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Mastering Skills for the TOEFL® iBT

Second Edition

Advanced

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ÖRNEKTİR

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Mastering Skills for the TOEFL® iBT Second Edition

Moraig Macgillivray · Patrick Yancey · Jeff Zeter · Casey Malarcher

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Introduction to the TOEFL® iBT

What to Expect on the TOEFL®

The TOEFL® (Test of English as a Foreign Language) is an Internet-based test designed to assess English proficiency in non-native speakers who want to achieve academic success and communicate effectively in English. Most people take the TOEFL® iBT to gain admission into universities and colleges where instruction is in English. Additionally, many employers and government agencies use the scores to determine a person's English ability. It is not meant to test academic knowledge or computer ability, and as such, questions are always based on information found in the test (computer tutorials are available for those not familiar with personal computers). We have designed this practice book to be as similar as possible to the actual TOEFL® iBT in format and appearance in order to better prepare you for the test.

The TOEFL® iBT is divided into four sections: reading, listening, speaking, and writing.

Major Changes to the Internet-Based TOEFL® (iBT)

● General

- ⇒ The test measures all four language skills equally; a speaking section is included.
- ⇒ The Test of Spoken English® (TSE®) will now be part of the TOEFL®. Test takers will no longer take the TSE® as a separate test.
- ⇒ Order of sections on the test:
 - Reading
 - Listening
 - (10-minute break)
 - Speaking
 - Writing
- ⇒ The test is approximately four hours long and is taken in one day.
- ⇒ Tests are administered through the Internet in Educational Testing Service (ETS) test centers around the world.
- ⇒ There is no structure section, as there was in previous tests.
- ⇒ Note-taking is allowed in every section, and is not marked.
- ⇒ The test is a linear exam, not computer adaptive; each test taker receives the same range of questions.
- ⇒ The scores will be viewed online.

● Reading / Listening

- ⇒ Passages for the reading and listening sections are longer than those in the computer-based test (CBT). Refer to the introduction of individual sections for further details.

● **Speaking / Writing**

- ⇒ Tasks for the speaking and writing sections include integrated questions that require more than one skill to complete, i.e., reading and/or listening, then speaking or writing.
- ⇒ For the speaking section, test takers speak into a microphone, and their responses are digitized and sent to the ETS Online Scoring Network.
- ⇒ For the writing section, test takers must type their responses.

The TOEFL® iBT Format

Section	Number of Questions	Time (minutes)	Score
Reading	3–5 passages <ul style="list-style-type: none"> • 12–14 questions each • 700 words per passage 	60–100	30 points
Listening	4–6 lectures <ul style="list-style-type: none"> • 6 questions each • 500–800 words (4–6 min.) 2–3 conversations <ul style="list-style-type: none"> • 5 questions each • 400–500 words (2–3 min.) 	60–90	30 points
BREAK		10	
Speaking	2 independent tasks <ul style="list-style-type: none"> • 1 personal experience • 1 preference/choice 2 integrated tasks (Read-Listen-Speak) <ul style="list-style-type: none"> • Reading 100 words • Conversation 200 words (1–2 min.) • Lecture 200–300 words (1–2 min.) 2 integrated tasks (Listen-Speak) <ul style="list-style-type: none"> • Conversation 200 words (1–2 min.) • Lecture 200–300 words (1–2 min.) 	20	30 points
Writing	1 independent task 1 integrated task (Read-Listen-Write) <ul style="list-style-type: none"> - Reading 250–300 words - Lecture 250–300 words (2 min.) 	50	30 points

Study Tips

The only way to be certain of an excellent TOEFL® score is to be able to read, write, understand, and speak English like an educated native speaker. You have no doubt been developing your ability in these areas for many years now. Unfortunately, this is not something one can accomplish by studying in the traditional way. However, research conducted over the years by applied linguists, psychologists, and educators has yielded a considerable amount of information on the best methods for refining these skills for the purposes of standardized tests. By keeping the following study tips in mind, you can optimize your study habits and achieve the highest possible scores with the level of language proficiency you have obtained.

- Prepare a study area for yourself. This should include the following:
 - ⇒ A comfortable chair and spacious table or desk
 - ⇒ Suitable lighting
 - ⇒ Good ventilation and air quality — an open window or a house plant are good ideas
 - ⇒ An area free of distractions such as outside noise, television, or radio (unless you are using the television or radio to study)
 - ⇒ Proper space to keep all the materials you will need when studying, such as books, paper, pens, pencils, a tape recorder or other recording device, and if possible, a computer with Internet access
- Study regularly over a long period of time. Do not study to the point of exhaustion, as this has been shown to be ineffective in retaining information.
- “Cramming,” i.e., studying intensely for a day or two before an exam, is not effective, as it strains your general health and well-being and does not lead to good long-term retention of information or skills.
- Psychologists have discovered a principle called “state-specific memory.” This means you remember things better in the same conditions that you learned them. For example, if you always study math at night, you will do better on a math exam taken at night. Use this concept to your advantage. If you know when and under what conditions you will take the TOEFL®, simulate these in your study environment and habits. For instance, if you plan to take the TOEFL® on a Saturday afternoon, then make a point to study in the afternoons.

- Be well rested on the day of the exam. Do not stay up all night studying. Also, eat healthy foods including fruits and vegetables.
- Be relaxed and confident. Do the best that you can and do not worry excessively about any mistakes or uncertainties.

Registering For the TOEFL®

Students must get registration information for the TOEFL®. Registration information can be obtained online at the ETS website. The Internet address is www.ets.org/toefl. The website provides information such as testing locations, costs, and identification requirements. The website also provides other test-preparation material.

The registration information, such as the test center location, identification requirements, and costs, will vary depending on the country in which you take the test. Be sure to follow these requirements carefully. If you do not have the proper requirements in order, you may not be able to take the test. Remember that if you register online, you will need to have your credit card information ready.

What TOEFL® Scores Are Used For

The primary use of TOEFL® scores is for acceptance into universities, colleges, and other institutions where English is the main language of instruction. It is estimated that about 4,400 such institutions require TOEFL® scores for admission.

The highest possible score on the iBT is 120 points. Different institutions will have their own specific score requirements for admission. For that reason, it is very important to check with each institution individually to find out what its admission requirements are. For example, a passing score at one university may not be a passing score at another university. It is the responsibility of the student to find out what the requirements are for each institution.

Although TOEFL® scores are used primarily to satisfy the admissions requirements of universities, they are also necessary when applying for certain kinds of jobs. Many government agencies as well as multinational corporations require applicants to submit TOEFL® scores. Even English-teaching institutes may request TOEFL® scores in order to place students at the appropriate level of instruction.

Certainly, doing well on the TOEFL® can be very helpful for students in both their academic and professional careers. However, success requires consistent and dedicated practice. We hope that you will take full advantage of this practice book and study hard. Your hard work and dedication will provide you with the best opportunity to do well on the TOEFL® and meet your goals for the future.

Academic Subjects in the TOEFL®

The following is a list of academic subject areas typically seen in the TOEFL®:

Humanities	Social Sciences	Biological Sciences	Physical Sciences
Archaeology Architecture Art History Fine Arts Linguistics Literature Music Philosophy	Anthropology Business Economics Education Geography History Political Science Psychology Public Health Sociology Urban Studies	Agriculture Anatomy Biology Botany Entomology Environmental Science Medicine Zoology	Astronomy Chemistry Computer Science Engineering Geology Mathematics Oceanography Physics

Mastering

Skills for the

TOEFL[®] iBT

READING



READING

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The TOEFL® iBT Reading Section

In the reading section of the TOEFL® iBT, you will be required to read three to five passages on varying topics. After each passage, you will answer twelve to fourteen questions that test your ability to understand vocabulary, sentence structure, and factual information, as well as implied information and the writer's intention. You will not see the questions until after you have read the passage. While answering the questions, you will be permitted to look back at the reading. You do not need any previous knowledge on the topic in order to answer the questions correctly.

● Passage Types

1. Exposition – Material that provides information about or an explanation of a topic
2. Argumentation – Material that presents a point of view about a topic and provides supporting evidence in favor of a position
3. Narrative – An account of a person's life or a historical event

● Question Types

Questions in the reading section of the TOEFL® iBT are multiple choice and much like those found in older versions of the TOEFL®. The following list explains the question types and number of each type on the test. Questions will not necessarily appear in this order.

Question Type	Number	Task
Factual Information	3-6	Select details or facts provided in the passage.
Negative Factual Information	0-2	Identify something that is not in the passage or not true according to the passage.
Inference	0-2	Select an answer based on information not actually stated in the passage, but that is implied or can be inferred.
Rhetorical Purpose	0-2	Identify the author's method in explaining a point, or why the author has mentioned something.
Vocabulary	3-5	Choose the best synonym.
Pronoun Reference	0-2	Identify the noun to which a pronoun refers.
Sentence Simplification	0-1	Choose the best paraphrase of part of the passage or a sentence and analyze its meaning.

The other three question types found in the TOEFL® iBT are not multiple-choice and are types not found on older versions of the TOEFL®. One is a sentence insertion activity, and the last question can be one of two types of activities: either a summary question or a table/chart question.

Text Insertion Question

This question shows you a sentence that could be added to the passage. You must decide where the sentence would best fit in the passage. While you are reading, you will notice several icons that look like this ■ on the actual Internet-based test. You will be required to click on the square [■] where you feel the new sentence should be added. For the purposes of this book, simply choose the letter beside the appropriate square. This question tests how well you understand the organization of the passage, as well as grammatical connections between sentences.

Table/Chart Question

For passages on topics that explain groups or categories of information, you may be asked to demonstrate your understanding of the groups or categories mentioned by completing a chart. There will be two or three categories and either five or seven correct choices. Two of the answer choices will not be used. This question requires the ability to organize important information and to understand relationships between major ideas presented in the passage.

● **Example:**

Frogs	Toads
_____	_____
_____	_____
_____	_____
_____	_____

- (A) bumpy, dry skin
- (B) eggs in a chain
- (C) build nests
- (D) shorter legs
- (E) eggs in a bunch
- (F) have live babies
- (G) longer legs
- (H) smooth, wet skin
- (I) bulging eyes

● **Correct answers:**

Frogs	Toads
eggs in a bunch	bumpy, dry skin
longer legs	eggs in a chain
smooth, wet skin	shorter legs
bulging eyes	

- **Not used:** build nests, have live babies

The chart questions are worth up to three points if there are five correct answers and four points if there are seven correct answers. Partial credit is awarded for having some but not all correct answers.

Summary Question

In this type of question, you will be presented with an introductory sentence for a brief summary of the passage. You will then find six additional sentences. Three of the sentences express major ideas in the passage, and the others do not. Incorrect choices will be either minor ideas or ideas that are not presented in the passage. This question measures your ability to recognize important ideas from the passage and distinguish them from minor ideas or ideas that are not in the passage.

- **Example:**

First sentence of introduction:

Animals in the desert have different ways to live with little water.

- ⇒ Camels can live for a long time without water.
- ⇒ Desert plants do not need much water.
- ⇒ Desert reptiles and birds do not sweat.
- ⇒ Larger animals get the water they need from things they eat.
- ⇒ At night, desert temperatures can drop below ten degrees Celsius.
- ⇒ Some animals stay underground to keep water in their skin.

- **Correct answers:**

First sentence of introduction:

Animals in the desert have different ways to live with little water.

- ⇒ Desert reptiles and birds do not sweat.
- ⇒ Larger animals get the water they need from things they eat.
- ⇒ Some animals stay underground to keep water in their skin.

- **Not used:**

- ⇒ Camels can live for a long time without water. (minor detail)
- ⇒ Desert plants do not need much water. (incorrect information)
- ⇒ At night, desert temperatures can drop below ten degrees Celsius. (minor detail)

The summary question is worth up to 2 points. Partial credit is awarded for having some but not all correct answers.

Study Tips for Reading

- Practice reading passages of academic English regularly (the Internet can be a great source of practice materials).
- Become a master of vocabulary and constructions:
 - ⇒ Make it your goal to understand all the words you come across when studying.

- ⇒ Keep a vocabulary notebook listing new terms and their definitions. Write out the definitions in English. Only refer to bilingual dictionaries if you cannot understand a word used in context or its definition from an English-only dictionary. Set aside a period of time every week to review your new vocabulary. Practice it by writing out your own sentences using the words.
- ⇒ Master any and **all** grammatical and rhetorical constructions you encounter. Discover their meanings and uses by asking a teacher or doing an Internet search and viewing multiple examples of their use. You can keep a notebook of constructions as well.
- Learn how to take notes. You are permitted to take notes during the reading section of the TOEFL®. Note-taking is not writing down every word of the reading. A good idea is to note the main idea and then note the information that supports it. Note-taking must be learned, and it takes time. The better your note-taking skills, the easier you should find the TOEFL® reading section, as well as other sections of the TOEFL® iBT.
- Do not use a pencil or your finger when you are reading. Your eyes move faster than your finger, so you slow yourself down if you trace lines with a pencil or finger while reading.

Test Management

- Questions cannot be viewed until after the passage has been read.
- You will be allowed to study the reading as you answer the questions.
- Use the Review icon at the top of the screen to return to previous questions.
- There is a glossary available. Simply select the particular word with the cursor to find its meaning.
- When reading passages, ask yourself the following questions:
 - ⇒ What is the main idea of the passage?
 - ⇒ How is the main idea developed/supported in the passage?
- For each paragraph or new point in the passage, ask yourself why the author mentions it and how it relates to the main idea.
- Keep in mind that you have 60 to 100 minutes to read the passages and answer all of the questions in the reading section. This means that you can spend roughly 20 minutes on each set. Try to pace yourself accordingly. For each set, first answer the questions that you can answer easily. Then go back and answer more difficult questions. If you find that you have exceeded 20 minutes for a particular section, it is best to guess an answer and move on to the next section rather than remain on a particularly difficult question for several minutes.

Preview Test

Directions

You will read one passage and then answer reading comprehension questions about it. Most questions are worth one point, but the last question is worth more than one point. The directions indicate how many points you may receive.

You will have 20 minutes to read the passage and answer the questions.

You may see a word or phrase in the passage that is underlined in purple. Definitions or explanations for these words or phrases are provided at the end of the passage.

You can skip questions and return to them later as long as there is time remaining.

When you are ready, press **Continue**.

Track 1

Did the New Deal Prolong the Great Depression?

"There is nothing to fear but fear itself," claimed American President Franklin Delano Roosevelt during his first speech as president. The world was in the throes of a severe depression. America's newly elected president jumped without hesitation into his series of aid programs called the New Deal. With the goal of providing relief, recovery, and improvement, he began creating reforms and changing policies for his country in order to alter the effects of the market slump. However, history shows that the changes he implemented only served to worsen the country's problems.

In 1929, the stock market experienced the worst economic crash in its history. This led to the period known as the Great Depression. It was characterized by higher consumer prices, increased unemployment, and decreased income. All workers and industries were affected adversely. The depression lasted over ten years, with banks closing and businesses failing. Over fifteen million Americans, about twenty-five percent of the workforce, became unemployed. Americans blamed President Herbert Hoover for the crisis. When Hoover's term as president ended, the majority of American citizens elected Franklin Roosevelt of the Democratic Party to the presidency in 1932. He entered office with many promises to the American people and stepped into action immediately after his term began. He mandated a four-day bank holiday, during which Congress enacted the Emergency Banking Relief Act to stabilize the banking systems. He laid the groundwork for his New Deal reforms during the first one hundred days of his term.

As the depression stretched on, it became evident that Roosevelt's quick, aggressive action was detrimental to many people. ■ **A)** For example, in an effort to reduce unemployment, Roosevelt created the National Recovery Administration (NRA). ■ **B)** One of the stipulations of the NRA was that if fifty percent or more of an organization's workers wanted to be part of a union, then that organization would automatically become part of a union. Also, its employees all had to join that union. ■ **C)** The problem was that many unions at the time would not accept African Americans. ■ **D)** Therefore, many African Americans who belonged to an organization that became unionized lost their jobs. The government's new program took jobs away from people who needed them, emphasizing the inconsistency and self-contradiction of the New Deal.

The progressive ideas of the New Deal called for a government-run economy, somewhat fashioned after the Russian government. Based on the idea that the market was unstable, Roosevelt believed that intervention by the government was necessary in order to balance the various interests of farmers, business, and labor. Therefore, by using his authority, the president pushed the government to become more involved in the affairs of the American population than ever before. It monitored as well as limited everything from market prices of goods to

veteran pensions.

Since Roosevelt himself did not have enough knowledge in the area of economics, many of his acts solved immediate economic difficulties, but introduced new problems. Some of his policies were actually contradictory. For example, one of Roosevelt's advisors asked him to choose a speech, one defending high tariffs and the other in favor of lowering tariffs. Roosevelt told the advisor to simply "weave the two together." His Agricultural Adjustment Act raised food prices above market level. It was an act that helped farmers, but hurt the rest of the population. Yet, as he increased food prices to help farmers, the NRA simultaneously raised the prices of manufactured goods and equipment. This hurt the farmers who relied on the equipment. Relief spending was meant to help the unemployed. Conversely, corporate income taxes, Social Security taxes, and minimum wage laws led to higher unemployment.

This endless spiral of government action and the effects it had on the people of America likely prolonged the Great Depression. While the stock market crash led to government action, those governmental policies led to increased problems. They also added to the time spent trying to recover from the depression. The purpose of the reforms was not to create havoc, and the changes for the American people were well intended. The problem came when actions were not fully thought through and were implemented quickly, regardless of the effects they would have. It is unknown whether or not the Great Depression would have ended more quickly without such intense government involvement. However, with ten years of struggle and another mild recession in the midst of those years, a different plan of action could have greatly benefited the American people.

▶ **pension**

a fixed monetary amount given to specific groups for service

▶ **tariff**

a charge incurred by importing and exporting goods

▶ **recession**

a period of decreased activity in an economy

1. According to paragraph 1, which of the following is true of Franklin Roosevelt's New Deal?
 - (A) It was a series of acts by the government.
 - (B) It was a cause of the Great Depression.
 - (C) It was an agreement between government and business.
 - (D) It was a policy to advance the government.
2. According to the passage, which of the following was NOT a characteristic of the Great Depression?
 - (A) Greater unemployment
 - (B) Increased personal taxes
 - (C) Higher costs of goods
 - (D) Lower earned income
3. The author discusses the percentage of unemployed people in paragraph 2 in order to
 - (A) establish the need for Roosevelt's intervention
 - (B) list the faults of Hoover's presidency
 - (C) compare the employed with the unemployed
 - (D) illustrate the effects of the downturn in the economy
4. The word mandated in the passage is closest in meaning to
 - (A) ordered
 - (B) wrote
 - (C) displayed
 - (D) proposed
5. The author of the passage implies that the New Deal
 - (A) required the agreement of all Americans
 - (B) showed favoritism to certain people
 - (C) disappointed the president
 - (D) corrupted the government instead of offering aid
6. The word detrimental in the passage is closest in meaning to
 - (A) relevant
 - (B) unfair
 - (C) experimental
 - (D) harmful
7. The word stipulations in the passage is closest in meaning to
 - (A) necessities
 - (B) requirements
 - (C) circumstances
 - (D) basics
8. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

While these government acts resolved certain problems for some of the people, they made them worse for others.

Where would the sentence best fit?
 - (A) First square
 - (B) Second square
 - (C) Third square
 - (D) Fourth square

9. Which of the sentences below best expresses the essential information in the highlighted sentence? Incorrect choices change the meaning in important ways or leave out essential information.

- (A) Government involvement was deemed necessary by Roosevelt to handle market instability.
- (B) Roosevelt watched the market closely before taking government action for workers.
- (C) The government was more stable than the stock market, according to Roosevelt.
- (D) Roosevelt employed the market to aid the interests of farmers, business, and labor.

10. The word *It* in the passage refers to

- (A) The American population
- (B) Authority
- (C) The government
- (D) Intervention

11. According to paragraph 5, why did some of Roosevelt's policies lead to higher unemployment?

- (A) The farmers did not want equipment prices to go up.
- (B) The NRA did not want to follow the policies.
- (C) His advisors wrote contradictory speeches for him.
- (D) He did not know enough about economics.

12. The word *prolonged* in the passage is closest in meaning to

- (A) lengthened
- (B) aided
- (C) worsened
- (D) enabled

13. The word *they* in the passage refers to

- (A) governmental policies
- (B) increased problems
- (C) effects
- (D) actions

14. Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. ***This question is worth 2 points.***

After the stock market crashed, President Roosevelt enacted reforms and policies known as the New Deal to lessen the effects of the Great Depression, inadvertently causing harm to the people.

<ul style="list-style-type: none">•••

Answer Choices

- (A) Increased government involvement in the people's affairs was a main result of the New Deal.
- (B) The Great Depression lasted around ten years after the stock market crashed.
- (C) Unemployed Americans made up twenty-five percent of the entire population.
- (D) Roosevelt enacted an Emergency Banking Relief Act at the beginning of his term.
- (E) Because he took quick action, Roosevelt failed to consider the effects of his policies.
- (F) Many reforms directly countered others, resulting in ineffective change.

Chapter 1

Fact Questions

Necessary Skills

- Identifying important information and facts stated in a passage
- Locating a specific piece of information in a passage quickly
- Understanding the distinction between main ideas and supporting details
- Focusing on facts, details, definitions, or other information presented in a passage

Example Questions

- According to the passage, who/when/where/what/how/why _____?
- According to paragraph X, which of the following is true of _____?
- The author's description of _____ mentions which of the following?
- According to paragraph X, _____ occurred because _____.
- According to the passage, why did X do Y?

Strategies

- Look for transitional expressions to locate details such as examples, steps, time, reasons, or results.
- Pay attention to examples and descriptions that provide information and details.
- Eliminate choices presenting information that contradicts what is provided in the passage.
- Answer the specific question being asked. Do not select an answer just because it is mentioned in the passage.

Read the following passage. Then fill in the diagram with the information that you read.

Track 2

Titan's Atmosphere

Saturn's largest moon, Titan, has recently become a source of interest to atmospheric scientists. Atmospheric scientists focus on the way moisture and weather patterns within an atmosphere interact. Eager to find new environments to observe, scientists have begun looking at Titan. It is the only one of Saturn's moons large enough to support an atmosphere. Given its distance from the sun, Titan is significantly colder than Earth. However, its atmospheric conditions are nearly identical to Earth's in many regards. On Earth, liquid water evaporates and rises into the atmosphere, where various forces move the air. These atmospheric air currents dictate the formation of clouds, wind direction, and the places where precipitation occurs. Scientists observing Titan have found that its atmospheric currents are similar to those on Earth and are responsible for similar events.

Unlike Earth, however, the vapor in Titan's atmosphere is not evaporated water. As Titan is much colder than Earth, water can only exist as a solid. Methane on Titan, on the other hand, behaves in a manner similar to water on Earth. We are accustomed to seeing methane as a gas, as that is how it commonly occurs on Earth. Titan's lower temperatures, however, allow methane to coalesce into a liquid and become a vapor. Given Titan's atmosphere, the evaporated and liquefied vapor acts in a manner similar to the way water behaves on Earth. It puddles on Titan's surface, evaporates, and forms into clouds. As a result, the atmospheric conditions on Titan mimic those observed on Earth.

By observing the atmospheric events on Earth and comparing them to those on Titan, scientists can improve their understanding of atmospheric behavior. On Earth, for instance, the atmospheric forces result in a large concentration of clouds and precipitation along the equator. This area of concentration, known as the inter-tropical convergence zone (ITCZ), can also be observed on Titan. However, the ITCZ on Titan is not limited to its equatorial region. Instead, liquid methane actually evaporates into vapor along the middle section of the planet. It then moves toward the poles, where it is deposited as precipitation. This unusual behavior can most likely be attributed to the fact that Titan lacks an ocean, which plays a key role in evaporation on Earth.

The outcomes of the atmospheric activity on Titan and Earth are quite different. Yet, this difference can be very helpful in honing our understanding of the way moisture in the atmosphere interacts and

evaporate:

to change from a liquid into a gas or steam

precipitation:

rain, snow, or hail

vapor:

a substance in a gaseous state

coalesce:

to join together

convergence:

a gathering or assembly

deposit:

to drop or put down

hone:

to improve; to clarify

produces different atmospheric events. Since atmospheric science studies complex systems with a number of factors, these environments are nearly impossible to accurately reproduce in a lab. As such, it is difficult to test theories that scientists may have on atmospheric behavior. The fact that we are now able to study another atmosphere and compare and contrast it with that of Earth is valuable in improving our understanding of atmospheric sciences.

Earth's Atmosphere vs. Titan's Atmosphere

Earth	Both	Titan
•	•	•
•		•

- According to paragraph 1, what do scientists hope to do by studying Titan's atmosphere?
 - Gain more understanding of how methane behaves at lower temperatures
 - Improve their knowledge of atmospheric events and their causes
 - Begin finding atmospheres other than Earth that are friendly to life
 - Prove that any element can play a part in generating atmospheric events
- According to paragraph 3, an inter-tropical convergence zone is:
 - An area of concentrated moisture within an atmosphere
 - An area that only occurs along the middle section of Titan
 - An atmospheric event occurring in equatorial regions
 - An event observed exclusively in Earth's atmosphere

3. According to paragraph 4, why is it helpful to have another atmosphere to compare with Earth's?
- (A) We are not familiar with the way methane behaves at lower temperatures.
 - (B) Most theories concerning atmospheric behavior are only relevant to Earth.
 - (C) Most planetary bodies simply lack atmospheres that we can observe.
 - (D) Reproducing atmospheric variables in a lab is nearly impossible.

Fill in the blanks to complete the summary.

The passage compares and contrasts the atmospheres of Earth and Saturn's moon, Titan. The Earth's atmospheric conditions determine cloud formation, _____ and wind direction. On Titan, methane _____ behaves in a way similar to water vapor on Earth. Due to the moon's lower temperatures, methane on Titan _____ into a liquid, which then becomes a vapor and mirrors the behavior of water on Earth. Unlike the concentration of clouds and precipitation along the Earth's equatorial region, however, the liquid methane on Titan moves toward its poles, where it is then _____ as precipitation. By studying the evaporation of methane and its formation into clouds on Titan, scientists can _____ their understanding of atmospheric science.

Read the following passage. Then fill in the diagram with the information that you read. **Track 3**

Detecting Bacterial Contamination in Water

Contemporary water treatment methods allow governments to treat water infested with potentially harmful bacteria and make it drinkable. While these methods make tap water entirely safe to drink, it is not practical to treat all of the world's surface water in this fashion. Thus, people who use untreated water for recreational purposes are at risk of ingesting harmful bacteria. As a solution, the British government and a number of other countries within the European Union are working together. Their goal is to produce a method that can be employed to prevent bacterial contamination of lakes, rivers, and oceans.

This method, however, does not actually cleanse the water. Rather, it is used to evaluate which areas in a region may contribute to water contamination. It is especially useful near agricultural regions. These areas are where contamination is most likely to occur. Large amounts of animal waste in these areas increase the possibility of harmful contaminants making their way into water. This new method will be used to test the agricultural regions and determine where preventative measures are needed.

Due to the high amount of animal waste used and produced by the agriculture industry, analysts have adjusted their efforts specifically to such areas. When precipitation occurs near facilities that hold animals, it is possible that contaminants will be picked up from waste material and run into water sources. In addition, many vegetable farmers may use animal waste to fertilize their fields. This can also contaminate runoff water. As these processes are necessary to provide food for a country, it is impossible to stop them entirely. Instead, these new methods are being employed to locate particular spots that are most likely to cause contamination.

These methods involve taking a number of soil samples from any given agricultural area and bringing them to a lab. The samples are analyzed to count bacteria. Those with particularly high concentrations of bacteria are matched with the region they were taken from. Researchers can then return to high-risk areas and help local people take measures to prevent contamination by runoff. For instance, farmers might avoid heavily watering a high-risk field. By watering high-risk fields more frequently using less water, the risk of contamination by runoff is minimized. Since water is less likely to run out of the field this way, it is also less likely to work its way into public water sources. The methods can also be adjusted in regions where water pollution is already occurring. Finding the most intense sources of pollution allows experts to

contemporary:
modern

contamination:
the act of making something impure by adding another substance to it

employ:
to use or practice

preventative:
designed to keep something undesirable from occurring

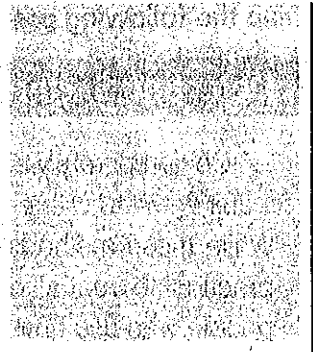
fertilize:
to add a natural or chemical substance to soil in order to help plants grow

sample:
a small amount of something that shows what the whole is like

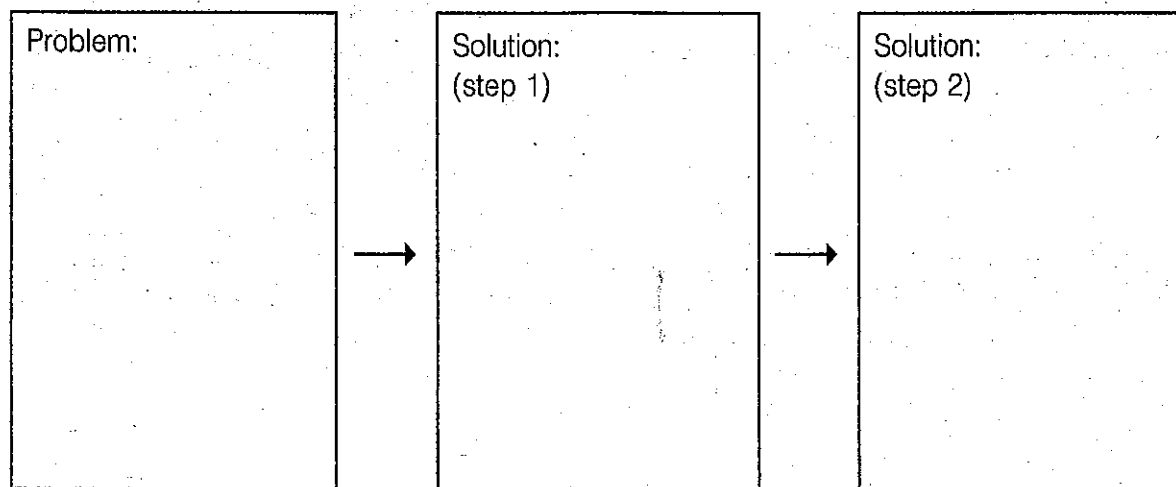
measure:
an action taken to achieve a particular result

focus their attention on the few areas that need the most work.

These efforts represent preventative methods that governments are employing in an attempt to stop environmental crises before they occur. In using this mode of analysis and responding accordingly to the results, a community can pinpoint sources of serious pollution. They can then address them before their water becomes contaminated. In the long run, these efforts will prove valuable in preventing sickness and making water safer to use for recreation.



Preventing Water Pollution with Soil Analysis



1. According to paragraph 3, why are agricultural areas some of the most likely contributors to water contamination?
 - (A) In cleaning and growing food, a number of harmful chemicals are used.
 - (B) They produce and use a large amount of animal waste.
 - (C) In cleaning and growing food, the industry is in close contact with water supplies.
 - (D) They lack the facilities necessary to purify the water they use.
2. According to paragraph 4, why are soil samples from fields taken into a laboratory?
 - (A) To check for possible chemical contamination of the soil
 - (B) To see if contaminants are making their way into the food being grown
 - (C) To ensure that farmers are using the right amount of fertilizer
 - (D) To evaluate the concentration of bacteria within a sample

3. According to paragraph 4, farmers should irrigate high-risk fields more often with less water because
- (A) it minimizes runoff from the field
 - (B) it assists in the rapid growth of crops
 - (C) it is unnecessary to use fertilizers
 - (D) it keeps contaminants from entering fertilizer

Fill in the blanks to complete the summary.

The passage explains how some governments have recently developed testing methods to prevent bacterial _____ of lakes, rivers, and oceans. These methods are being _____ to identify likely sources of water pollution and determine where _____ measures are needed, especially in the agricultural industry. By analyzing soil _____ for high concentrations of bacteria, experts can then take _____ to stop contamination before it occurs.

03 Business

Read the following passage. Then fill in the diagram with the information that you read. Track 4

Equity Theory

Equity theory was originally explained by a behavioral psychologist, John Stacy Adams, in 1963. This theory attempts to explain an individual's behavior within the context of striving toward equilibrium in a situation. Equity theory claims that individuals act according to inequities that they perceive in their environment. When people observe an unequal situation, they experience distress. This compels them to act in a way to achieve equity within the situation.

Equity theory is applicable to a number of realms. It can be used to explain how individuals act in personal relationships. It also has been employed extensively in the realm of business management. For instance, employees that know they are being paid less than their coworkers for doing more work would feel under-compensated. In an effort to correct this inequity, they might attempt to fix the observed inequity in a number of ways. They might work less, talk to their managers, or attempt to motivate their coworkers to work harder. Equity theory can also be applied to employees that perceive an inequity that favors them. Employees who feel that they are getting too much in return for their input may attempt to remedy the situation. They may work harder, argue for better pay for others, or take other measures to make the situation equitable.

By applying equity theory to actual situations in a workplace, managers can gain valuable insight into factors motivating their employees. However, attempts to make practical sense of equity theory reveal its weaknesses. Critics point out that not all employees will seek to correct inequities in the workplace. Non-confrontational people who feel under-compensated may continue to work in the inequitable conditions simply because they fear conflict. Employees who are over-compensated, on the other hand, might be satisfied with the inequitable situation. They may do nothing to change it for fear of hurting their position. In short, equity theory unjustifiably presumes that individuals will value equity over all other factors. Moreover, it fails to account for quirks in someone's personality that might cause him or her to avoid addressing inequality.

A larger criticism stems from the fact that equity theory only seeks to explain individuals' responses to perceived inequities between individuals. Equity theory does not account for perceived inequities between individuals and systems. For instance, an employee might feel equally compensated as compared to his or her fellow employees. However, he or she might feel that the business is not paying anyone

strive:

to put a lot of effort into achieving something.

equilibrium:

a state of equality or balance

perceive:

to become aware of something

quirk:

a peculiar or unusual trait

criticism:

the act of viewing something unfavorably

fellow:

sharing a particular quality or condition

highlight:

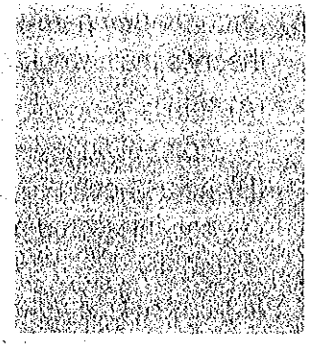
to pick out or emphasize

comprehensive:

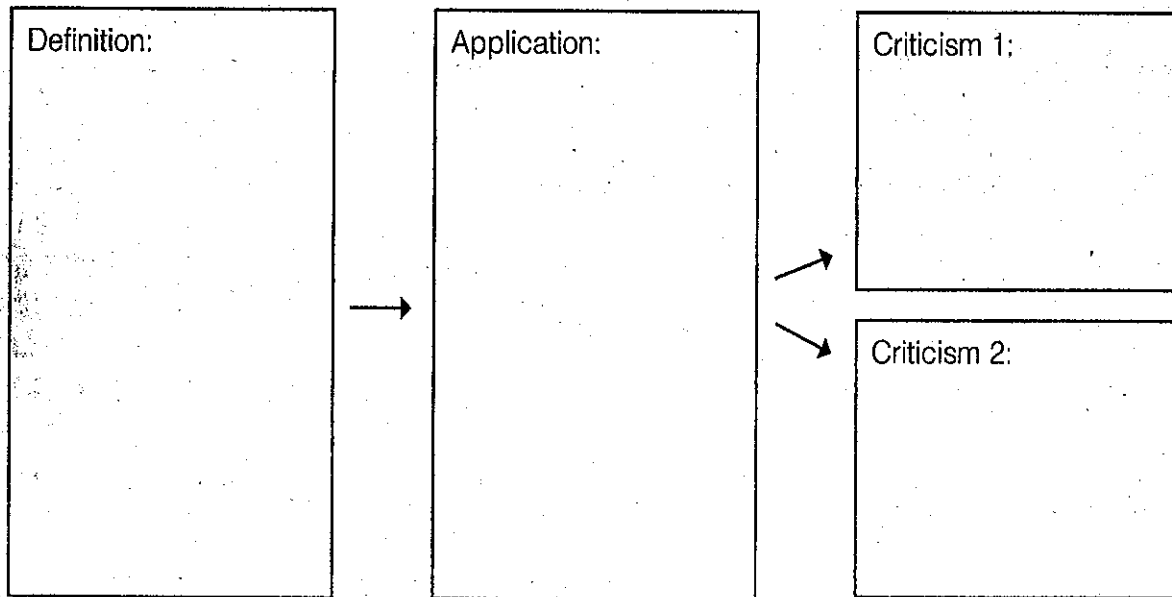
including many details of something

enough. Equity theory does not account for this.

These shortcomings highlight the impractical aspects of equity theory, which seems to oversimplify a very complex subject. Ultimately, there are a number of factors that may influence how individuals act in any situation. Their perception of inequalities is only a part of a much bigger picture. Equity theory may be part of one person's considerations in acting a certain way. However, it is by no means a comprehensive explanation for individual behavior.



Equity Theory



1. According to paragraph 1, how does equity theory explain individual behavior?
 - (A) Equity is achieved in a system by individuals acting on self-interest.
 - (B) Individuals behave in a self-interested way with little regard for others.
 - (C) Individuals attempt to correct perceived inequities they observe in relationships.
 - (D) Perceived inequities in a business environment may cause employees to act in a certain way.

2. According to paragraph 3, which of the following is true of equity theory?
 - (A) Managers can use it to understand their employees.
 - (B) Employees can use it to justify their request for a raise in pay.
 - (C) Managers can use it to motivate employees to work harder.
 - (D) Employees can use it to change their perception of a business.

3. According to paragraph 3, what is equity theory's main weakness?

- (A) It fails to account for other factors that compel an individual to act.
- (B) It has been proven that people are self-interested and uninterested in equity.
- (C) It is difficult to apply to the real world in a meaningful way.
- (D) It is too complex for most managers to adequately understand and apply.

Fill in the blanks to complete the summary.

The passage discusses equity theory. Equity theory attempts to explain the behavior of individuals by arguing that they strive toward _____ in certain situations. Individuals seek to fix inequities that they _____ in their relationships with other people. It has been used as a tool for business management to help employers understand their employees. However, it fails to consider _____ in personalities or feelings of unfair compensation among _____ employees within a system. These weaknesses _____ the impractical aspects of equity theory, such as oversimplification.

04 Biology

READING

LISTENING

SPEAKING

WRITING

PRACTICE TEST

Read the following passage. Then fill in the diagram with the information that you read. **Track 5**

Thermoregulation in Mammals

Over the course of their evolution, mammals have developed a sophisticated nervous system by which they can control their internal temperature. Thermoregulation allows mammals to keep their internal temperatures constant. This can occur despite external temperature changes in their environment. It offers mammals a degree of freedom from their environment. However, it requires a very large expenditure of energy. This process is centered within the hypothalamus. The hypothalamus is a part of the brain responsible for other subconscious functions like breathing and blinking. By using nervous signals sent from temperature-sensing nerves in the skin, the hypothalamus can activate mechanisms in the body to regulate the body's internal temperature.

The most basic process for temperature regulation is simply to change the rate of heat production. The hypothalamus sends signals to skeletal muscles, which causes them to move. This movement requires muscle cells to metabolize substances to produce energy and, in doing so, create heat. A mammal involuntarily shivers when it is cold because the hypothalamus is ordering the muscles to move and produce heat. Conversely, the hypothalamus can also stop unnecessary muscle movement and slow metabolic heat production to cool a mammal.

The hypothalamus can also trigger vasodilation and vasoconstriction in blood vessels near the surface of the skin. Using these processes, the amount of heat lost to the environment can be controlled to a degree. When a mammal enters a cold environment, the blood vessels near the skin surface constrict. This lessens the amount of blood that flows into those regions. As such, heat loss resulting from the flow of blood can be reduced. The opposite process, vasodilation, can be used to help cool the body by increasing the flow of blood to vessels near the surface of the skin.

Terrestrial mammals—those that live on land—can also regulate their temperature by controlling the amount of moisture released by the skin. When released moisture collects on the skin of a mammal, it eventually evaporates into the air around it. The evaporation process creates a cooling effect on the surface of the skin, which can be used to regulate temperature. This is common among humans, who sweat when they enter warm environments. Some mammals lack the ability to produce sweat. However, they can still use evaporative cooling methods to regulate their body temperature. Rodents, for instance, may use saliva

sophisticated:

advanced in design

regulation:

the control of an activity or process by official rules

expenditure:

the action of using or spending

metabolize:

to break down food into energy

involuntarily:

suddenly and in a way that cannot be controlled

constrict:

to tighten or narrow

saliva:

a liquid produced by glands in the mouth

mobile:

able to move freely or easily

to wet their heads. Bats use their own saliva and urine to cool themselves. Evaporative cooling of the skin coupled with vasodilation can quickly reduce a mammal's body temperature.

Finally, mammals may simply relocate to regulate their body temperature. In desert regions, mammals gather underneath the shade of trees to avoid harsh sunlight. During winter, many mammals go into hibernation—a deep sleep in which many body functions slow considerably. Hibernating mammals survive the winter months by conserving energy and dedicating it to sustaining a constant temperature. The hibernation process relies on reserves of energy stored as fat, which are burned over the winter to produce heat. Thanks to hibernation, many mammals can inhabit extremely cold regions and survive the winter.

All of these thermoregulatory processes are controlled by the hypothalamus. Some mechanisms, such as hibernation or relocation, may require a conscious effort on behalf of the organism. However, even those processes employ parts of the hypothalamus. At the core of any thermoregulatory process is one of two parts of the hypothalamus: the heating center or the cooling center. As the name suggests, the heating center senses temperature changes and triggers certain mechanisms when the mammal needs to conserve or produce heat. Alternatively, the cooling center senses excessively warm conditions around the mammal. It then triggers responses to reduce the body temperature. The hypothalamus is the core of thermoregulation.

Without these thermoregulatory devices, mammals would be at the mercy of their environment. Like reptiles, mammals would have to bask in the sun to be able to move or function. Thermoregulatory devices allow mammals to travel to regions inaccessible to reptiles and continue to function in spite of weather. This comes at the cost of energy consumption, which is much higher than for most reptiles. To maintain a steady temperature in an environment of twenty degrees Celsius, a human male has to metabolize 1800 kilocalories a day. Meanwhile, a typical alligator only metabolizes sixty kilocalories per day. The alligator, however, has to wait for adequate heat in its environment before it can move. Furthermore, alligators and most other large reptiles are forced to remain in environments that stay warm year-round. Thanks to thermoregulation, mammals are mobile and independent from their environments.

Thermoregulation

Type 1:	→	Explanation:
Type 2:	→	Explanation:
Type 3:	→	Explanation:
Type 4:	→	Explanation:

1. According to paragraph 1, what do thermoregulatory mechanisms allow mammals to do?

 - (A) Move about freely without relying upon environmental conditions
 - (B) Maintain their biological functions without conscious thought
 - (C) Consume energy in a more efficient way than other types of animals
 - (D) Avoid overheating in extremely hot environments
2. According to paragraph 3, how does vasoconstriction help regulate temperature?

 - (A) By keeping blood vessels from moving towards the skin
 - (B) By increasing the flow of blood underneath the skin
 - (C) By forcing cooler blood closer to the surface of the skin
 - (D) By narrowing blood vessels near the surface of the skin

3. According to paragraph 5, relocation and hibernation are different from other thermoregulatory mechanisms because
- (A) they can be used to produce and conserve heat, but not cool an organism.
 - (B) they do not cause a physiological change within the organism.
 - (C) they may require conscious effort by the organism.
 - (D) they work independently of other thermoregulatory mechanisms.

Fill in the blanks to complete the summary.

The passage describes how mammals have developed a _____ nervous system to control their internal temperature. Thermoregulation allows for temperature _____ through a series of physiological responses controlled by the hypothalamus. The hypothalamus can signal the muscles to _____ substances to produce energy and can cause blood vessels to _____ to reduce heat loss. Because of thermoregulation, mammals can maintain a relatively constant temperature in warm and cold conditions alike. This allows for freedom from the environmental conditions that affect other animals like reptiles, but it requires a great _____ of energy.

Read the following passage. Then fill in the diagram with the information that you read. **Track 6**

Artificial Flood Controls

In earlier eras, humans were forced to adjust their living patterns according to seasonal changes each year. For people that settled in river valleys, these adjustments were especially pronounced. Over the course of the winter months, snow accumulates in mountainous regions. With the onset of spring and summer, the snow melts and collects into streams and rivers. In other regions, heavy rains fall during late summer, forcing rivers over their normal boundaries. As a result, ancient people that settled near rivers often experienced yearly floods. In the modern era, however, people have altered their environment to avoid the hassle and destruction that accompany annual river valley flooding. These methods involve manipulating the river or the environment surrounding the river to minimize the impact of flooding, a process that has had both advantages and disadvantages.

Artificial levees are the most straightforward flood control device. Levees are large earthen containment structures that are built along the banks of a river. During flood season, the river still rises, but the levees contain the rising waters. As a result, the land surrounding the river can be used without the hassle of annual flooding. More recently, levees have been reinforced using various methods to make them more structurally sound, but the principle remains the same. While levees do work, they are by no means foolproof. Unusually large amounts of flood waters can compromise the integrity of a levee. Furthermore, levees have to be strengthened regularly to remain functional. Floodwaters typically carry large amounts of sediment, which will be deposited along the riverbed. Without levees, the sediment carried by rivers is distributed across the floodplain. Rivers controlled with levees, however, can only deposit sediment along the riverbed. Over time, large amounts of sediment settle along the riverbed, taking up a large amount of the river channel. As such, the height of levees has to be increased to avoid flooding.

Dams are another method whereby the effects of flooding can be mitigated. Flood-control dams can be built in strategic areas along the course of the river to collect the water in a reservoir. The impact of flooding can be controlled by releasing the collected water from the dam slowly. There are a number of drawbacks to damming a river, however. It is expensive and sometimes difficult to dam a river. Moreover, the area behind the dam—the reservoir—will be filled with water, covering valuable riverfront land and scenic valleys. Sediment also tends to collect heavily in the reservoir area of a dam, requiring

pronounced:
very noticeable

accumulate:
to gather up or collect

manipulate:
to skillfully handle or control

hassle:
an annoying problem that requires effort to fix or solve

sediment:
matter that settles at the bottom of a liquid

floodplain:
an area of low-lying ground near a river

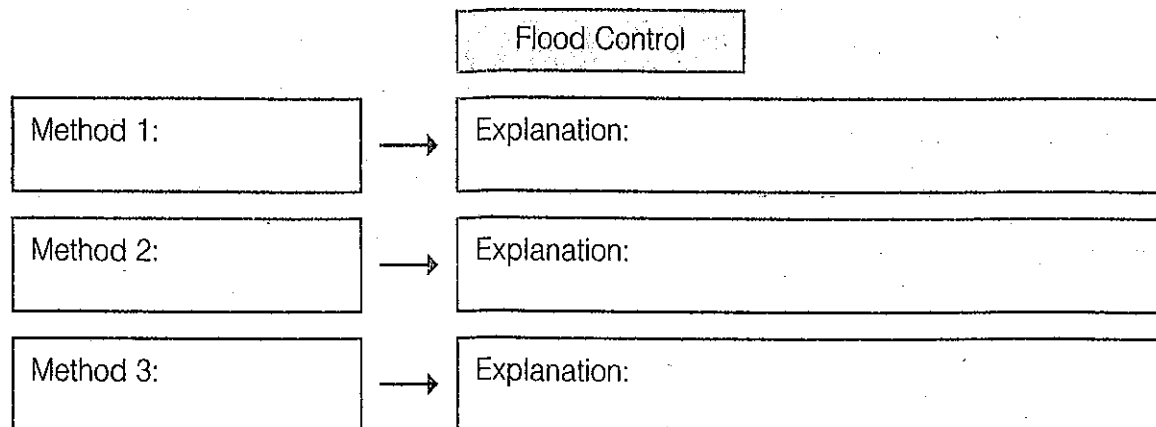
mitigate:
to make less severe or serious

streamlined:
with a smooth shape

the reservoir to be drained and the soil removed. On top of the high costs of building dams, they are also expensive to maintain.

Channelization is yet another method to control the impact of flooding. The process of channelization involves manipulating the river channel. In many cases, the riverbed may simply be dredged, a process whereby the materials collected in the riverbed are removed. By removing excess material in the riverbed, more water can flow through it without flowing over the river's banks. A more dramatic form of channelization involves creating new routes for the river. By removing bends and curves in the river, the water flows more rapidly. With a streamlined river channel, floodwater flows more quickly and, hopefully, the river remains within its banks. Dredging itself is a costly and time-consuming process, but is minor in comparison to the cost and effort involved in cutting new river channels. Furthermore, channelization is not always reliable. As is the case with levees and dams, unusually large amounts of flood water can cause the system to fail.

The dramatic alterations in a river's behavior that flood controls require can have a negative impact on the environment. The sediment carried by rivers is usually rich in nutrients and can replenish the topsoil of nearby land. By preventing floods, many of these restorative nutrients are lost. Furthermore, regulating flood cycles is expensive and labor-intensive. Reliance on artificial flood controls has also led to disaster. With the aid of these controls, people settle in areas vulnerable to flooding. When levees, dams, or channelization fail, the resulting flood can be devastating and costly. Many scientists and engineers have begun advocating more practical and less intrusive approaches to managing floodwater. These new methods allow natural flooding to occur by modifying land use around rivers. By controlling the construction of roads and structures within the floodplain and managing the buildup of debris in areas where flooding occurs, we can adapt to the normal behavior of rivers rather than fight them.



1. According to paragraph 2, why do levees have to be regularly strengthened to prevent flooding?
 - (A) Sediment along the riverbed is needed for farmlands near the river.
 - (B) Rivers constantly erode the sides of levees, weakening them considerably.
 - (C) Sediment slowly collects in the riverbed, leaving less room for water to flow.
 - (D) Rivers with large amounts of sediment tend to flow more slowly.

2. According to paragraph 4, channelization helps with flood control because
 - (A) it diverts the river into an area that is not as vulnerable to flooding
 - (B) it removes the water in a section of river and uses it for agriculture nearby
 - (C) it secures the riverbed and the surrounding banks
 - (D) it increases the volume and/or the rate of flow through a section of river

3. According to paragraph 5, what is one of the downsides to artificial flood controls?
 - (A) They displace people interested in settling in a floodplain.
 - (B) They cause the river's water to flow more slowly.
 - (C) They reduce the amount of usable land around rivers.
 - (D) They deprive the surrounding land of nutrients in the sediment.

Fill in the blanks to complete the summary.

The passage describes ways in which humans have tried to artificially control the flooding of rivers in the modern era. During the spring and summer months, heavy rains or melting snow that has _____ in the mountains cause flooding. Over the centuries, people have tried to _____ rivers and the environments around them to minimize flooding in their communities. People attempt to _____ the effects of flooding through levees, dams, or channelization. However, these measures restrict the deposit of _____, or are costly and harmful for the environment. By controlling construction within the _____ and managing debris in areas prone to flooding, we can adapt to rivers' natural behavior.

Read the following passage. Then fill in the diagram with the information that you read. **Track 7**

Lithography

Lithography is a truly unique printmaking technique. Unlike other methods that had a long legacy of practice before their modern adaptation, lithography is a fairly new way of printing. It was discovered in the 1790s by a young German actor and playwright named Alois Senefelder. Senefelder was an aspiring artist in Munich, but was unable to get any of his plays published by the larger printing presses of the time. In an effort to make a name for himself, he attempted to reproduce the plays that he wrote independently. Originally, Senefelder approached the problem traditionally. Printmaking techniques of the time involved carving out areas of a copper plate and leaving behind raised areas. These raised areas would then have ink smeared across them. Inked plates would be set on a paper to make a print. Senefelder was too poor to purchase copper plates, however, so instead he used large sheets of limestone that lined the streets of Munich.

One day, Senefelder's laundress arrived at his studio to pick up his laundry. He quickly wrote his laundry list on a limestone plate with crayon made of wax, soap, and a black pigment. Afterwards, he placed the limestone in acid and discovered that the laundry list he had written with the crayon appeared in relief on the stone plate. The waxy crayon material protected the limestone underneath it from being dissolved by the acid. In this way, acid and wax crayons could be used to produce printing plates. This discovery provided the foundation for lithography, which would develop into a new artistic medium.

Eventually, the process of creating a relief on the surface of the plate stopped. The process was altered so that the printing surface instead remained totally flat. Essentially, an artist marks a limestone or aluminum plate with a greasy substance—typically, a crayon made of wax or soap. The plate is then treated in a light acid bath, which helps fix the image on the plate and keep it from smearing. After the acid bath, the plate is soaked in water. The area of the plate not drawn on with the crayon soaks up the water, while the greasy areas repel the water and keep it from soaking into the plate. Upon removal from the water, the plate is then inked, whereby a light layer of ink is brushed across the plate. The portions of the plate saturated in water repel the ink, while the greased portions of the plate soak up the ink. When the inked plate is put on a piece of paper, the water-soaked areas contain no ink and make no image. Meanwhile, the greased portions soaked with ink print the page. Although the plate is flat, ink only sticks to the greased sections. As a result, the greased area becomes imprinted on a page.

adaptation:

something that has been modified to suit different conditions or a different purpose

in relief:

elevated from a flat surface

medium:

a way of communicating information and ideas

repel:

to force away from

saturated:

soaked with liquid

concentration:

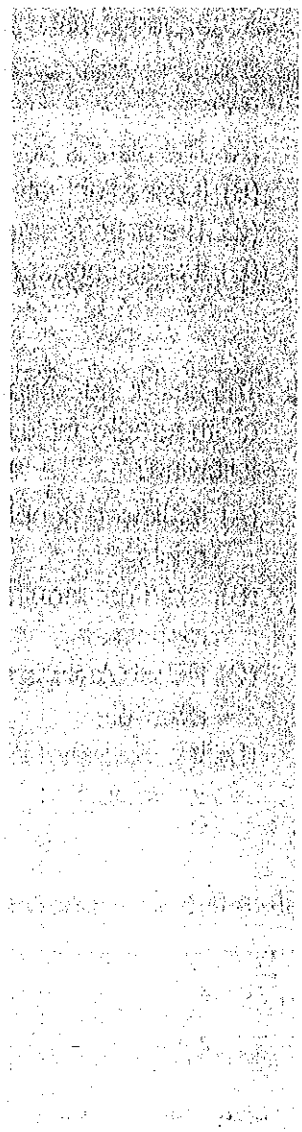
the relative amount of a given substance in a particular area

tone:

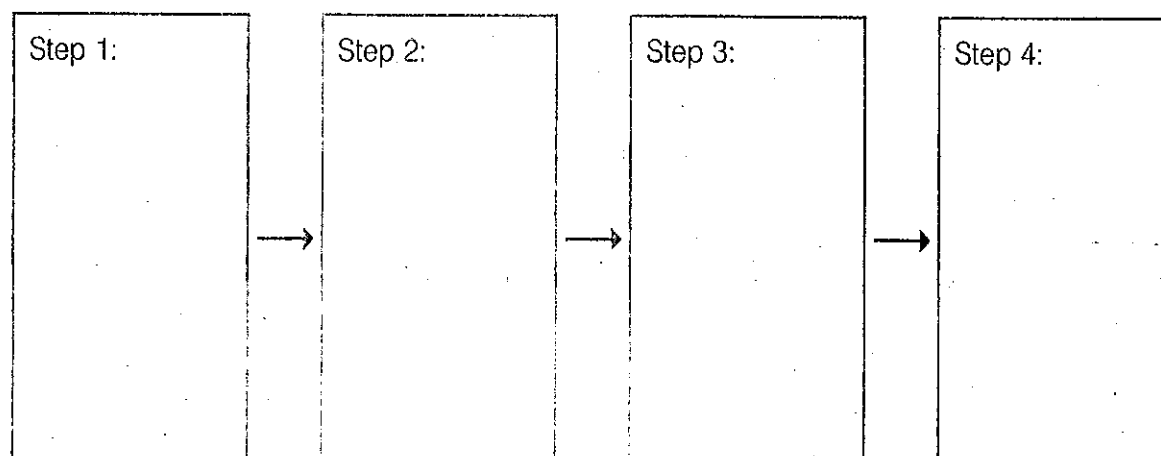
the quality of brightness and shade of a color

As it developed, the possibilities that lithography had were realized almost immediately. Printers could create a number of interesting effects relatively easily. Compared to carving a plate to do the printing, an image could simply be drawn onto a plate, which would be treated in acid and water and then inked. It was significantly cheaper and less labor-intensive than other printmaking techniques. Moreover, a number of artistic effects were made available with this new lithographic process. By putting particular colors in the grease crayon used to draw the image on the plate, new colors besides that of the ink could be added to the image. Furthermore, by adjusting the concentration of certain components in the grease crayon, the amount of ink taken by the plate could be manipulated.

Needless to say, the process of lithography changed printmaking entirely. It made images more readily available to the public, thanks to the low cost of production. In addition, lithography allowed one to manipulate the tone and concentration of ink on an image, which was impossible using other printmaking methods. It quickly grew in popularity and was used to print books and posters. A number of European and American artists were quick to adapt the technique to their artistic vision as well. Without a doubt, Henri de Toulouse-Lautrec was the most famous artist to use lithographs. Typically using lithography to create advertising posters, Lautrec's style was well-suited to the printing technique. Lautrec's images draw one's eye toward the poster and attract attention. Over the course of less than 100 years, the lithographic process had become streamlined and widely popular. Besides creating a new artistic medium, it also made prints more widely available to the public and allowed them to have art in their homes.



The Lithographic Process



1. According to paragraph 3, how did lithography differ from earlier forms of printing?
 - (A) The plate is put on paper.
 - (B) It uses flat plates.
 - (C) The plate is smeared with ink.
 - (D) It uses copper plates.

2. The author's description of the advantages of lithography includes which of the following?
 - (A) It allowed people to publish their own prints.
 - (B) It did not require complex machinery to maintain.
 - (C) It used materials that were readily available.
 - (D) It was cheaper and easier than other techniques.

3. According to paragraph 3, how did Senefelder's initial discovery differ from later lithography?
 - (A) Later lithography only used aluminum plates.
 - (B) His plates used both water and acid in the treatment process.
 - (C) Later lithography used a different crayon to write on plates.
 - (D) His plates used a technique that relied upon relief in the stone.

Fill in the blanks to complete the summary.

The passage discusses the process of lithography. Discovered in the 1790s, lithography is unlike other printmaking techniques in that it has not had such a long development toward its modern _____. Printmakers use a grease crayon to draw a design on a plate of limestone or aluminum. The plate is then treated with acid, _____ in water, and inked. Parts of the plate soaked in water _____ the ink. When the plate is pressed onto paper, only the greased parts soaked in ink print on the page. By changing the _____ of components in the grease crayon, the amount of ink taken by the plate can be manipulated. One can also change the _____ of ink on an image, a technique not possible through other printmaking methods. The process is cheaper and less labor-intensive than other printmaking techniques and quickly gained popularity.

Chapter 2

Negative Fact Questions

Necessary Skills

- Recognizing incorrect information as well as information not mentioned in the passage
- Identifying paraphrases that do or do not correctly summarize information from the passage
- Verifying that three answer choices are true and one is false

Example Questions

- All of the following are mentioned in paragraph X as _____ EXCEPT:
- According to the passage, which of the following is NOT _____?
- The author's description of _____ mentions all of the following EXCEPT:

Strategies

- Be aware that often, the three incorrect answer choices are spread across a paragraph or several paragraphs.
- Keep in mind that the correct answer either directly contradicts one or more statements in the passage or is not mentioned in the passage at all.
- Check your answer to make sure that you understood the question accurately.

Read the following passage. Then fill in the diagram with the information that you read. **Track 8**

Early Photographic Processes

Two processes invented during the Industrial Revolution advanced the field of photography. These new processes made images available to the general public. Before these processes were invented, the first permanent photographic images took eight hours to expose and develop. This made the development of photographs a long and tedious process. This all changed in 1839 when the daguerreotype was produced in France and the calotype was invented across the channel in England. Though both methods came out the same year and broadened the scope of photography, they produced very different results.

The daguerreotype, invented by Louis Jacques Mande Daguerre, was the first to gain popularity. Creating a daguerreotype involved producing images on copper plates coated in a silver-and-chalk solution. One great disadvantage of daguerreotypes was the mercury used in the process. After the photo was taken, it was placed in mercury fumes to form a latent image. The vapors were hazardous to the photographer and could result in mercury poisoning. There is speculation that Daguerre himself may have suffered from mercury poisoning in his later years.

Unlike daguerreotypes, calotypes were images developed on paper. Invented by William Fox Talbot, the paper was coated with alternating layers of silver nitrate and salt. This made silver chloride. When exposed to light, the silver chloride decomposed, evaporating the chloride. At the same time, the silver oxidized when placed in contact with gallic acid. Photographs using this method could be exposed in as quickly as thirty seconds on a bright day. Calotypes produced negative images with light areas appearing dark and dark areas appearing light. Talbot discovered that by placing a second sheet of photographic paper underneath the negatives, he could make multiple numbers of images.

Daguerreotypes produced clear images with fine detail. At first, they were more popular than calotypes because the texture of the paper fibers used in calotypes made the images slightly blurry. On the other hand, the polished surface of daguerreotypes could result in a reflection that made viewing difficult. Calotypes were easier to examine and less fragile, making them popular with travelers. Since calotypes were printed on paper and not on metal plates, they did not require the glass coverings and cases like daguerreotypes did. However, the most significant contrast between the two was the calotype's use of negatives. It was possible to make multiple copies of a calotype. A daguerreotype was a one-of-a-kind image that could not be reproduced.

tedious:

boring; uninteresting

scope:

range of application

mercury:

a poisonous liquid metallic element

latent image:

a photographic image that has been exposed but not yet developed

hazardous:

dangerous; potentially causing harm

speculation:

reasoning based on incomplete facts or information

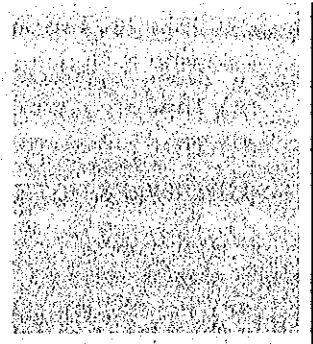
fragile:

easily broken or damaged

ingenuity:

cleverness and originality

The invention of daguerreotypes and calotypes helped pave the way for modern photography. Calotypes have had a more lasting impact, since photographs are still printed on paper and negatives are used to reproduce many images. However, the glossy clarity of the daguerreotype is also still desirable today. Later photographers would improve on the development process of these two techniques. Yet, the original results of Daguerre and Talbot's ingenuity is still seen over a century later in today's photographs.



Daguerreotypes vs. Calotypes

Daguerreotypes	Both	Calotypes
•	•	•
•	•	•
•	•	•
•	•	•

- Calotypes and daguerreotypes have all of the following in common EXCEPT:
 - Their use of paper in the printing process
 - Shortened exposure time from previous styles
 - Their use of silver in the development process
 - Their need for a development process

- The author's description of calotypes mentions all of the following EXCEPT:
 - The production of negatives
 - The creation of multiple prints
 - The use of mercury during development
 - The photographs are easily carried

3. According to the passage, which of the following is NOT true of daguerreotypes?
- (A) They are not reproducible.
 - (B) They are easily breakable.
 - (C) They are typically encased.
 - (D) They are blurred and unclear.

Fill in the blanks to complete the summary.

The passage describes two early, very different photographic processes that broadened the _____ of photography. Previously, developing photographs had been a long and _____ process. Daguerreotypes, invented in France, were very clear and detailed. They were developed on metal plates and were one of a kind. However, the mercury fumes used to form a _____ were _____ to the health of the photographer. Calotypes were developed on paper and were faintly blurry. They used negatives and were able to be reproduced multiple times. Calotypes were less _____ than daguerreotype, making them more popular among travelers. Concepts from both processes are still used in modern photography today.

Read the following passage. Then fill in the diagram with the information that you read. Track 9

Effects of Temperature on Elevation

Imagine two of the world's largest cities, New York and Los Angeles, submerged underwater due to natural causes. What "natural causes" could lead to such a disaster? Immediately, thoughts of earthquakes and flooding come to mind. Yet, the explanation might be something much more subtle. A recent geological study has found a correlation between the temperature of the Earth's crust and the elevation of its surface. Using North America as an example, the study reveals how increases or decreases in temperature can cause changes in the altitude of any given place on the continent.

Previously, scientists believed that variations in the thickness and composition of crustal rocks alone were the reasons for the elevation and buoyancy of different areas in North America. It was thought that elevation was the result of tectonic plates in the Earth's crust that collided to build mountains, sink the sea floor, and contribute to volcanic activity. They did not consider the heat that makes rock expand as a factor. When rocks are heated, they become less dense and more buoyant, an occurrence known as thermal isostasy.

A new study of elevation takes into consideration not only the composition of the rock in the upper mantle and crust, but also its temperature. Ice floats because when water freezes, it expands and becomes less dense. Similarly, when heat is applied to rock, it also expands and becomes less dense. The heat that aids in buoyancy and maintains elevation is found in the Earth's interior and from the radioactive decay of elements in the Earth's crust. The significance of taking into account temperature, composition, and thickness of crustal rock is that it allows scientists to examine other heat sources that may affect elevation, such as "hot spots." Hot spots are places in the Earth's mantle where rocks melt and create magma.

The city of Seattle, Washington in the northwestern United States is at sea level. It is located on rock that is at below average temperature for crustal rock. The slab beneath the city is insulated from the heat beneath it. If it were not, then Seattle's elevation would rise to 1,813 meters above sea level. The increase in temperature would expand the crust under the city and make it more buoyant, thus increasing the altitude. It stands to reason that if cooling makes elevation fall, then heat makes it rise. Denver, Colorado is located in the Rocky Mountains. It is called "The Mile High City" because its elevation above sea level is exactly one mile. If the temperature beneath the mountains dropped low enough, it is estimated that Denver would go

correlation:

a connection or relationship between two or more things that is not caused by chance

variation:

differences in amount, number, level or form

buoyancy:

the quality of being able to float

tectonic plate:

a segment of the Earth's crust and upper mantle that moves horizontally relative to other segments

mantle:

part of the Earth that is deep below the surface and surrounds the core

magma:

hot liquid rock inside the Earth

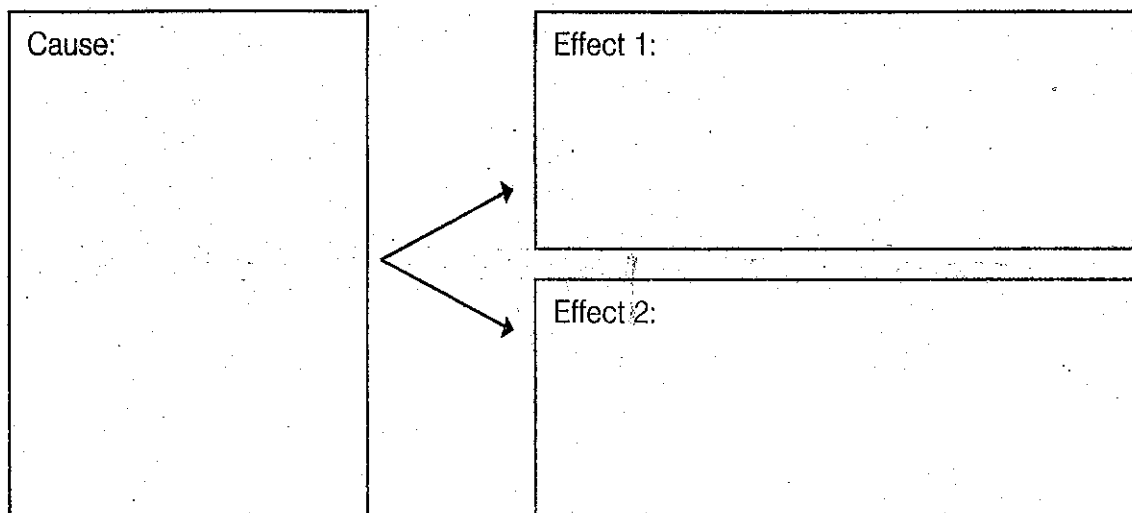
insulate:

to cover something to prevent heat, cold, noise or electricity from passing through

from 1,609 meters above sea level to 222 meters below sea level. Clearly, temperature has a large impact on elevation.

It will take billions of years for the rock beneath North America to cool and become dense enough to submerge most of the continent. However, monitoring elevation changes can aid scientists in predicting temperature shifts on the Earth's surface. In some areas, increases in altitude could signal the beginnings of volcanic activity as magma heats up crustal rock. This would allow for advance warning of volcanic eruptions.

The Effects of Temperature on Elevation



1. According to the passage, all of the following affect elevation EXCEPT:
 - (A) Crustal rock density
 - (B) Changing temperature of crustal rock
 - (C) Changing water temperature
 - (D) Composition of crustal rock
2. According to the passage, which of the following is NOT true of thermal isostasy?
 - (A) It makes rock expand.
 - (B) It reduces the density of rock.
 - (C) It increases floating capability.
 - (D) It creates hot spots.
3. All of the following can result in an increase in altitude EXCEPT:
 - (A) An increase in the temperature of the crustal rock.
 - (B) Heat rising to the crust's surface.
 - (C) A decrease in the density of the crustal rock.
 - (D) Crustal rock becomes more buoyant.

Fill in the blanks to complete the summary.

A new study has shown a _____ between the temperature of the Earth's crust and elevation. Scientists had previously thought that _____ in crustal rocks were the reasons for elevation and _____ in certain areas. Heat in the Earth's crust increases elevation, while cold decreases it. Observing temperature, composition, and crustal rock thickness allows scientists to study other heat sources that may affect elevation, such as hot spots in the Earth's _____ that melt and create _____. By monitoring changes in elevation, scientists can detect changes in the Earth's surface, which may signal impending natural disturbances.

03 Architecture

Read the following passage. Then fill in the diagram with the information that you read. **Track 10**

Architectural Styles of Le Corbusier

A leader in modern architecture was Charles-Edouard Jeanneret-Gris. Better known as Le Corbusier, he embraced the idea that land, people, and buildings should work together. Endowed with great natural talent, he was one of the most influential architects of the twentieth century. Examples of his work can be found in countries around the world. Though he is classified as a modernist architect, Le Corbusier used different architectural styles throughout his career to create his works of art.

Le Corbusier himself was one of the leading proponents of the international style of architecture. This style refers to the buildings and architecture during the 1920s and 30s, the decades that saw the formative years of modernism before World War II. The chief feature of the international style was a radical simplification of form that rejected ornamentation, preferred glass, steel, and concrete for building materials, and favored transparency to allow in more natural light. It accepted the use of industrialized mass-production techniques and saw construction as the honest expression of structure. Four slogans summed up the ideals espoused by architects that used the international style: "ornament is a crime," "truth to materials," "form follows function," and Le Corbusier's own claim that houses are "machines for living in." This last quote indicates his fascination with machinery such as automobiles and steamships. He believed that houses, like machines, should be functional. Most of Le Corbusier's designs are based on the international style. One example is the Villa Savoye built in 1929 by Le Corbusier in Poissy, France. With its steel and concrete structure, stucco walls, and simple box design, it adheres to the concepts of the international style. The Villa Savoye is considered a prime example of modern architecture and one of Le Corbusier's trademark works.

A decade after World War II, Le Corbusier turned from international style to an expressionistic one when he built the Chapel of Notre Dame du Haut at Ronchamp in France in 1955. The expressionistic style is characterized by the distortion of form for emotional effect, the curving of geometry, the subduing of realism, the borrowing of natural forms, and the use of mass-produced building materials in the international style. Notre Dame du Haut was reconstructed on the site of a pilgrimage chapel that was destroyed during the war. Le Corbusier designed it specifically to make use of the hilltop view of the horizon. Visible from all four sides, the natural surroundings aid in the expressionistic style of the chapel. The building itself is made of concrete and stone, some of which were remnants of the destroyed chapel. The walls are short and thick, while the upturned concrete roof is supported by columns and resembles a sail. The sail shape alludes

modernist:

someone who deliberately breaks away from previous styles

transparency:

the quality of being easy to see through

stucco:

plaster used for coating walls

realism:

lifelike artistic representation

allude:

to mention someone or something in an indirect way

unadorned:

without ornament; plain

stark:

very clear and plain to look at

dominate:

to be easily noticed in contrast to surroundings

to the chapel being a "ship" of religion. The building is considered one of the most important examples of religious architecture in the twentieth century, due to its unique design.

Le Corbusier himself termed his next style Brutalism when he referred to his choice of building material as *beton brut* or "raw concrete." Brutalism has its roots in modernist architecture, preferring to use rough-hewn concrete, stone, stucco, and glass. It is characterized by repeated angular geometric shapes, glaring irregularities, and rough textures in the unadorned concrete. It often demonstrates the building's function using the exterior of the building. For example, Le Corbusier's Monastery Sainte Marie de la Tourette has a rough finish to the concrete and a stark design intended to reflect the simple and sometimes harsh life of a monk. The large concrete structure sits in a meadow surrounded by forest and dominates the landscape. The monastery contains strategically placed sources of natural light to evoke a feeling of silence and reflection. There are no stained glass windows, images, or statues for adornment. Although it is still in use today by a small number of monks, La Tourette is a popular site for architecture students to visit. They can stay overnight in one of the hundred narrow cells and study a master architect's achievement first-hand.

Le Corbusier was voted one of *Time* magazine's most influential people of the twentieth century because of his impact on building design. His creations range from private homes to churches and government buildings. Le Corbusier's designs are important examples of modernist architecture that still awe people with their ingenuity today, no matter which style he used to build them.

Architectural Styles of Le Corbusier

International	Expressionism	Brutalism
•	•	•
•	•	•
•	•	•
	•	

1. The author's description of the international style of architecture mentions all of the following EXCEPT:
 - (A) Rejection of adornment
 - (B) Use of natural light
 - (C) Subduing of realism
 - (D) Use of simple forms

2. According to the passage, all of the following styles of architecture were used by Le Corbusier EXCEPT:
 - (A) International style
 - (B) Naturalist style
 - (C) Expressionist style
 - (D) Brutalism style

3. According to the passage, which of the following is NOT true of the brutalist style of architecture?
 - (A) The architect's use of angular geometric shapes.
 - (B) There are noticeable irregularities in the exterior.
 - (C) The presence of rough textures in the materials.
 - (D) A distortion of forms for emotional impact.

Fill in the blanks to complete the summary.

The passage discusses Le Corbusier, one of the greatest _____ architects of the twentieth century. He used different styles of architecture throughout his career. In his earlier years, he used the international style. It rejected ornamentation and favored _____ to let in more natural light. After WWII, Le Corbusier used expressionist and then Brutalist styles in his designs. Brutalism features angular shapes, irregularities, and rough, _____ concrete. For example, Le Corbusier's La Tourette exhibits a _____ design on the exterior and it _____ the surrounding landscape.

04

Environmental Science

Read the following passage. Then fill in the diagram with the information that you read. **Track 11**

Mountaintop Removal Mining

From below, everything appears as it should. A mountain thick with trees, wildlife foraging for food, and the undisturbed natural beauty of the rocky landscape. However, looking down on that same mountain from the air, viewers observe quite a difference. Instead of seeing a majestic peak, there is a flat plateau sitting hundreds of meters below the hills surrounding it. In the Appalachian Mountains of the United States, a new form of coal mining is taking place. Called mountaintop removal mining, it is a form of surface mining that is stirring up a large amount of controversy.

The process of mountaintop removal mining begins with clearing the land of all trees and removing the topsoil. The trees are usually sold to lumber companies and the topsoil is put aside for reclamation once the mining is completed. Miners then use explosives to expose the coal. The resulting debris is then pushed into nearby valleys to create what is called a valley fill. An excavator uses a bucket to scoop up the coal on the surface. Then the coal is taken to a processing facility where it is washed, resulting in millions of gallons of wastewater called "slurry." The pools of slurry are usually contained by earthen dams near the coal plant. After all the coal has been mined from the mountain, the topsoil that was removed at the beginning is replaced and seeded to grow vegetation. However, it is not required that the land be returned to its original state.

There are some advantages to mountaintop removal mining. It is the most cost-effective method of coal mining, cheaper than underground mining per ton of coal. Using this process, coal production increased from ninety-five million tons in 1977 to 181 million tons in 1998. Mountaintop removal mining uses explosives and heavy machinery to extract the coal. This makes it a much faster method than underground mining. Another benefit to coal companies is that the machinery allows the work to be done with fewer employees. Also, it is safer for miners in comparison to underground mining since coal seams are accessed from aboveground instead of underground, removing the risk of cave-ins. In some areas of Central Appalachia, mountaintop removal mining sites allow for development of land where stores, hospitals, schools, and industrial parks can be built.

Despite the benefits of mountaintop removal mining, it takes a heavy toll on the environment and the people who live in areas near mining sites. Residents of mining communities have to deal with the noise and resulting flying rock from the destruction of the mountaintop. There are also damages to house foundations as a result of the

plateau:

a large, elevated flat piece of land

controversy:

a disagreement, especially about a public policy or moral issue

reclamation:

the conversion of waste-land into land suitable for habitation or cultivation

debris:

fragments of something that has been destroyed or broken into pieces

excavator:

a large machine used for digging holes in the ground

corrosion:

the process of destruction by a chemical process

accumulate:

to get more and more of something over time

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ground-shaking explosions. The dust from these explosions contains sulfur compounds that can cause corrosion and pose health risks. It settles into air vents and on anything outside, such as lawn furniture and playground equipment. The advantage the coal company receives from employing fewer workers means residents of Appalachia are at a loss for jobs in an area where most live below the national poverty level. Due to the environmental pollution of the mining communities, it is unlikely other industries will move in and supply new jobs. Valley fills have buried an estimated 1,931,212 meters of streams that are now contaminated. A by-product of valley fills is acid mine drainage, which accumulates in groundwater systems. This results in acidic water high in magnesium, aluminum, and iron that contaminates drinking water, streams, rivers, and lakes. Some coal companies have bottled water delivered to whole communities because the pollution from their mining operations causes groundwater systems to become undrinkable. Another concern is the breaking of slurry dams, which can release a flood of wastewater containing chemical and metal toxins such as mercury and arsenic into homes, schools, and water supplies.

There are distinct advantages and disadvantages to mountaintop removal mining. Since ninety percent of mined coal is used in the production of electricity, it is a valuable resource with a high consumption rate. The debate is whether or not the benefit of mining coal in a cost-productive, efficient manner is worth the impact it has on the environment and residents of mining communities. Much of the evidence indicates that more coal is not worth the destruction of the Appalachian Mountains or its residents, especially when considering the potential damage that can be caused if mountaintop removal mining continues.

Mountaintop Removal Mining

Advantages	Disadvantages
<ul style="list-style-type: none"> • • • • • 	<ul style="list-style-type: none"> • • • • •

1. The author's description of possible outcomes of mountaintop removal mining mentions all of the following EXCEPT:
 - (A) Acid mine drainage
 - (B) Harmful sulfur dust
 - (C) Cave-ins
 - (D) Slurry ponds

2. According to the passage, which of the following is NOT an advantage of mountaintop removal mining?
 - (A) The land does not have to be returned to its previous state.
 - (B) There is less risk than underground mining.
 - (C) Coal companies find it more cost-efficient.
 - (D) Coal can be mined faster.

3. All of the following are disadvantages of mountaintop removal mining EXCEPT:
 - (A) Polluted water supplies
 - (B) Cracked house foundations
 - (C) No new industries in mining areas
 - (D) An increase in developable land

Fill in the blanks to complete the summary.

The passage discusses the large amount of _____ surrounding mountaintop removal mining. This form of surface mining creates a flat _____ that sits far below the hills that surround it. Although mountaintop removal mining allows more coal resources to be harvested in a shorter amount of time, the environmental and personal impact is extremely high in areas where it is practiced. Dust and _____ that result from the destruction of the mountain pose health risks to people living close by. Also, the valley fills that are created from the remains of the mountain have buried almost two million meters of streams that have become _____. Acidic water that is high in magnesium _____ in groundwater systems, which results in polluted water for those living in nearby communities.

Read the following passage. Then fill in the diagram with the information that you read. **Track 12**

Dunstan Baby Language

It is common knowledge that a crying baby is a discontent baby. The trick for caregivers is to figure out why infants are unhappy. A new method of parent/infant communication has been introduced that might make determining what a baby wants much easier. Dunstan Baby Language is a concept stating that all babies aged zero to three months, regardless of nationality and ethnicity, use five distinctive sounds to communicate their needs.

Dunstan Baby Language was conceived in Australia in 2006 by Priscilla Dunstan when she recognized that her infant son repeatedly made certain noises, or "sound reflexes." The sound reflexes are cues that the baby has needs to be met, such as hunger or tiredness. If the need goes unattended by the caregiver, the infant begins to cry. Dunstan took notes detailing the specific sound reflexes and whether the action she took in response had soothing effects. Through her empirical studies, she determined there are five sounds. "Neh" indicates hunger, "owh" communicates tiredness, "heh" expresses discomfort like needing a new diaper, "eairh" indicates flatulence, and "eh" signals the need for burping. Dunstan claims these noises are produced by the infant's body in response to a need. The theory states that once caregivers can recognize the different sound reflexes, they can respond accordingly to the needs indicated by the cues.

The Dunstan Baby Language website claims that eight years of research has gone into testing this theory of infant communication. According to Dunstan, research involving over a thousand babies and parents has been performed in seven countries with over thirty different nationalities. Independent research conducted in Australia, the United States, and the United Kingdom confirmed the system is effective. The Dunstan website also gives percentage statistics. For example, it claims that ninety percent of all mothers found Dunstan Baby Language to be very beneficial, while one hundred percent of all new mothers rated it as highly valuable.

Caregivers subscribing to the Dunstan Baby Language theory seem to benefit from its use. Seventy percent reported that their babies were easier to calm and they felt more confident in their childcare skills. Thus, they gained more self-esteem and experienced a reduction in stress. Also, two out of three fathers reported less stress and a happier marriage as an immediate result of more paternal involvement while using the Dunstan system. Some of the statistical data regarding the benefits is specific to the United States and Australia. For example, fifty percent of caregivers were able to engage in more uninterrupted

empirical:

based on observation or experience rather than theory

flatulence:

the condition of having too much gas in the stomach or intestines

leisure:

the time when one is not working or busy

methodology:

the methods and principles for doing research

construe:

to understand something in a particular way

phoneme:

the smallest unit of speech that distinguishes meaning

condition:

to train or influence people to behave or react in a certain way

sleep and reported feeling a closer bond with their babies. The technique for learning Dunstan Baby Language is sold on DVDs available for order online. This makes it a source of information that can be watched at leisure, repeatedly if needed, until parents are confident in their ability to recognize the sound reflexes.

In spite of the supposed benefits, there are several criticisms that have surfaced regarding the claims made by Dunstan. One problem is that there is no methodology given for Dunstan's research, only vague claims of success from caregivers who participated in the research process. This does not give the concrete data needed to prove the validity of the theory. Dunstan claims that this "language is shared by all babies throughout the world." Yet there is no specific information on how many babies were studied, where they were studied (except for a brief mention of three English-speaking countries), what language the babies were commonly exposed to, or how the studies were conducted. Also, researchers in the fields of linguistics and early language development question that the sounds Dunstan refers to as a language can be construed as such. They do not consider the sound reflexes to be formal. They have not been recorded in the International Phonetic Alphabet, and it is not clear what the phonemes comprising the five sound reflexes mean. It is also unclear if babies make these sounds inherently or if they are conditioned to make these sounds. For example, if a mother feeds her baby every time the baby utters the sound reflex "neh," the baby may make the connection after a time. The baby may then make the sound to get food when desired.

If Dunstan Baby Language does what it claims, then it will certainly be a sought-after technique to aid parents and infants alike. If it does not live up to what it promises, then caregivers will just have to go back to the old-fashioned way of baby care, which has worked for centuries.

Dunstan Baby Language

Benefits	Criticisms
<ul style="list-style-type: none"> • • • 	<ul style="list-style-type: none"> • • •

1. The author's description of the steps in the Dunstan Baby Language process mentions all of the following EXCEPT:
- (A) Parents determine what the sound reflex means.
 - (B) Babies begin to cry before giving the sound reflex.
 - (C) Babies vocalize the sound reflex to indicate a need.
 - (D) Parents respond to a sound reflex with an appropriate action.
2. According to the passage, which of the following is NOT true?
- (A) Mothers using Dunstan Baby Language felt less stress.
 - (B) If babies' needs are not met, they start to cry.
 - (C) Sound reflexes are recognized by linguists as language.
 - (D) Eight years of research has tested the validity of Dunstan Baby Language.

3. According to the passage, all of the following are criticisms of Dunstan Baby Language EXCEPT:
- (A) There is no methodology given for the research.
 - (B) Babies may be conditioned to make the sound reflexes.
 - (C) There is no information on what the sound reflexes mean.
 - (D) Fathers had less paternal involvement when using it.

Fill in the blanks to complete the summary.

The passage discusses Dunstan Baby Language, which operates on the belief that babies make five sound reflexes to indicate their needs. Through her _____ studies, Priscilla Dunstan claimed that these sounds are produced by a baby in response to a need, such as hunger, tiredness, or _____. However there is no concrete data proving that Dunstan's theory is valid. Critics claim that no _____ was given for the research and that the sounds babies make may not be _____ as language. Furthermore, babies may be _____ to make these sounds by their caregivers.

06 Psychology

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Read the following passage. Then fill in the diagram with the information that you read. **Track 13**

The Availability Heuristic

Heuristics are simple, efficient rules. Learned or inherent, they explain how people make decisions, form judgments, and solve problems. The availability heuristic is a concept in cognitive psychology. It states that people tend to judge the probability of a situation by how easy it is to think of its instances or examples through opinion, imagination, or memory. In short, the easier a situation comes to mind, the more likely it seems.

The availability heuristic explains that events that come to mind immediately are often judged more likely to occur than they really are. For instance, the odds of being killed in a plane crash have been estimated at one in twenty-two million, while the odds of being killed in a car crash may be one in 5,000. The statistical information shows that the chances of a person dying in an auto accident are much higher than dying in a plane crash. Yet, more people are afraid of air travel than of getting into a car. Though car accidents occur more frequently, plane crashes are given more media coverage on the rare occasions when they do happen. Since people easily recall seeing pictures of airplane catastrophes, they might believe that flying carries a higher risk than driving. Graphic, tragic images often stay in people's minds and are therefore easier to recall.

Similarly, when a group of people were asked which had a higher incidence of death, strokes or car accidents, the response most given was car accidents. Strokes is the correct answer, but since there is never a high rate of media attention on stroke victims, people are more easily able to recall reports of car accident fatalities. A picture of a smashed car on the front page of a newspaper is hard to miss. However, references to death by stroke in the obituary section of the same paper are easily overlooked and are not at the front of people's memories. Another example is when a parent may perceive a higher risk of their own children being abducted after seeing a program on television about kidnapped children. The likelihood of a child being abducted is very small, but due to media coverage, it can be perceived as higher than it really is. This may lead parents to worry about something that will probably never happen, instead of worrying about more immediate concerns like poor grades or bad eating habits.

The availability heuristic may also alter the perceptions of a group. Belonging to a specific group can lead to the belief that a great number of the general population is also part of that group. When vegetarians were asked to estimate how many people were vegetarians versus non-vegetarians, they commonly responded that the general population contained more vegetarians than non-vegetarians. Though statistically this is incorrect, vegetarians perceived that there was a higher number

Inherent:

basic or essential

catastrophe:

an event that causes a lot of damage

stroke:

a sudden blockage or rupture of a blood vessel in the brain

perceive:

to understand or think about something in a particular way

biased:

unfairly influenced

termination:

the ending point of an agreement, job, or situation

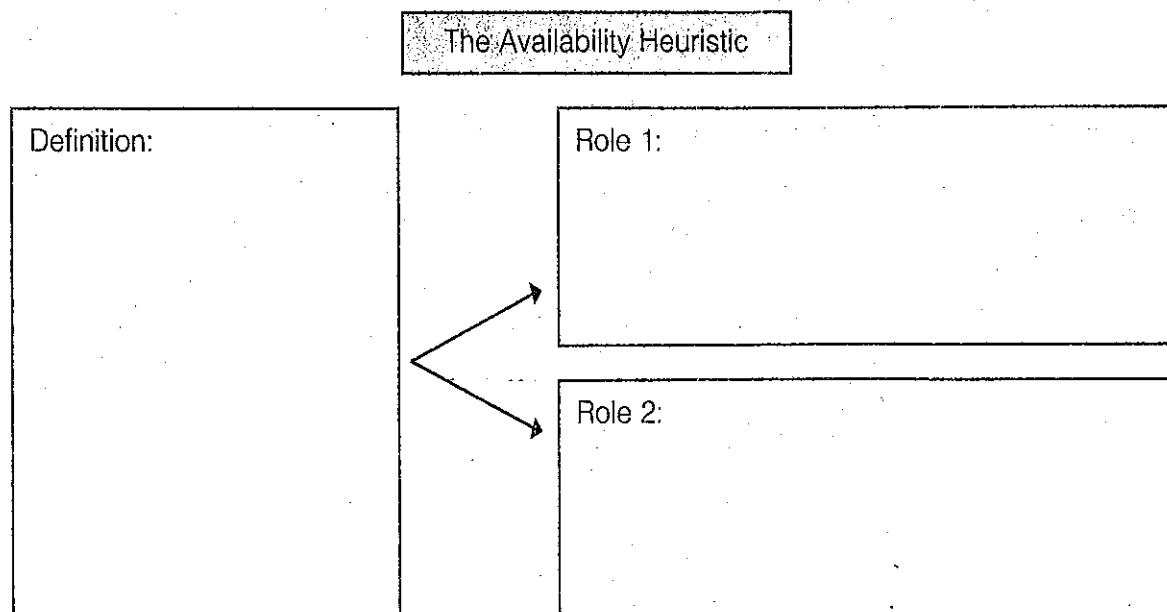
reinstate:

to give someone back their previous job or position

of people in their same group. This is because most of the people they associate with are part of that group. When pondering the question, vegetarians began to think of all the people they knew who were also vegetarians. This information was more readily called to their mind than the names of people who were not vegetarians. Thus, the group numbers seemed larger than they really were. Also, knowledge stored in short-term memory affects decisions and perceptions. Thus, having recent contact with other vegetarians would make it seem more likely that the general population contains a large number of vegetarians.

The availability heuristic also claims that the recall of some information may be biased because a person has limited exposure to certain events. A study of employees was done to determine if cases of employment termination were legal. It revealed that employees believed they were better protected by labor laws than they really were. Most workers do not have any legal training in employment law. Therefore, their knowledge is based on stories, incidents, and assumptions from their own experiences and those of their co-workers. If a worker knows of several others that were unfairly terminated and then reinstated, he might believe that it is harder to be fired than it really is. Since he is not exposed to the number of workers who have been permanently released from employment, he does not immediately call these cases to mind and incorrectly thinks he has more rights than he really does.

When the availability heuristic is associated with the objective likelihood of an event, it is trustworthy. However, the use of the availability heuristic can also lead to errors resulting in poor choices. It is extremely useful in inductive reasoning or the ability to make a judgment that supports an outcome. However, it can also cause misinformed decisions if people do not examine their reasoning closely.



1. According to the passage, which of the following is NOT true of the availability heuristic?
 - (A) It can be influenced by media exposure.
 - (B) Group association can affect perception.
 - (C) Recalled information can be biased.
 - (D) It can lead to an increase in accidents.

2. According to the passage, which of the following is NOT true?
 - (A) There is a higher risk of dying in a car accident than a plane crash.
 - (B) Car accidents have a higher incidence of mortality than strokes.
 - (C) It is more important to worry about a child having poor grades than being kidnapped.
 - (D) Vegetarians tend to think that more than half of the population are vegetarians.

3. The author's description of the availability heuristic mentions all of the following EXCEPT:
 - (A) Limited exposure can affect reliability of information.
 - (B) Items stored in short-term memory are more likely to be influential.
 - (C) Knowledge is sometimes based on assumptions.
 - (D) Instincts are important when predicting an outcome.

Fill in the blanks to complete the summary.

Heuristics are learned or _____ rules that explain how people make decisions, form judgments, and solve problems. The availability heuristic is based on people's judgment of a situation's probability based on what is easily recalled from memory. For example, because people more easily recall airplane _____, they may believe that flying carries a higher risk than driving. Also, parents may _____ that the risk of child abduction is higher than it actually is due to media coverage. Another instance is employees who believe that they are more protected against employment _____ than they really are. The recollection of some information may be _____ because people's knowledge is based only on their experiences and those of others they know.



Chapter 3 Inference Questions

Necessary Skills

- Perceiving ideas that are suggested but not directly stated within a passage
- Drawing conclusions based on information given within a statement or section of a passage
- Determining logical implications of the author's words

Example Questions

- Which of the following can be inferred about _____?
- The author of the passage implies that _____
- Which of the following can be inferred from paragraph X about _____?
- Based on information in paragraphs X and Y, what can be inferred about _____?
- It is suggested in paragraph X that _____

Strategies

- Ensure that your answer does not contradict the main idea of the passage.
- Do not choose an answer because it seems important or true. The correct answer must be inferable from the passage.
- Check that you can defend your answer choice by referring to explicitly stated information in the passage that points to the inference you have chosen.

01 Business

Read the following passage. Then fill in the diagram with the information that you read. Track 14

Improving Productivity

A key determinant of a company's success is its level of productivity. Productivity measures the time it takes workers to produce a particular product. Developing good employee attitudes and creating incentives for employees improve a business's productivity and effectiveness.

A well-managed company encourages behavior in its employees that causes an increase in productivity. Many characteristics are associated with well-directed companies. These include having high expectations for employees' work performance, trusting employees, and treating them with respect. These characteristics improve a worker's attitude. It goes without saying that satisfied workers tend to be more productive. Companies that show great organizational skills also try to engage employees in the workplace. They do this in the hopes that the employee will work hard to make the company more efficient and competitive in the market. A company may, for example, engage its employees by challenging them to be creative team players in the company. Allowing creativity and teamwork can make employees feel successful in their job. This leads to improvements in productivity.

Good attitudes also arise when well-managed companies motivate workers to do well in their jobs. The motivation employees receive from a company makes them feel useful and appreciated, which increases productivity. This motivation can come in the form of goals. Interestingly, goals do not have to be set particularly high. As an illustration, the computer company IBM wanted to increase productivity and decided to motivate its workers. The company intentionally set its sales quota low. This was done to assure that a majority of its salespeople could attain the quota. When the salespeople reached it, they felt useful and needed. The computer company's motivation strategies improved the quality and efficiency of its employees' work. In turn, the company improved its sales.

Many companies offer financial incentives and merchandise rewards to their employees. Financial incentives can be in the form of retirement plans or stocks. These incentives increase productivity by engaging employees in the workplace. They also motivate them to strive toward making the company successful and profitable. In 2004, the well-known food company Hormel provided the largest financial incentive package in their history. The company provided its employees with over 14.6 million dollars in financial rewards. These incentives enabled Hormel to reward employees for their dedication to improving the company's productivity in the challenging food industry market.

Incentive:

something that makes someone want to work harder

engage:

to involve someone in a particular activity

quota:

a minimum amount of something that someone needs to do

attain:

to succeed at accomplishing something

stock:

a share of money held by an investor

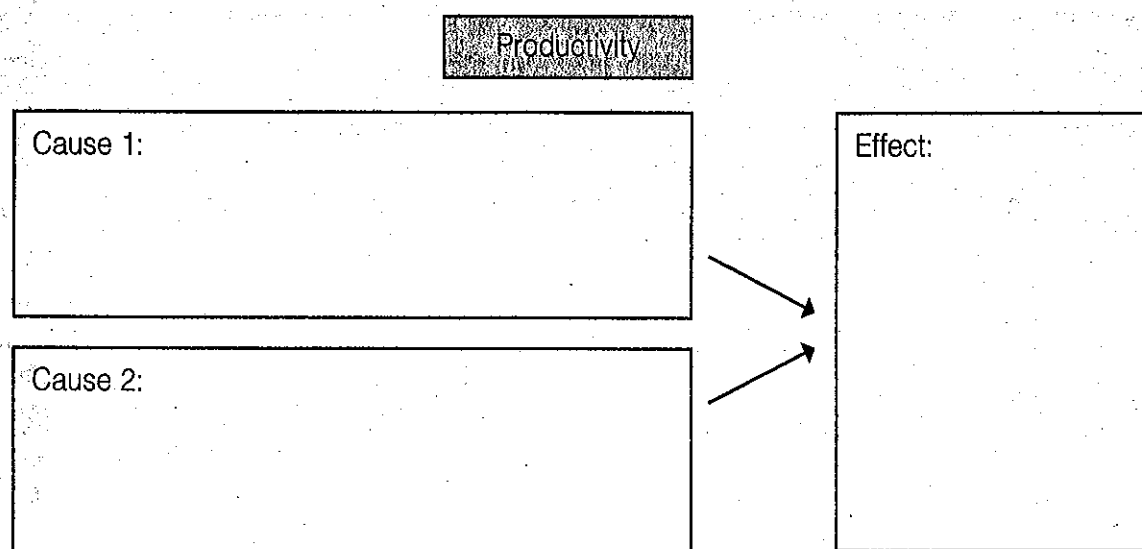
profitable:

making money

enable:

to provide somebody with the ability to do something

Other financial incentives include giving bonuses and increasing salaries. Some companies offer prospective employees bonus packages to encourage productivity. Others offer merchandise rewards to their employees. These include stereos and vacation packages. For instance, the tool company Stanley offered merchandise incentives to employees who provided ideas on how to improve productivity. These incentives engaged workers in coming up with ideas. They developed more than 18,000 ideas that would increase the tool company's productivity.



1. Which of the following can be inferred from paragraph 3 about low sales quotas?
 - (A) They can decrease a company's productivity.
 - (B) They do not necessarily motivate workers.
 - (C) They are easier to reach.
 - (D) They generate teamwork.

2. Which of the following can be inferred about financial incentives?
 - (A) They are offered once a year.
 - (B) Experienced employees receive more.
 - (C) They can be powerful motivators.
 - (D) Companies use them frequently.

3. Which of the following can be inferred about merchandise rewards?
 - (A) Workers are motivated by non-monetary rewards.
 - (B) They are more popular than financial incentives.
 - (C) Workers do not always know how they work.
 - (D) They do not always engage workers.

Fill in the blanks to complete the summary.

According to the passage, developing good employee attitudes and offering _____ can improve a company's productivity. Well-organized companies and motivation from employers create good attitudes among workers, which _____ workers and make them want to be successful in their jobs. Some companies may set their sales _____ low so that most salespeople can _____ that quota, which makes them feel useful and needed. Financial incentives and merchandise rewards can also improve employee productivity. Incentives can be in the form of employee retirement plans or _____. An employee's hard work caused by these incentives and rewards leads to an increase in productivity.

Read the following passage. Then fill in the diagram with the information that you read. **Track 15**

Blind Studies

Blind studies are tools that researchers use in different fields, such as pharmacology, medicine, and psychology. The name comes from the idea that participants cannot see or obtain any information about an experiment: they are, in effect, "blind" to the particulars of the study. There are two types of blind studies: single-blind and double-blind. They both address the problem of bias in research, which is the prejudice of researchers and participants that might influence the results of experiments. During these studies, participants are placed in either a control or an experimental group. A control group contains participants that are not exposed to a particular treatment in an experiment, such as a drug treatment. In contrast, an experimental group contains participants that are exposed to the treatment in the experiment.

In the single-blind study, participants in an experiment do not know if they are in an experimental or control group. The single-blind study prevents any bias from the participants during the experiment. It does this by concealing information that might influence their behaviors and affect the results of the experiment. Researchers in the single-blind study know the full details of the experiment, such as which participants are in the control or experimental group. A simple example of a single-blind study is a blind taste test for brand name cookies. In order to eliminate bias for a particular brand of cookie, researchers may blindfold the participants so they cannot see the cookies during taste tests. The single-blind study does contain a flaw called experimenter effects. These effects are simple cues, such as a researcher's smile or tone of voice. These cues might influence a participant's behavior in an experiment and lead to inaccurate results in the experiment. For instance, a researcher might talk to a participant about the great advantages of a drug in a particular research experiment. Doing this could influence the participant's behavior in the study.

Cues from a researcher that might affect a participant's behavior are virtually eliminated in the double-blind study. Also, the possibility of bias from the researcher and participant is lessened by concealing information that might influence their behavior. In the study, researchers and participants do not know if the participants are in the control or experimental group. This assures that the behavior and actions of researchers and participants will not influence the outcome of the experiment. Researchers in the pharmaceutical industry typically conduct research on newly developed drugs using the double-blind study. Some participants in the drug study are put in an experimental

bias:

an unfair preference for or dislike of something.

expose:

to make someone experience something

flaw:

a fault in something that makes it less effective

lessen:

to become smaller in amount or importance

cue:

an action or statement that tells someone indirectly that they should do something

placebo:

a substance that contains no medicine, given to determine the effectiveness of new medicines in drug studies

group where they receive the drug being tested. Other participants are put in a control group where they receive a placebo. Using the double-blind study in drug research prevents bias from researchers and participants toward a particular drug. It also leads to accurate results by concealing information that might affect participants' and researchers' attitudes.

Blind studies prevent bias in research because they conceal information about experiments from researchers and participants. With the increasing amount of research being done in different fields such as medicine, blind studies are necessary tools. They ensure that researchers' and participants' prejudices do not interfere with the results.

Blind Studies

Single-blind	Both	Double-blind
•	•	•
•	•	•
	•	

- Which of the following can be inferred about single-blind studies?
 - They are more prone to error than double-blind studies.
 - Researchers do not have the ability to affect a participant's behavior.
 - More researchers use single-blind studies than double-blind studies.
 - The results of single-blind studies are often affected by a person's age.
- The author of the passage implies that double-blind studies
 - are structured differently depending on the participant's gender
 - correct problems associated with single-blind studies
 - make experiments easier
 - contain experimenter effects

3. Which of the following can be inferred from paragraph 3 about double-blind studies?
- (A) Researchers may know a participant's personal information.
 - (B) There may be some bias in a double-blind study.
 - (C) They are used more often than single-blind studies.
 - (D) Participants may infer they are being tested with a placebo.

Fill in the blanks to complete the summary.

According to the passage, single- and double-blind studies address the problem of _____ in research. Any _____ of researchers or participants could influence the results of an experiment. In these experiments, participants are either part of a control group, in which they are unexposed to a particular treatment, or are part of an experimental group, in which they are _____ to the treatment in the experiment. Single-blind studies do have a _____. Researchers may give simple _____ to participants that may lead to inaccurate results. Double-blind studies withhold information not only from the participants, but also from researchers, which _____ the possibility of bias from the researchers or the participants.

Read the following passage. Then fill in the diagram with the information that you read. Track 16

Achievements of the Hellenistic Period

Alexander the Great, the famous warrior king of Macedonia, had conquered much of Europe and Asia by the time of his death in 323 BCE. During his twelve-year reign as king, he spread Greek culture throughout the lands he conquered—an influence that, in fact, far outlived the life of the great king. Historians generally mark the year of his death as the starting point of the Hellenistic Age (323–31 BCE), an era marked by the spread and integration of Greek culture into the conquered lands beyond Greece.

A number of major scientific breakthroughs occurred during the Hellenistic Age. The Egyptian city of Alexandria attracted prominent Greek scholars because of its research library and museum. The museum housed a small observatory where astronomers could study the heavens. It was here, through his careful examination of the cosmos, that the Greek astronomer Aristarchus developed two significant astronomical theories. Opposite to the prevailing theory of the day, Aristarchus boldly determined that the Earth was smaller than the sun. He further concluded that the planets revolved around the sun, and not the other way around, as most people then believed. In addition to Aristarchus's discoveries, Eratosthenes, another Greek scholar, correctly determined that the circumference of the Earth is roughly 25,000 miles. As the director of Alexandria's library, Eratosthenes researched different theories about geometry to help him determine Earth's size. He used a text written by the famous mathematician Euclid that included significant concepts in geometry. With the help of Euclid's book, other scholars were also able to build formulas and concepts concerning the size of certain objects.

The arts flourished as well during the Hellenistic Age. Sculptures were created during this period that honored Greek gods and heroes and portrayed people in everyday situations, some of which were enormous in scale. The Colossus of Rhodes was the largest known statue during the Hellenistic period. The 105-foot bronze statue was on the island of Rhodes, and historians believe that this gigantic statue might have served as a lighthouse for the island. In 1863, archaeologists discovered another Hellenistic statue named the Winged Victory of Samothrace. According to historians, the statue honored a naval victory by the Greeks against enemies who threatened the Greeks' freedom. Yet the crowning achievement of Hellenistic art must be those works found within the city of Alexandria. The city teemed with beautiful palaces and often imposing structures. One of Alexandria's most famous structures was the Pharos. At a height of 400 feet, the Pharos

prominent:

well-known

flourish:

to be successful

observatory:

a building used to view stars

revolve:

to turn around a central point

formula:

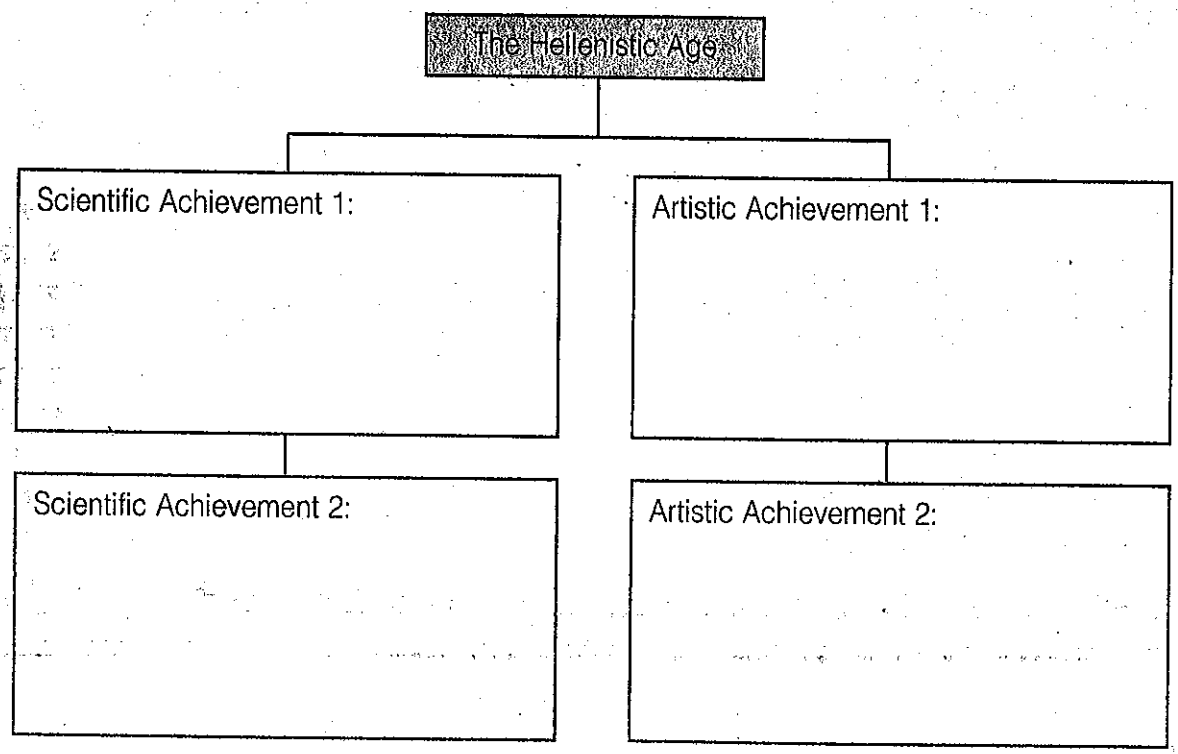
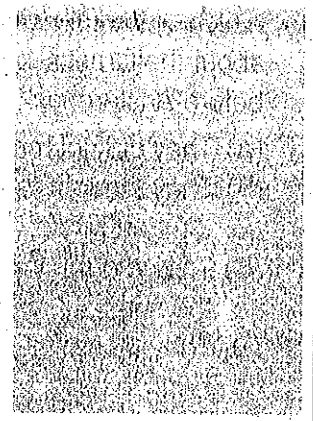
a method of doing something

naval:

relating to a part of a country's military that fights at sea

was an enormous lighthouse at Alexandria's harbor. The lighthouse had a bronze mirror, which reflected light from a burning fire.

Greek power and influence certainly did not go unnoticed. In fact, a new battle for the domination of the world had begun years before in the third century BCE. Little by little, Roman armies conquered many areas previously controlled by Greece. Then, in 31 BCE, the Hellenistic Age came to an abrupt end when the Roman navy conquered Greek forces in the battle of Actium. The Hellenistic Age was over, but its influence continued as the Romans adopted and adapted many Greek contributions.



1. Which of the following can be inferred about the Greeks' concept of the sun before Aristarchus?
 - (A) They did not realize the sun was a star.
 - (B) They thought the sun was closer to the Earth.
 - (C) They did not think about the size of the sun.
 - (D) They thought it was smaller than the Earth.

2. Which of the following can be inferred about the scholar Eratosthenes?
 - (A) Euclid's book helped him grasp theories about geometry.
 - (B) He discovered the actual size of the sun.
 - (C) The observatory helped him determine the Earth's size.
 - (D) He was a significant leader of Alexandria.

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3. The author of the passage implies that the Colossus of Rhodes
 - (A) portrayed people in everyday situations
 - (B) may have served a dual purpose
 - (C) was destroyed by the Romans
 - (D) honored the bravery of the Greeks

Fill in the blanks to complete the summary.

According to the passage, the Hellenistic age produced many achievements in the arts and sciences. The city of Alexandria's research library and museum attracted many _____ Greek scholars. Astronomers also came to study the heavens in the museum's _____, which led to the conclusion that the planets, in fact, _____ around the sun. Scholars developed concepts and built _____ to determine the size of certain objects such as the Earth. There are many examples of art achievements in the Hellenistic age, which included, among magnificent palaces and structures, a statue honoring a _____ victory against those who threatened the Greeks' freedom.

Read the following passage. Then fill in the diagram with the information that you read. **Track 17**

Habitat Fragmentation

Researchers in the field of conservation biology who study factors such as urban development and its effects on ecosystems have focused much attention on habitat fragmentation. Habitats are said to fragment when they are broken down into smaller habitat patches. It is typically the result of human activity, such as rural development or agricultural practices. This fragmentation has many effects, which include localized species extinction and so-called "edge effects." Edge effects occur when a fragmented habitat borders a contrasting environment, such as developed land.

Habitat fragmentation is a significant cause of localized extinction (the extinction of a species only within a certain area). Fragmentation increases the risk of predation. When humans build roads, houses, and buildings, they fragment ecosystems. This effectively reduces the size of many animals' hunting and feeding areas. Smaller habitats resulting from habitat fragmentation rarely provide enough cover and food resources for species living there. For example, the New England cottontail rabbit requires large patches of shrubs (woody plants) as a cover resource. Without the shrubs to conceal their movements, the cottontail is unable to hide from attacking predators. Localized extinction is likely.

The numbers of predators, such as raccoons, foxes, and coyotes often increase in a fragmented habitat. Predators can often more easily adapt to different environments—including the smaller patches of habitat—because they can take advantage of different resources that exist in both the small patches and the developed areas. To illustrate, a raccoon can find food alongside highways or even in the trashcans of residential areas. The prey of such animals is then more susceptible to attack as a result of the higher numbers of predators, making localized extinction more probable.

In order for any natural population to survive, it must maintain a "critical number" of whatever species makes up the population. If animals within that species drop below a certain number, the species will face extinction. In order to maintain this critical number, the species needs a certain amount of area in which to live. This minimum area should be great enough in size to compensate for years of bad weather. For example, animals that live in larger habitats may struggle during seasons or years with poor weather. They must travel far and wide through the larger area to find the food needed to get through difficult times. However, in a smaller, fragmented habitat, a harsh winter

conservation:

the preservation of natural resources

urban:

relating to the city

ecosystem:

the plants and animals in a certain area that depend on one another

patch:

a small area of land

rural:

found in the country

susceptible:

likely to be affected by something

migration:

the movement of a group of people or animals from one region to another

adapt:

to change something to make it more suitable to different conditions

or a season or two with much lower than average precipitation can kill off a species, as finding food becomes problematic during such times. Simply put, in smaller areas, there is not enough food to go around during the lean times.

Habitat fragmentation also causes what are known as edge effects. When a border is created between a natural habitat and developed land, the ecosystem within the natural habitat is affected. A forest's ecosystem may, for example, be affected when it borders a land where the trees have been cut down. Sunlight penetrates the former forest's interior, drying it up more quickly. The drying-out process then affects the border areas of the remaining forest, causing them to dry out as well. The forest's interior is shadier, more humid, and the air more still than at the edges. The climate toward the edges, on the other hand, is windier and has more sunlight due to its proximity to the developed land, which has been cleared and exposed to more climate changes. This all has the effect of drying out the edges of forests to a sometimes dangerous degree.

Of course, such edge effects have an impact not only on the plants of an area, but its animal populations as well. On a micro scale, many insects that live in border areas, particularly those that do not roam far from a home base or migrate, may face localized extinction. Larger animals, too, feel the edge effects. They typically move further into the center of the fragmented habitat, since it is nearly impossible for many animals to adapt to the edge effects. Predators can, of course, sense these movements, and the large numbers of smaller animals that move into the habitat's center often become easy prey.

Habitat Fragmentation

Effect 1:

Example:

Effect 2:

Example:

1. Which of the following can be inferred about habitat fragmentation?
 - (A) Some animals can benefit from it.
 - (B) Smaller animals may not be affected by it.
 - (C) Species of plants often go extinct because of it.
 - (D) Prey will typically starve to death.
2. The author of the passage implies that bigger populations that are not fragmented
 - (A) are less likely to be repopulated
 - (B) are limited in their resources
 - (C) are more adaptable than smaller populations
 - (D) are isolated from smaller animals
3. Which of the following can be inferred from paragraph 5 about climate changes?
 - (A) Edge effects are felt more during the winter months.
 - (B) Climate changes at the edge include more humidity.
 - (C) Climate changes rarely happen in a habitat.
 - (D) Edge effects may result in more forest fires.

Fill in the blanks to complete the summary.

According to the passage, habitat fragmentation causes species extinction and edge effects in habitats that have been broken down into smaller _____ of land. These patches are typically the result of _____ development or agricultural practices. Because predators can _____ more easily to changing environments, their prey become more _____ to attack, which makes localized species extinction more likely. The edge effects of habitat fragmentation influence the climates between the edge and the interior of a fragmented habitat. If animals that live in these habitats do not _____, they often face localized extinction.

Read the following passage. Then fill in the diagram with the information that you read. **Track 18**

The Art of Hawaiian Kapa

In early Polynesia, weaving from animal hair did not exist, nor were there any fiber sources such as cotton, hemp, flax, or silk that could be used for material. However, Hawaiians in the eighteenth century developed a process for making material, called kapa, from the bark of trees.

This multi-purpose fabric was water-resistant, soft, warm, and washable. Kapa was used to make clothing for men and women, blankets for newborns, capes, and household goods such as bedding. Orange strips of kapa were used by women as hair accessories and were also wrapped around arms and legs for adornment. The material was used in religious practices as well. Tall towers that were thought to be dwellings of the gods were covered in kapa, and wooden idols would be draped with kapa to indicate a god's presence inside the statue. It could be used for burial shrouds, kite tails, bandages, balls for games, and even something as simple as lamp wicks.

Kapa making was a long process requiring diligence that began with cultivating trees. Though kapa could be made using various trees, the most preferred kind was wauke, a paper mulberry tree that yielded the best quality material. The wauke trees had thick, rough leaves and branches that grew profusely from a slim, stalk-like trunk. The side branches would be cut off in order to produce straight wauke trunks without branch holes marring the bark. The trees would be harvested anywhere from nine months to two years after planting. The trunk stalks were gathered so that the process of stripping off the bark could begin. Using serrated shells, the bark was cut the entire length of the stalk and carefully peeled off. It was then rolled into small coils, with the inner side of the bark facing outward. These coils were left for several days so the bark surface would turn flat and smooth. The strips were unrolled, stretched flat, and the outer layer of bark was scraped off. The inner bark was rolled up again and soaked in sea water for another several days to make it soft and to remove any resin from the fibers.

The next step involved beating the strips to form the kapa material. The softened strips were placed across a stone anvil and pounded with a round mallet called a hohoa, which turned them into longer strips. The strips were left out in the sun to bleach before being wrapped in tea leaves and placed in a covered pot of water to soak again for two weeks. This would soften them up for a second round of beating, this time on a wooden anvil. The instrument used for this stage in the process was a square mallet called a kuku, and each of

diligence:
persistent and
hard-working effort in
doing something

cultivate:
to grow crops or plants,
especially in large
quantities

profuse:
existing or being
produced in large
amounts

serrated:
edged with notches or
projections resembling
the teeth of a saw

resin:
a transparent, sticky
substance produced by
some plants and trees

mallet:
a tool resembling a
hammer

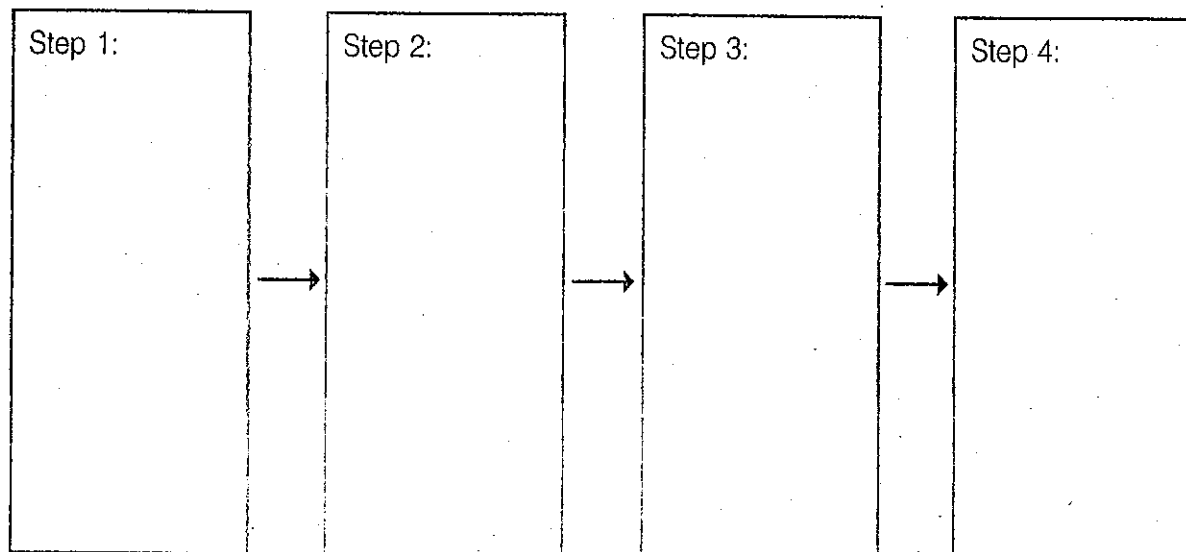
resurgence:
rising again; becoming
stronger again

the mallet's four sides had a different texture. The side with the coarsest grooves was used first to break down the wet bark. Then two other sides with finer grooves were used to further mash the bark, and the final stage of beating was done using the fourth smooth side of the mallet to bond the fibers together into the desired width of the kapa. To give the material a personal touch, a kapa maker might mark the cloth with her own special design that would show through the fabric, much like a watermark on a piece of high-quality paper.

Finished kapa material was always white from the strips of bark being bleached in the sun. However, kapa makers had many sources of dye that could be used to color the fabric. By using leaves, roots, berries, and bark, a variety of shades of red, yellow, green, blue, pink, and purple could be produced to make the kapa colorful. Free-hand designs could be brushed onto the fabric to lend additional decoration. There was also a stamping process using bamboo that had a design cut into the inner side of the stalk. Dipped in dye, this stamp was repeatedly placed on the cloth, allowing kapa makers to produce their own artistic creation. Coconut oil, scented fern leaves, and sandalwood were used to lend pleasing scents to the material as a finishing touch.

The arrival of Europeans in the late 1700s introduced woven cloth, and the art form of kapa making died out. However, there has been a recent resurgence in making kapa material. Hawaiian artists are taking interest and pride in their past culture, and kapa is once again being made today using the same process as was used centuries ago.

Kapa Making Process



1. Which of the following can be inferred from paragraph 2 about eighteenth century Hawaiian religious beliefs?
- (A) Kapa was considered to be a creation of the gods.
 - (B) Supernatural beings were thought to inhabit the island with the people.
 - (C) The kapa-making process was considered a way to anger the gods.
 - (D) Hawaiian gods were greedy and demanded nice things.
2. What does the author of the passage imply about the wauke tree?
- (A) They were easy to care for and grow.
 - (B) Only old trees could be used for kapa.
 - (C) Its trunk is not naturally straight.
 - (D) It was the only tree that could be used for kapa.
3. Which of the following can be inferred from paragraph 4 about the bark used to make kapa?
- (A) Dry fibers were not flexible enough to make the material.
 - (B) Variations in its color resulted in different colored kapa.
 - (C) The inner layer of bark was not needed to make kapa.
 - (D) Different kinds of bark produced different designs.

Fill in the blanks to complete the summary.

The passage discusses how Hawaiians in the eighteenth century made material called kapa out of tree bark. The process of making kapa required _____ that began with the _____ of wauke trees. Once the trees were gathered, the kapa makers used _____ shells to cut the bark off the stalk. After the inner bark was scraped off and soaked in water, the softened strips were pounded with _____, then dyed and scented. Though kapa making became a lost art for several generations, there has been a recent _____ in making kapa materials using traditional methods.

06 Biology

Read the following passage. Then fill in the diagram with the information that you read. **Track 19**

Diversity in the Cambrian Seas

The seas during the Cambrian period of the Earth's history were teeming with new forms of life. Scientists once thought these early multi-celled creatures could not possibly be as varied as today's ocean inhabitants. However, this theory has been disputed by the discovery of two major fossil sites. These sites provide evidence that organisms during the Cambrian Period were actually much more diverse than sea life today.

Around 545 million years ago, a large number of complex multi-celled organisms appeared over a five-to-ten-million-year period. This phenomenon occurring in such an evolutionarily brief amount of time is called the Cambrian Explosion. This sudden burst of life is responsible for most of the major animal groups that are recognized today. The majority of fossils found from the Cambrian period have been classified as arthropods. They are related to today's insects, spiders, and crustaceans. During the Cambrian Period, the first shelled animals with exoskeletons appeared, called trilobites. Natural selection is thought to have promoted larger sizes in organisms, and there was a need for hard skeletons to provide structural support. The exoskeleton helped preserve organisms in fossil form. By studying examples found at two major fossil sites, scientists now know much more about these Cambrian species than before.

The Chengjiang Biota in China preserved many diverse organisms from the Early Cambrian Period in a section of mudstone fifty meters thick known as the Maotianshan Shale. The fossils are embedded one to two centimeters deep in the stone, providing the oldest Cambrian examples of diverse and well-preserved soft-bodied organisms. Though their presence has been known since 1900, it was the discovery of a trilobite fossil in 1984 that revealed the information Chengjiang could offer. The unique preservation of the soft body parts and internal soft tissue of organisms, as opposed to just the hard skeletal elements usually found in fossils, presented a wealth of knowledge about the organisms in the Cambrian period. More than 120 species have been classified at Chengjiang Biota, and more than ten animal phyla recognized. However, there were also a number of fossils that could not be categorized. These mysterious fossils exhibited features that have not been seen in modern organisms. It is believed these organisms may have failed at evolution and died out as quickly as they appeared.

No doubt the Chengjiang Biota demonstrates a wide diversity of Cambrian life. However, the most significant discovery that suggests

teem:

to be full of

phenomenon:

an event; a happening

arthropod:

an invertebrate animal with an exoskeleton and segmented body

embed:

to fix something firmly in a surface or object

exoskeleton:

a hard outer covering such as a shell that provides protection and support

extensive:

very large in amount or degree

appendage:

a part or organ, such as an arm or leg, joined to a body

READING

LISTENING

SPEAKING

WRITING

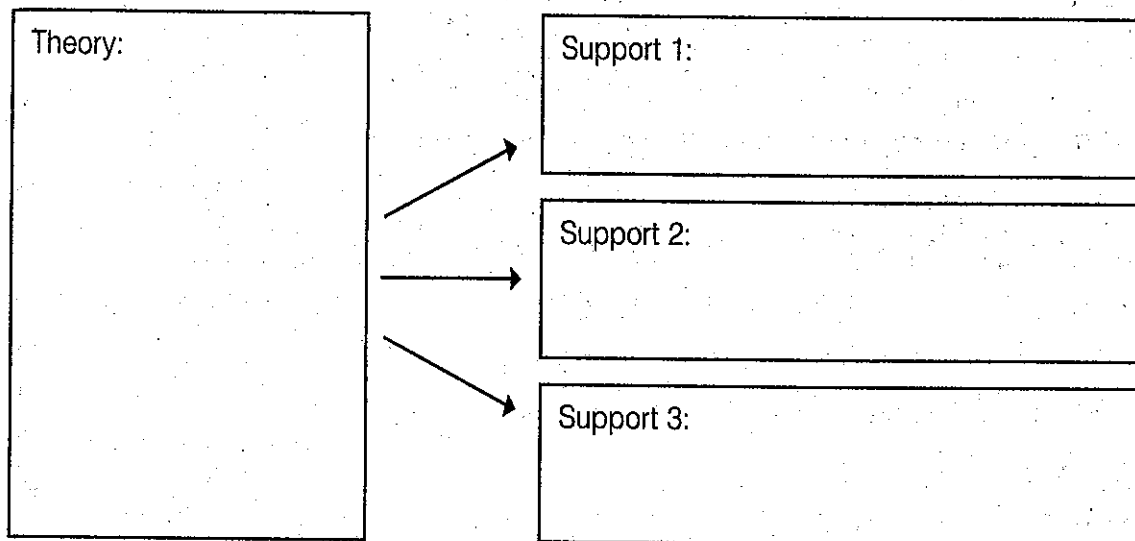
PRACTICE TEST

animals in the Cambrian Period were more diverse than modern animals is the Burgess Shale in the Canadian Rockies of British Columbia. It was first discovered in 1909 by Charles Doolittle Walcott, secretary of the Smithsonian Institute in Washington, DC. He spent eight years collecting more than 65,000 specimens. He took them back to the Smithsonian, where they stayed undisturbed until 1971. That year, a professor and two graduate students re-examined the fossils using modern technology to project large images of them on the wall. This magnified details that could not be seen earlier. The fossils from the Burgess Shale indicated that the multi-celled organisms inhabiting the Cambrian Period had a much broader range of body styles than previously thought. Like the Chengjiang Biota, many of the fossils at the Burgess Shale contain preserved soft parts of organisms, and there is an extensive amount of overlap in the large number of species found at the two sites.

Two examples of the diverse organisms found during the Cambrian period that have no modern counterparts in today's seas are the *Marella* and the *Anomalocaris*. The *Marella* is the most common arthropod from the Cambrian Period. It had two pairs of curving spines that may have functioned as armor, two pairs of antennae, and twenty-six body segments. Each body segment had a pair of branched appendages to move it across the sea floor. The greatest enemy of the *Marella* was the *Anomalocaris*, a tubular organism with flexible lobes on the sides of its body to move it through the water. It measured from sixty centimeters to two meters in length. It snatched its prey using two spiked feeding arms, and then ate them with its circular mouth. Many fossils from the Cambrian period show several organisms like *Marella* and *Anomalocaris* that do not fit into any of the modern biological classification systems and have no recognizable descendants in today's oceans.

The study of fossils from the Chengjiang Biota and the Burgess Shale give insight to the kinds of creatures that inhabited the seas during the Cambrian Period. Though it is still uncertain how these multi-celled organisms developed so quickly, it is certain that they were more diverse in form than animals today.

Diversity in the Cambrian Seas



1. Which of the following can be inferred about fossils before the Cambrian Period?
 - (A) None has been found with an outer shell.
 - (B) They were not very well preserved.
 - (C) All of the fossils found are related to arthropods.
 - (D) They are fossils of creatures that lived in warm water.

2. Which of the following can be inferred from paragraph 3 about the fossils found at the Chenjiang Biota?
 - (A) It is difficult to determine prey and predator among the fossils.
 - (B) Preserved soft body parts aided scientists in the classification of organisms.
 - (C) There were more trilobites than arthropods during the Cambrian Period.
 - (D) Scientists have by now classified all of the fossils found there.

3. What does the author of the passage imply about Charles Doolittle Walcott's discoveries?
 - (A) The animal forms suggest that the seas were much warmer than today.
 - (B) Land animals probably first evolved in the area of the Burgess Shale.
 - (C) The significance of the Burgess Shale was not recognized previously.
 - (D) It was proof that the *Marella* was similar to modern organisms.

Fill in the blanks to complete the summary.

According to the passage, seas in the Cambrian period of Earth's history were _____ with new forms of life. Recent discoveries at two fossil sites determined that the organisms were more diverse than modern animals. The Cambrian explosion, an evolutionary _____ that occurred during a short period of time, resulted in a large number of complex multi-celled organisms. Fossils _____ in mudstone at the Chenjiang Biota have led to the discovery of numerous species, some of which cannot be identified using modern biological classification systems. Furthermore, fossils found in the Burgess Shale revealed a(n) _____ amount of overlap with the species found at the Chengjiang Biota. One organism that lived during the Cambrian period was the *Marella*, which had two spines and twenty-six body segments, each of which had a pair of branched _____ to help it move.

Chapter 4

Rhetorical Purpose Questions

Necessary Skills

- Determining why the author has presented a piece of information in a certain place or way within a passage
- Understanding the role of a certain statement in a passage
- Inferring the author's intention in mentioning certain information
- Relating specific information to the main ideas of a passage in order to understand the purpose of the information

Example Questions

- The author discusses _____ in paragraph X in order to
- Why does the author mention _____?
- The author uses _____ as an example of

Strategies

- Learn and understand the meaning of certain words and phrases often used to describe rhetorical purposes: *definition, example, function, to illustrate, to explain, to contrast, to refute, to note, to criticize.*
- Focus on logical links between sentences and paragraphs in a passage.

01 Business

Read the following passage. Then fill in the diagram with the information that you read. **Track 20**

Identifying Problems in Business

One of the most important tasks for managers in a business is to identify problems. While employees can typically be relied upon to perform their day-to-day duties, few have time to recognize potential issues that the company may face in the future. For managers, knowing how to spot particular trends that may have a negative impact on business is the key to avoiding negative outcomes.

The first set of situations that managers should watch for is simple deviations from the norm. Past experience is the best indicator of what "the norm" should be. If, for instance, a toy company has made sales of five million dollars quarterly for the past several years, it can expect similar sales to continue. If sales drop dramatically for one or more quarters, managers should attempt to discover the source of the decreased sales. Perhaps a competitor has released similar toys, or the tastes of children have shifted and the toys are no longer wanted. Whatever the case, it is the duty of management to discover the change responsible for the deviation and address it.

Another method of discovering a problem that may face a business is by noting the behavior of others. Employees may warn managers of a fault in their system that could pose problems to the business in the long term. Staff members may begin resigning, or those in upper management might shift their strategy. The behavior of other people, independent of simple sales numbers, is a fundamental part of understanding problems that may face the business. Managers must be willing to do their part in addressing these issues. Other employees typically lack the power within the business to make the necessary changes. If, for example, a business gets an increased number of customer complaints concerning unreliable shipping, it is the responsibility of the manager to address the problem. By understanding other people's motivations for acting a particular way, managers can counteract potential problems.

Finally, the performance of the competition provides the most obvious sign of potential problems in a business. If the competition begins reporting higher earnings or sales, managers should study the competition. They may see what their businesses can do to remain competitive. As well, managers should also identify shortcomings of competitors. If a competitor sees a dramatic decrease in sales, a savvy manager will attempt to discover the source of the competition's failure. By understanding the mistakes others make, managers can help their businesses avoid making the same errors.

Naturally, it is impossible for managers to identify all of the problems

trend:

the pattern of behavior or general direction of something

deviation:

a change or difference from what is usual or expected

norm:

a usual or typical pattern

strategy:

a plan of action to reach desired goals

motivation:

the reasons one behaves in a certain way

potential:

possible

intuitive:

based on what one feels to be true without conscious reasoning

that a company may face. In addition, solutions may vary depending on the values and past experiences of a manager. It is an intuitive process that cannot be made clear with simple equations. In fact, many managers stumble upon problems before they become apparent in sales numbers or other formal data.

Identifying Problems in Business

Solution 1:	→	Explanation:
Solution 2:	→	Explanation:
Solution 3:	→	Explanation:

- Why does the author mention the toy company in paragraph 2?
 - To give a scenario showing how a company might lose sales to competition
 - To provide an example of how a manager might observe a deviation from the norm
 - To show that there are a number of factors that may impact a company's sales
 - To argue that the performance of competition is crucial to a company's success
- The author mentions unreliable shipping in paragraph 3 in order to
 - point out that a business must be aware of other businesses involved in its process
 - illustrate how a manager can understand other people's behavior to find problems
 - underscore the importance of good shipping in any business model
 - assume that customers are inclined to complain about poor delivery service

3. The author describes the shortcomings of competition in paragraph 4 in order to
- (A) Highlight how managers can use a competitor's failure to their advantage
 - (B) Argue that nearly any business is open to competitors in the marketplace
 - (C) Show that competitors can increase their sales by releasing unique products
 - (D) Illustrate how competition leads to lower prices and less profit in competitive marketplaces

Fill in the blanks to complete the summary.

The passage describes ways that managers can identify potential problems in their businesses. First, by recognizing particular _____ that may negatively impact the business, managers can avoid problems. Next, they should also be aware of any deviations from the _____. Managers can also counteract potential problems by understanding people's _____ for acting in a certain way. Finally, managers should also study the competition for signs of _____ problems in their business. Identifying potential problems faced by a company is an _____ process that cannot be made clear with simple equations.

Read the following passage. Then fill in the diagram with the information that you read. **Track 21**

Genetic Alteration of Plants

Plant geneticists have been manipulating the genetic structure of plants for hundreds of years. In some cases, plants are selectively bred to create heartier, healthier plants. Using similar techniques, plant geneticists can also alter a plant's genetic structure to protect against pests or other factors. By introducing new features into a plant species, food shortages as a result of pests can be avoided.

Chemical barriers are some of the most common features introduced by geneticists to protect plants against pests. By selectively cross-breeding particular plants, scientists can create a unique genetic strain that produces a chemical repellent to the pests that would otherwise consume it. Following the American Revolutionary War, the Hessian fly became an epidemic in the Midwest portion of the country. The flies laid their eggs on the leaves of wheat plants. The larvae hatched from the eggs would work their way down the leaves and eat the stem of the plants. This feeding pattern weakened the stems of the wheat plants, causing them to break. In response to impending wheat shortages, researchers introduced a trait through crossbreeding that allowed the wheat to produce a chemical. The chemical killed Hessian fly larvae when they ate the wheat's leaves. This prevented severe wheat shortages. Alternatively, plant geneticists can use similar physical barriers to repel insects. Certain plants have actual physical features that impede pests. Leafhoppers are a common pest among smooth-leaf crops such as alfalfa, beans, and potatoes. However, if vulnerable plants are selectively bred to make the leaves rougher, leafhoppers can be repelled.

It is also possible to genetically manipulate pest populations directly. Introducing a large number of sterile males into a population drastically reduces reproduction. Males are bred in a laboratory and then exposed to a slight amount of radiation, which renders them sterile. The sterile insects are then released into an area, where they compete with virile males to reproduce with females of the species. As a large percentage of the male insect population is sterile, the number of impregnated females is relatively low. This significantly reduces the population of the pests' next generation. Screwworms, a species of fly that kills cattle by causing open wounds, has been combated by introducing sterile males to its population.

Finally, plant geneticists have begun manually manipulating the genetic structure of plants. Using cutting-edge biotechnology, they can alter genes without crossbreeding. By introducing new genetic

hearty:

strong and healthy

repellent:

a substance that drives away insects

larva:

the wingless, immature form of an insect

sterile:

unable to reproduce

virile:

able to reproduce

virtually:

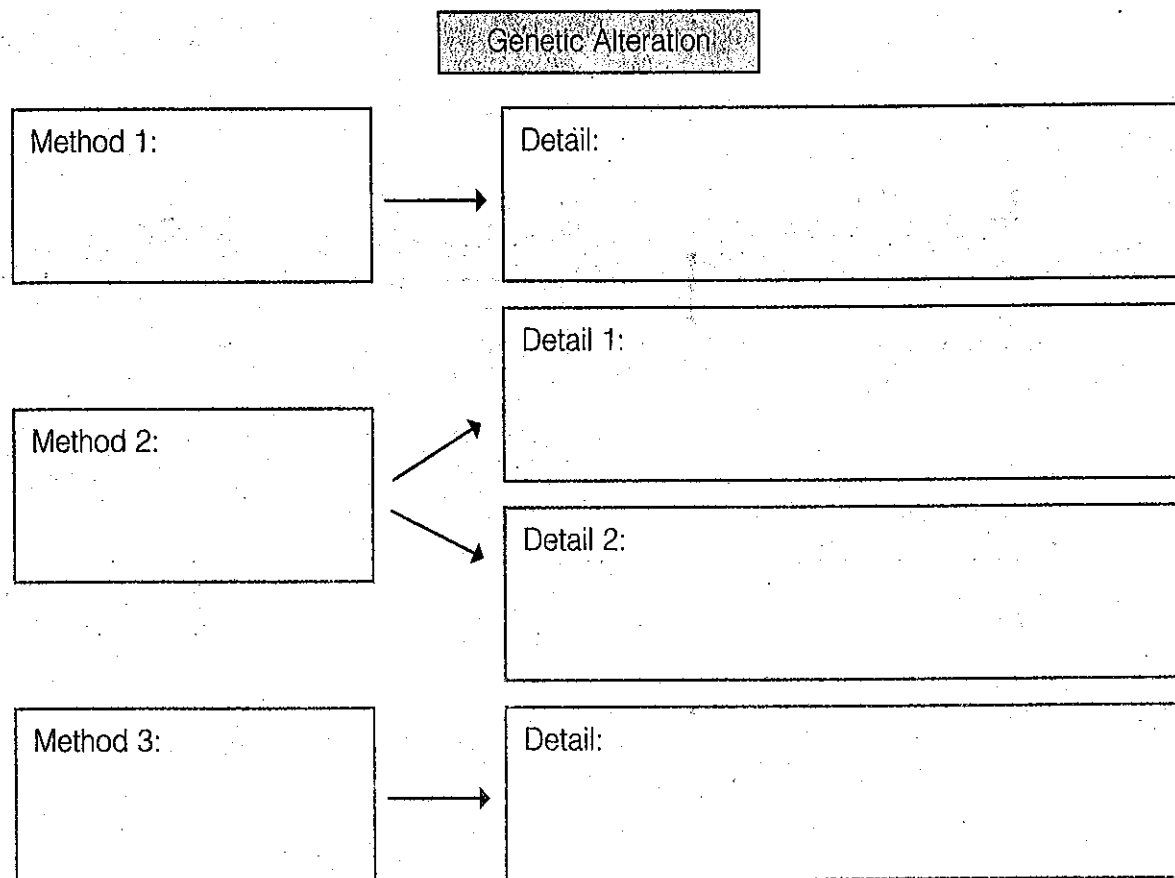
nearly; almost

avert:

to avoid

elements with biotechnology, plants can become resistant to potential pests virtually overnight. The genetic makeup of plant viruses, for instance, has been introduced into the genetic structure of the plants themselves, rendering them immune from the disease.

As knowledge of genetics increases and the ability to manipulate genes improves with technological advancements, the possibilities are nearly endless. Food shortages can be averted, pests can be deterred, and plants can adjust to their environment. With new discoveries, the process is becoming more streamlined. Hopefully, with the aid of genetic manipulation, science may one day be able to stop hunger around the world.



1. Why does the author discuss Hessian flies in paragraph 2?
 - (A) To point out that pests can be introduced into an environment in non-natural ways
 - (B) To argue that the choice of particular types of crops is key in protecting against pests
 - (C) To show how crossbreeding can be used to introduce chemical protection from pests
 - (D) To illustrate how conflict can affect an environment by introducing new species

2. Why does the author mention screwworms in paragraph 3?
 - (A) To push for policies that would allow farmers to use radiation treatment on pests
 - (B) To show that pests can easily be dealt with if their mating habits are well understood
 - (C) To point out that pests are capable of affecting not only plants, but animals as well
 - (D) To give an example of how the introduction of sterile males can affect a pest population

3. The author discusses biotechnology in paragraph 4 in order to
 - (A) note that plant genetics is still an important field of knowledge
 - (B) argue that genetic manipulation of plants may have unknown consequences
 - (C) show how plant viruses pose no problem to modern science
 - (D) explain current developments in the field of plant genetics

Fill in the blanks to complete the summary.

The passage discusses how plant genetics has played a significant role in combating pests. Some plants are bred selectively to create _____, healthier plants. By cross-breeding plants, geneticists can introduce new strains that produce a chemical _____ to protect them from pests. Alternatively, _____ males may be introduced to pest populations to reduce their reproduction. Finally, biotechnology can alter a plant's genes to make it resistant to pests _____ overnight. Plant genetics can help deter pests and _____ food shortages.

03 Economics

Read the following passage. Then fill in the diagram with the information that you read. **Track 22**

Behavioral Economics

Behavioral economics is a field that attempts to understand how consumers make choices that affect the marketplace. It began in the classical period (1776–1870). At this time, the field of economics was closely tied to the field of psychology. During this era, economists were deeply interested in what drove particular consumers to make particular decisions. These choices, behavioral economists believed, were closely tied to how much utility a person derived from making them.

Behavioral economics rests upon a few key assumptions. First, it dictates that individuals will be rational in their decision-making process. This does not necessarily mean that they will make a choice that is economically beneficial to them. Instead, behavioral economics asserts that people will make a decision that will result in some perceived increase in utility. For instance, many people often give to charity. In purely material terms, they are not making a sound economic choice. There is little physical benefit they receive in exchange. However, by giving to charity, consumers may feel more satisfied with themselves. In turn, they experience an overall increase in utility.

Second, behavioral economists recognize that people make choices based upon how certain situations or products are framed. In economic terms, framing refers to the way products are phrased or explained to consumers. For example, the painkiller aspirin was once used only for headache relief. As time went on, pharmaceutical companies realized that aspirin could be used for other painful ailments. Through successful framing of aspirin's additional benefits, companies were able to increase their customers' utility. As a result, aspirin sales rose significantly. Thus, framing can have a major influence over buying behavior when it appeals to consumers' concepts of utility.

Finally, behavioral economists are forced to recognize non-rational decisions by consumers. Non-rational decisions result from a miscalculation in a particular situation. Most misperceptions are attributed to social psychology. This is where a crowd misinterprets particular elements of an object or situation. For example, many feel that an increase in wealth always leads to an increase in utility. However, studies have proven that while increasing wealth can increase utility up to a certain level, eventually people reach a point when wealth no longer matters as much. In this case, the utility from making more money quickly diminishes. Despite this proven fact, many people continue to believe that more money will bring increased happiness. These beliefs affect the choices they make in their daily lives.

psychology:

the study of the human mind and its effect on behavior

utility:

a measure of happiness or satisfaction

charity:

an organization that collects money and organizes other voluntary help for people in need

sound:

worthwhile or justified

ailment:

an illness

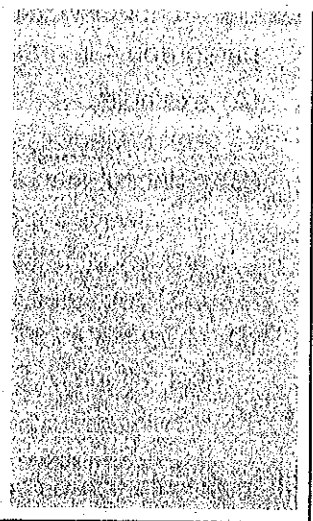
diminish:

to become less

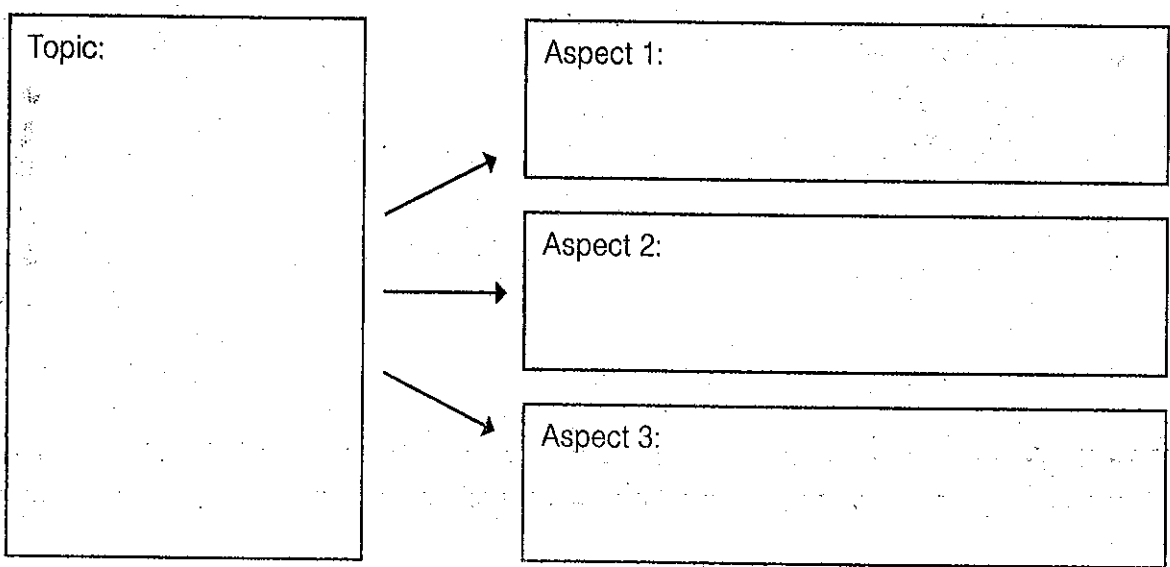
dynamic:

characterized by constant change or transformation

Both rational and non-rational factors may influence an individual's decisions. Thus, behavioral economics is a complicated and sometimes unpredictable field. It is nearly impossible to evaluate every variable that determines a single individual's choice. However, behavioral economists focus on much larger groups. By spotting trends in larger groups of people, behavioral economists can help businesses. With an understanding of particular patterns in consumer behavior, businesses can adjust their advertising, pricing, or production models to maximize sales. At one time, behavioral economics was disregarded by most economists. They thought it too abstract and dynamic to be worthwhile. The field has become more popular in the last several years, however, and continues to grow.



Behavioral Economics



1. Why does the author mention charity in paragraph 2?
 - (A) To explain the role of charity in economic decisions
 - (B) To explain that rational individuals tend to act in ways that bring little material benefit
 - (C) To explain that material benefit is the main determinant of rationality
 - (D) To explain how choices can be rational without having material benefit

2. The author discusses aspirin in paragraph 3 in order to
 - (A) reveal the rationality of the pharmaceutical companies
 - (B) provide an example of how businesses can present a product
 - (C) show that not all rational decisions are the best economic choice
 - (D) give an example of how consumers can lead the framing process

3. The author discusses increased wealth in paragraph 4 in order to

- (A) exemplify some people's refusal to acknowledge economics
- (B) point out that rational decisions are not always the best ones
- (C) argue that rationality is often misinterpreted
- (D) show that individuals may not always act rationally

Fill in the blanks to complete the summary.

Behavioral economics seeks to explain how and why consumers make certain decisions. It was originally closely tied to the field of _____ and attempts to analyze consumer behavior. Behavioral economics acknowledges that consumers are rational in their decisions, although those decisions may not be economically _____. For example, many people give money to _____ although they do not benefit materially from it. Also, people make choices based on how certain situations or products are framed. For instance, companies changed the framing of aspirin once it was found to ease a variety of _____. In addition, consumers sometimes make irrational decisions based on misperceptions, such as the belief that making more money increases happiness. The reality is that once a certain level of wealth is reached, the amount of happiness felt from earning more money _____.

04 Business

READING

LISTENING

SPEAKING

WRITING

PRACTICE TEST

Read the following passage. Then fill in the diagram with the information that you read. **Track 23**

The Levinson Model

When running a business, it is important for managers to understand employees' career goals and attitudes toward their job. By understanding psychological phases that employees may be experiencing, managers can help the business. They can pick out particularly able and willing people to benefit the business. While it is impossible to generalize an individual's ambitions entirely, the Levinson model has been used to formulate how people approach their careers at different times in their lives.

The Levinson model was created by Daniel Levinson. It was based upon his study of forty men in four different occupational groups. Hourly industry workers, business executives, university biologists, and novelists were all surveyed extensively. Their answers were then used to identify particular periods common among all groups. The resulting Levinson model then attempted to explain career approaches. Results were placed in the context of five- to seven-year cycles that occur over the course of an adult's life. These cycles represent different approaches to one's personal and professional life, and how those approaches translate into professional behavior.

The Levinson model begins with the seventeen- to twenty-two-year-old age group, when individuals are trying to establish emotional and financial independence from their families. Some go to college, while others choose to enter the work force directly. Over the course of early adulthood, individuals dabble in a number of different careers and experiences. Many people associate this period with a process of self-discovery. Since they are no longer students and are attempting to find a professional field right for them, there are few facets of their lives with which they can form an identify.

As individuals enter their thirties, they take a step back and evaluate their experiences. Feeling pressure to "settle down" and begin a formalized career, individuals will most likely pursue a career in a field they find interesting. In their mid-adulthood phase, a career will be decided upon. The individual will then focus on advancing in the workplace. Success in the workplace will be his or her primary point of identification. As the products of these efforts become evident and individuals become financially secure, they may turn inward and re-evaluate their career and goals. With financial security established in the mid-forties, individuals seek to secure friendships and re-establish contact with old acquaintances. Their financial security gives them the opportunity to focus on their personal lives. As they reach the age of

ambition:

a strong desire to achieve something

survey:

to investigate the opinions or experiences of a person or persons

dabble:

to take part in an activity in a casual manner

acquaintance:

a person one knows slightly

defy:

to openly resist or contradict

retirement, they once again re-focus their lives outside of the professional realm.

While the Levinson model is helpful for managers, it is only a series of generalizations. Some question its value in the current marketplace. Many social and cultural changes have taken place since Levinson first published his findings in the 1970s. For instance, Bill Gates, the famous and very wealthy founder of Microsoft, defied the phases of the Levinson model. He started out at a young age with a single focus and retained that focus throughout his life. Since there are exceptions to the Levinson model, managers should get to know all of their employees personally. Managers should not attempt to categorize employees' goals according to a narrow, age-based model.

The Levinson Model

Cycle 1:



Cycle 2:



Cycle 3:

1. Why does the author mention self-discovery in paragraph 3?
 - (A) To help explain the changes taking place in early adulthood
 - (B) To illustrate how young adults are dissatisfied with their lives
 - (C) To show that managers need to be aware of employees' changes
 - (D) To explain why young employees tend to stick to one career
2. The author discusses financial security in paragraph 4 in order to
 - (A) suggest that the transition from mid-adulthood to late adulthood is smooth
 - (B) argue that financial success is the primary motivator for those in late adulthood
 - (C) show that success in one's career is typically associated with one's happiness
 - (D) explain why those in late adulthood begin to focus on things besides their career
3. The author uses Bill Gates as an example of
 - (A) an exception to the Levinson model
 - (B) evidence supporting the Levinson model
 - (C) how the Levinson model has been used to foster success
 - (D) the cultural and social forces at work in the Levinson model

Fill in the blanks to complete the summary.

By extensively _____ a number of professionals from different occupations, Daniel Levinson identified a series of cycles that individuals go through. The Levinson model, while unable to generalize individuals' _____ entirely, can describe how they approach their careers throughout their life. For example, in early adulthood, people _____ in a number of different careers and experiences. In their thirties and forties, people tend to pursue a career they find interesting and renew contact with old _____. While the cycles may be somewhat valuable to managers, not everyone follows them, like in the case of Bill Gates, who _____ the Levinson model by focusing on one thing throughout his life.

05 Architecture

Read the following passage. Then fill in the diagram with the information that you read. **Track 24**

Romanesque and Gothic Architecture

Around the 10th century, a new architectural style was making its debut across Western Europe. Known for its massive quality and thick walls, the Romanesque style marked the beginning of a period that would be known for its large cathedrals and churches. About 200 years after the development of Romanesque architecture, however, Gothic architecture became the preferred style for cathedrals and churches. Even today, the structures inspired by Gothic style continue to amaze and dazzle onlookers. Although Gothic architecture would succeed Romanesque architecture in popularity, it was strongly influenced by the style before it. Still, there are also a number of differences between the two styles.

The most obvious difference between Romanesque and Gothic architectural styles is the construction of archways. As the name suggests, Romanesque styles borrowed heavily from Roman architecture. In Rome, semi-circular archways were popular, so most Romanesque buildings had semi-circular archways. The Gothic style that followed favored a pointed archway, where the two sides of an arch curve upward and meet at a point. Pointed arches are more structurally sound than their semi-circular counterparts. They also allow greater architectural flexibility. With its pointed arches, Gothic architecture appears more vertical and almost seems as if it is reaching to the heavens. More than any other feature, the pointed arch became the defining feature of Gothic style. It would frame the windows, doors, and passageways of countless European cathedrals. Many have argued that these early instances of pointed archways are reflective of an Islamic influence. Indeed, pointed archways were popular in the Middle East for some time before they became popular in Europe.

The concept of the pointed arch allowed architects to change the way they approached vaults in churches and cathedrals. The ceilings of Romanesque structures were fairly modest, favoring long halls topped with a long, continuous, semi-circular archway. These ceilings are known as barrel vaults because they look like a large barrel that has been cut in half vertically and made into a roof. Romanesque ceilings also include simple beam structures laid across a span of two walls. Eventually, as pointed archways became more popular and their structural advantages were realized, they began to be incorporated into the vaults of Gothic structures. Ribbed vaults, or ceilings that span square areas, also became popular in Gothic architecture. By installing a pointed arch along the diagonals of a square and filling in the area between, ribbed vaults were a versatile alternative to traditional barrel vaults. Most importantly, ribbed vaults transferred the weight of the ceiling differently than barrel vaults. They also allowed for more architectural freedom.

preferred:

considered more desirable than the alternatives.

vertical:

at a right angle to the ground or a horizontal line

vault:

an arched ceiling that tops a building or room

span:

the amount of space that something covers

buttress:

a supporting structure of stone or brick built along a wall for support

variation:

changes or differences in conditions

distribution:

the way in which something is spread out among an area

mainstream:

the ideas, actions, and values that are most widely accepted by a society

The construction and use of buttresses also allows one to easily discern between Romanesque and Gothic architectural styles. Since the barrel vaults of Romanesque ceilings required two strong walls for support, an architect was limited to long halls with minor variations. Ribbed vaults allowed the weight of the ceiling to be distributed between four points along the corners of the vault's expanse. Since four points cannot bear the weight of an entire ceiling, the points were secured using buttresses. In Gothic architecture, flying buttresses were preferred for their weight bearing abilities. They were constructed outside of the actual structure along the sides. Archways would then be constructed that connected the buttresses to the sides of the building. Using this method, flying buttresses could actually be used to transfer the weight of the ribbed vault ceiling outside of the building. Due to their structural advantages, flying buttresses became a popular feature in Gothic architecture. The architectural advantage of flying buttresses and their weight distribution also allowed for ornate windows. Since Romanesque barrel vaults required strong walls, an architect could not insert windows without compromising the integrity of the ceiling. As flying buttresses allowed weight to be distributed through a small portion of the wall to a buttress outside, windows became a possibility.

Since Gothic architecture borrowed heavily from the Romanesque style that preceded it, there is no way to clearly define a point at which one style ended and the other began. The adoption of Gothic stylistic elements, however, quickly took hold in Western Europe. Gothic elements appeared in Romanesque churches and cathedrals long before Gothic architecture became part of the mainstream. In spite of their similarities, though, it became clear around the 12th or 13th century that a new style was in place, independent from the Romanesque. By understanding the differences between the two, one can better understand how one style contributed to another.

Differences in Architectural Styles

Style 1:	
Feature 1:	
Feature 2:	
Feature 3:	

Style 2:	
Feature 1:	
Feature 2:	
Feature 3:	

1. Why does the author mention the Middle East?
 - (A) To show that Europeans were open to influence from around the world
 - (B) To point out that there was contact between the Middle East and Europe
 - (C) To argue that Gothic architecture originated in the Islamic world
 - (D) To explain a theory regarding the origins of pointed arches

2. The author uses a barrel cut in half as an example of
 - (A) early influences in Romanesque architecture
 - (B) a difference between ribbed and barrel vaults
 - (C) the general shape of barrel vaults
 - (D) the influence of engineering on architecture

3. The author discusses windows in paragraph 4 in order to
 - (A) reveal the availability of glass that came about in the Gothic period
 - (B) explain the goals that drove the architectural advancements of the Gothic period
 - (C) give an example of Romanesque influences in Gothic architecture
 - (D) highlight the architectural opportunities flying buttresses made available

Fill in the blanks to complete the summary.

The passage describes differences between Gothic and Romanesque styles of architecture. Gothic architectural style borrowed several elements from the earlier Romanesque style and became the _____ style for the building of cathedrals and churches. The use of pointed arches makes Gothic architecture appear more _____, and the use of ribbed vaults allowed for more architectural freedom when _____ square areas. Flying buttresses in Gothic architecture set it apart from the Romanesque. They were an important architectural advance in that their weight _____ allowed for the insertion of ornate windows. Elements of Gothic architecture appeared in Romanesque buildings long before it became part of the _____.

Read the following passage. Then fill in the diagram with the information that you read. Track 25

Genetic Therapy

Genetic code provides the basis of most physical characteristics. It determines one's gender, eye color, hair color, and a myriad of other factors that make every person unique. Just as a computer program gives specific instructions on how the computer should act, genetic codes contain instructions for all cellular activity. In some instances, however, a person's genetic code can be flawed. A gene may undergo mutations for a number of reasons. This can result in a genetic disease. A genetic disease is so ingrained in a person's genetic code (DNA) that it cannot be cured using traditional medical methods. Doctors cannot simply prescribe medicine or perform surgery to repair genes. Instead, the genetic structure must be manipulated directly.

Only with recent advances in genetic science have physicians been able to begin curing genetic diseases. Doctors can now treat a number of genetic diseases that individuals may inherit from their parents. The process, however, is difficult to master and continues to pose a number of problems. Perhaps more than any other medical field, genetic therapy remains truly experimental.

In order to alter a person's genetic code, the particular gene causing the problem must first be identified. By taking tissue samples and isolating a strand of DNA from a cell, scientists can compare an individual's DNA to a normal genetic code. After the mutated portion of the DNA has been discovered, scientists can go about engineering a genetic treatment to permanently fix the problem. The process is not simple. The body's immune system is designed to identify DNA structures besides those normally found in the body and destroy the cells containing them. In order to bypass the immune system, scientists have to introduce the new genetic code using different methods.

The repair of a gene involves a device called a vector. A vector can be any form of biological material that carries a genetic code. Viruses are the most common vectors used, as they are pathogenic and easily spread throughout a person's cellular structure. Doctors manually manipulate the genetic makeup of a vector before the material is introduced into a patient's body. This is so that it will carry new, repaired DNA to the body. If the vector is a virus, then the virus has been engineered so that it is harmless. The vector is then placed inside an individual. Vector transplants may take place *ex vivo* (externally) by removing a portion of the patient's body. This introduces the vector directly into the tissue and places it back into the body. Alternatively, vectors may be implanted *in vivo*, whereby vector cells carrying the new DNA are injected directly into the patient's body. Transplants typically take place within the part of the body affected by the genetic

myriad:

a countless or extremely large number

mutation:

a change in the structure of a gene

manipulate:

to alter or change

bypass:

to avoid an obstacle, obstruction, or problem by using an alternative route or method

pathogenic:

causing disease

transplant:

a medical operation in which a new organ is placed inside a patient's body

replicate:

to make an exact copy of; to reproduce

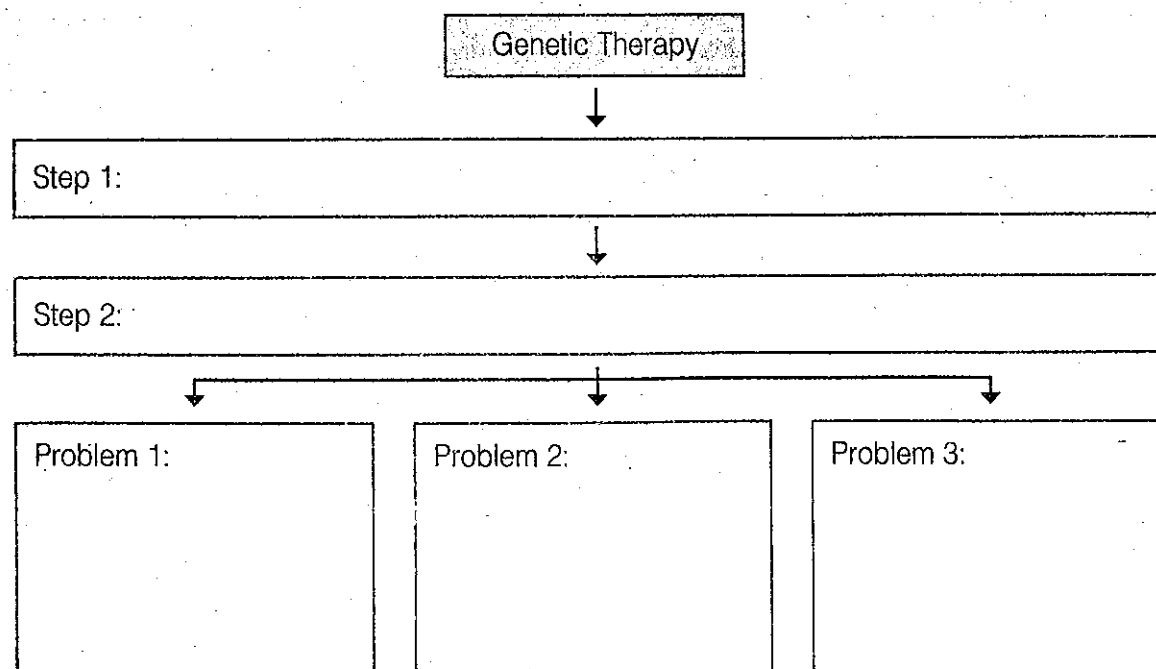
recover:

to return to a normal state

disease. For instance, a person with a genetic disease affecting the liver might have it removed in order to introduce the vector cells *ex vivo* before putting it back in the body.

Genetic therapy is not as simple as introducing a vector, however. The body's immune system is designed to detect cells with a genetic makeup unlike the DNA carried by the rest of the cells in the body. Genetic therapy may be in vain if the body's immune system attacks and kills the vector cells containing repaired DNA. In 2006, a group of Italian researchers discovered a way to overcome this problem. Their method allows doctors to manipulate another portion of the DNA strand. This prevents the body's immune system from identifying the unique genetic code. As a result, vector cells can replicate in the body unhindered by the immune system.

The use of viral genes as vectors remains a source of concern for gene therapy. If the body's immune system has already been exposed to the virus used as a vector, it is more likely able to destroy cells containing the new DNA. Additionally, introducing new DNA to a particular portion of the body can cause discomfort in the patient. Moreover, there is always the possibility that the viral vector will recover its ability to cause disease inside the patient. In this case, a genetic disease may be treated, but a new, potentially harmful disease may be introduced into the patient's body. Given the manipulation the disease may have undergone to prevent the body's immune system from attacking the vector, it is possible that the immune system will be unable to fight the new disease. In spite of these risks, a number of doctors are now using genetic therapy to treat patients.



1. The author mentions a computer program in paragraph 1 in order to
 - (A) give an example of a concept similar to a genetic code
 - (B) draw a relation between computers and genetic mutation
 - (C) show that the human body operates more efficiently than a computer
 - (D) suggest that doctors need computers to treat genetic disease

2. Why does the author mention liver surgery in paragraph 4?
 - (A) To argue that genetic diseases should be treated using *ex vivo* methods
 - (B) To describe an instance of a transplant occurring where the disease affects the body
 - (C) To highlight the difference between *ex vivo* and *in vivo* transplant procedures
 - (D) To provide an explanation of an *ex vivo* vector transplant

3. Why does the author mention Italian researchers in paragraph 5?
 - (A) To show that the body's responses may not always be adequate in treating a disease
 - (B) To provide an example of the immune system attacking vector cells
 - (C) To explain discoveries about how genetic therapy can avoid immune systems
 - (D) To illustrate how vector cells are naturally inclined to replicate in the human body

Fill in the blanks to complete the summary.

Genetic therapy directly alters DNA to treat genetic diseases. As doctors cannot prescribe medication or perform surgery to repair genes, the genetic structure must be _____ directly. To _____ the immune system, scientists create a vector, which contains the corrected genetic data. Because they are _____ and spread easily through a person's body, viruses are the most common vectors. It is introduced into the patient's body, where it can _____ unhindered by the immune system. While some genetic diseases may be cured through genetic therapy, possibilities such as viral vectors _____ their ability to cause diseases mean that genetic therapy remains a complex and experimental field.

Vocabulary Review 1

Instructions: Choose the best word or phrase to complete each sentence.

- Sales of the popular book began to _____ after the author admitted that most of her information was fictional.
(A) teem
(B) accumulate
(C) dabble
(D) diminish
- The removal of _____ from the collapsed building took several weeks to complete.
(A) speculations
(B) debris
(C) sediment
(D) quirks
- The water in the shallow pool quickly _____ after the sun came out.
(A) evaporated
(B) attained
(C) defied
(D) metabolized
- The teacher _____ her young students in class by using songs, chants, and funny stories.
(A) surveyed
(B) honed
(C) engaged
(D) accumulated
- According to the park's rules and _____, campfires must not be left unattended.
(A) equilibrium
(B) conservation
(C) ambitions
(D) regulations
- Investing in the successful fast food chain became a(n) _____ decision for the wealthy businessman.
(A) extensive
(B) profitable
(C) preferred
(D) sophisticated
- After receiving treatment at the best hospital in the country, the patient _____ quickly from his illness.
(A) recovered
(B) flourished
(C) reinstated
(D) perceived
- The damages to the bank's security system resulted in the _____ of the employee responsible.
(A) cue
(B) resurgence
(C) termination
(D) acquaintance

Instructions: Choose the word or phrase closest in meaning to the underlined part of each sentence.

- The python is a snake that kills its victims by squeezing them, which cuts off the circulation of air.
(A) constricting
(B) dwindling
(C) corroding
(D) inscribing

10. The human body is not as delicate as some might think.

- (A) susceptible
- (B) fragile
- (C) inherent
- (D) definitive

11. The most famous film version of Mary Shelley's *Frankenstein* was made in 1931 and starred Boris Karloff.

- (A) adaptation
- (B) sample
- (C) observatory
- (D) motivation

12. In about one-third of all cases of hepatitis B, it is unknown how the patient became infected with the virus.

- (A) constituted
- (B) deposited
- (C) engaged
- (D) contracted

13. Comparison of the languages written on the Rosetta Stone allowed linguists to read Egyptian hieroglyphics.

- (A) enabled
- (B) adapted
- (C) replicated
- (D) averted

14. The juror in the trial was excused from service because she was thought to have an unfair prejudice against immigrants.

- (A) quirk
- (B) variation
- (C) bias
- (D) quota

15. The presidential candidate referred to the recent war overseas when she said that the country had made many sacrifices.

- (A) exposed
- (B) cued
- (C) perceived
- (D) alluded

Instructions: Write the missing words. Use the words below to fill in the blanks.

correlation ailments contaminated
preventative hazardous

The field of environmental medicine explores the impact of dietary and environmental factors on health and illness. Air, water, and food are the major areas in which we are exposed to

16. _____ substances like chemicals. Chemicals enter our environment in many ways. People can be exposed to cigarette smoke or air pollution from vehicles. They can also ingest chemicals through

17. _____ drinking water or food. A variety of 18. _____ can result from chemical exposure, ranging from mild allergies to cancer. There is a strong

19. _____ between chemical exposure and illness. Environmental medicine practitioners seek not only effective treatment, but also 20. _____ measures for patients.

Instructions: Match the words that are similar in meaning.

- | | |
|----------------|-----------------|
| 21. cultivate | (A) grow |
| 22. pronounced | (B) disapproval |
| 23. potential | (C) rotate |
| 24. revolve | (D) noticeable |
| 25. criticism | (E) possible |

Mini Test 1

01 Environmental Science

Read the passage and answer the questions. **Track 26**

Chemical Weathering

Stone statues and buildings that have stood in place for long periods of time have endured years of wind and weather, the effects of which are clearly visible in their outward appearances. Corners lose their sharp angles and features seem to crumble away. The natural process that breaks down rocks and stone is called chemical weathering. In the natural course of things, this type of disintegration is to be expected. When human use of fossil fuels is introduced into this equation, however, the process of chemical weathering is significantly affected.

In nature, water and acids act as primary agents in chemical weathering. Water, whether in the form of rivers or precipitation, plays a major part in the erosion of rocks and stone formations as they are weathered. "Dissolution" is the term scientists use for the process through which minerals are dissolved in water. For example, sodium chloride, or salt, quickly dissipates in water. However, most minerals will not dissolve in pure water alone. They must have at least one other substance present in order to initiate decomposition. When even a small amount of acid is added to water, its corrosive power is magnified. Acid can be produced by natural means such as when organisms decay and release organic acids back into the soil. Sulfide minerals such as pyrite release sulfuric acid into the atmosphere as they decay. These acids are absorbed into water and cause corrosion in many rocks. Additionally, when carbon dioxide from the atmosphere dissolves into raindrops, carbonic acid is created. As rain and snow fall on stone over time, they wear down the layers of sediment that make up the rock. Yet while many of these acidic reactions are to be expected in nature, the introduction of man-made byproducts has disrupted this natural cycle by hastening it along.

Man's use of fossil fuels in factories, power plants, and vehicles has greatly increased the amount of carbon dioxide, sulfur, and nitrous oxides in the atmosphere. This has led to an excessive amount of acid being produced and absorbed by different forms of water in the atmosphere. Scientists point to acid precipitation, rain with abnormally high levels of acid, as the culprit for the premature corrosion of stone statues and buildings. Whereas the natural chemical weathering process caused by the carbonic acid in rain would wear away rocks slowly over time, now the rocks decay at a more rapid pace. The acids that are not absorbed into rain or snow are often absorbed into the ground, seeping into ground water and affecting rocks and stones in river beds and lakes.

The process of decay and corrosion that rocks and stone structures undergo is a natural one that should take place over many years. Rainfall over time causes erosion and changes in the rock. Humans, however, have brought about changes in this process, increasing the speed at which stones are weathered by releasing more acid-producing compounds into the atmosphere. The effect is that buildings and monuments of stone that have stood for generations are experiencing swift decay.

▶ **decomposition** *the slow, natural process of destruction and decay*

▶ **corrosion** *the process of damage to metal or stone caused by a chemical reaction*

1. Why does the author mention the use of fossil fuels by humans in paragraph 1?
 - (A) To introduce a factor that affects chemical weathering
 - (B) To support the idea that chemical weathering is natural
 - (C) To argue that it is normal for stone buildings to disintegrate
 - (D) To reveal the true causes of chemical weathering

2. According to paragraph 2, which of the following is true of dissolution?
 - (A) Salt partially dissolves when placed in pure water.
 - (B) Water is responsible for only a small amount of chemical weathering.
 - (C) A large majority of rocks and minerals dissolve in water alone.
 - (D) Small amounts of acid greatly increase water's ability to dissolve minerals.

3. According to the passage, which of the following is NOT true about the process of chemical weathering?
 - (A) Man does not play a part in how rocks weather.
 - (B) Natural acid production assists in the process.
 - (C) Stones are slowly worn away over many years.
 - (D) Acid often contaminates groundwater.

4. According to the passage, which of the following is true of acid precipitation?
 - (A) It is a natural part of the weathering process.
 - (B) Acid rain does not affect areas where there is no pollution.
 - (C) The acid in acid rain is due to man's use of fossil fuels.
 - (D) It seems not to affect desert areas where there is no rain.

5. Which of the following can be inferred from paragraph 2 about acid?
 - (A) Most acids in the atmosphere result from man-made byproducts.
 - (B) Even unpolluted rain may contain acid.
 - (C) Carbonic acid is the most common acid found in the atmosphere.
 - (D) Natural acids seriously damage the environment.

6. The author uses factories and vehicles as examples of
 - (A) the largest producers of acid rain
 - (B) contributors to the production of acid rain
 - (C) items that are corroded by chemicals over time
 - (D) man-made byproducts that have disrupted nature

7. All of the following are true about acid absorption in the environment EXCEPT:
 - (A) Acid is absorbed into groundwater and affects rivers.
 - (B) Precipitation takes in the majority of acid from the air.
 - (C) Acid from the air directly corrodes stones and rock.
 - (D) Natural carbonic acid wears stone away over years.

8. The author implies in paragraph 3 that
 - (A) at this rate, future buildings will need stronger building materials.
 - (B) man cannot do anything to prevent acid rain from weathering rock.
 - (C) most of the acid in acid rain is absorbed into the groundwater.
 - (D) man has permanently disrupted one of nature's balanced cycles.

02 Business

Read the passage and answer the questions. **Track 27**

The Just in Time Method

Working as a manager at the Toyota Motor Company in the 1950s, mechanical engineer Taiichi Ohno was the head of a machine shop that produced parts used on Toyota's vehicle assembly lines. Ohno felt the need to develop a more cost-efficient way to store inventory before the parts were used on the assembly lines. He also wanted to improve the quality of the parts used on Toyota automobiles. By meeting these goals, Mr. Ohno transformed the way that Toyota and other companies inventoried their products with his Just in Time (JIT) method.

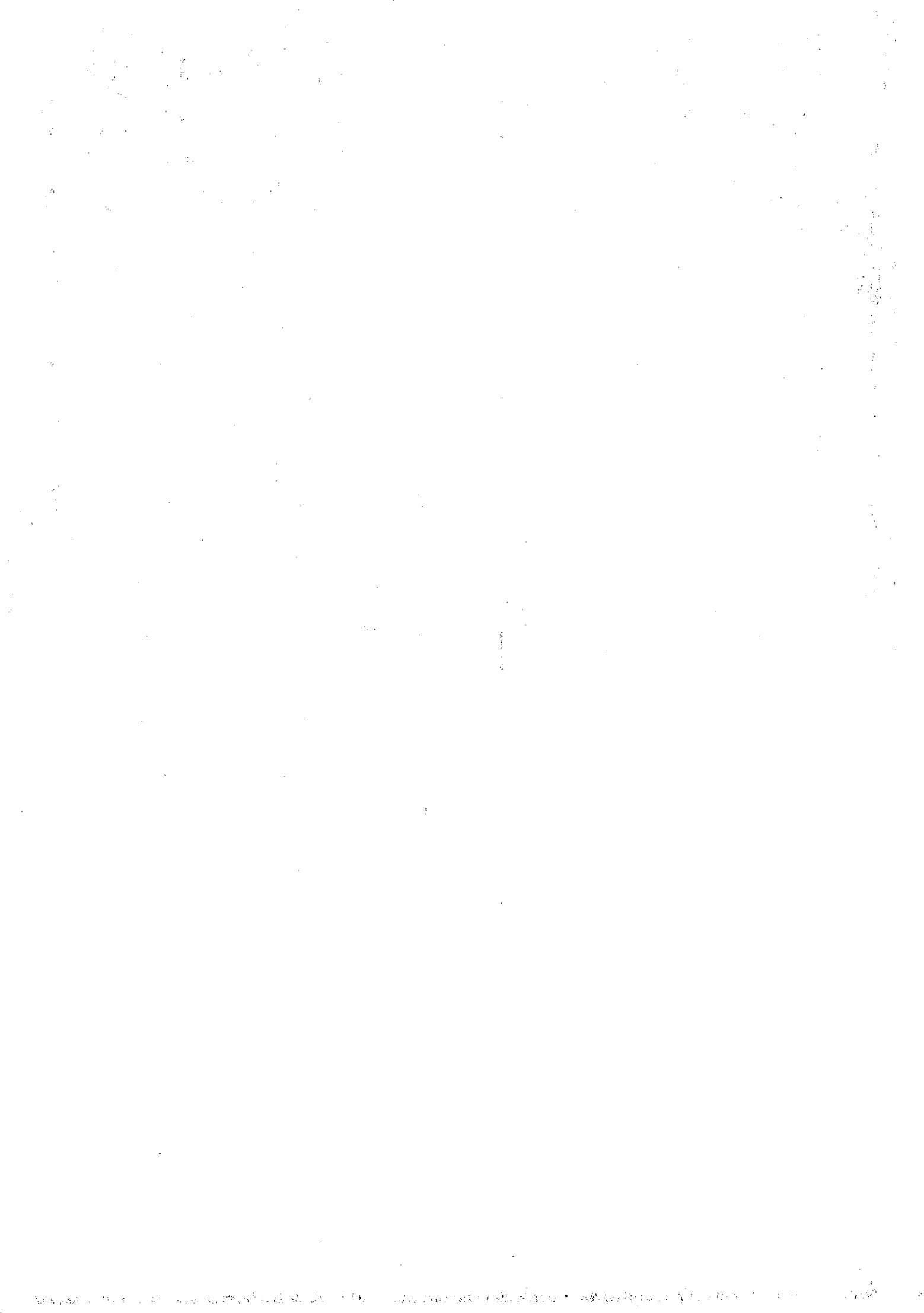
During the 1950s, companies like Toyota retained several large warehouses as space where their inventory could be stored before it was needed on the assembly line. Parts that were used to build their products sat on a shelf in the warehouse for months at a time before being sent to the production area. If a part had a defect, it was not discovered until the parts were at the assembly line ready to be used. Parts were produced in mass numbers on large machines, and it was possible that an entire shipment might consist of defective parts. As the assembly line worked on a rigid schedule, there was no time to look for defects or correct them. As a result, the company would often not notice that it had defective parts until after the products were already assembled. To fix these defective products, companies sometimes had to disassemble the entire finished unit, resulting in huge amounts of lost time and money for the company.

Taiichi Ohno believed that the company could avoid these defects by introducing parts to the assembly process as they were needed instead of letting them remain in storage for months. Not only would this make it easier to spot defects, but it would also save the company money on storage space. Mr. Ohno developed a system that was able to reduce component assembly times from hours to minutes. In doing so, he then sent only the parts that were needed at the assembly line out in a small, wheeled cart called a *kanban*. Since employees were now working with one part at a time, they were able to recognize any defective parts more easily. If a defect or problem was discovered, the workers were taught to recognize it and repair it quickly, rather than using several defective parts before realizing it. Production workers used the parts and sent the cart back empty. This alerted others that more parts were needed on the production floor. Another full cart would then be sent out just in time for assembly. The system, dubbed the kanban system, saved the company a huge amount of time and money in the long run. Eventually, Ohno was able to get rid of the warehouses in which parts had previously been stored. As intended, his system identified defects much more quickly and improved the quality of the parts that were produced.

The process was formally called the Just in Time method and led to widespread changes in the production methods of industries across the world. Taiichi Ohno revolutionized product inventories with his innovative JIT method. Not only did Toyota benefit, but many other companies adopted similar practices as well. Ohno's vision transformed the way products were made in these industries.

► **assembly line** *a system for making products in which every worker or machine is responsible for checking or adding a specific part*

1. The author discusses the storage of products in the Toyota warehouses in order to
 - (A) define the principles behind the Just in Time method
 - (B) criticize the company's methods of production
 - (C) highlight the problems of storing inventory
 - (D) illustrate the importance of finding defective parts
2. According to paragraph 2, which of the following is true of the assembly line schedule?
 - (A) It was a careless and sluggish environment.
 - (B) The workers adhered to a precise timetable.
 - (C) It was based on the part production schedule.
 - (D) Defects forced employees to work long hours.
3. The author of the passage implies that
 - (A) companies lost money even after adopting the JIT method
 - (B) other car companies made vehicles that were defective
 - (C) the machines used to produce parts were typically unreliable
 - (D) workers who noticed defective parts reported them to the manager
4. According to the passage, which of the following is true of automotive parts?
 - (A) They were used all at once before the JIT system.
 - (B) They were stored in the production areas ready to be used.
 - (C) They were often used after the defect was discovered.
 - (D) They were usually defective before they hit the assembly line.
5. The author's description of the Toyota Motor Company mentions all of the following EXCEPT:
 - (A) Prior to the JIT method, parts with defects were used on the assembly line.
 - (B) The warehouses used to stockpile vehicle parts were expensive.
 - (C) Workers learned to recognize defects more quickly with the JIT method.
 - (D) The JIT method did not result in improvements right away.
6. Why does the author mention the kanban?
 - (A) To contrast its use with previous methods of transport
 - (B) To illustrate a successful element of Ohno's method
 - (C) To give an example of how technology replaces people
 - (D) To explain how employees found defective parts
7. Which of the following can be inferred from paragraph 3 about companies that used the JIT method?
 - (A) The JIT method was not as efficient as more recent assembly systems.
 - (B) Companies using the JIT method valued quality of products over speed.
 - (C) Workers no longer had to worry about defective parts.
 - (D) The JIT method caused the production of final products to be faster.
8. According to the passage, which of the following is NOT true of the Just in Time method?
 - (A) It was developed by Mr. Ohno to save Toyota money.
 - (B) It worked only for the Toyota Motor Company.
 - (C) It resulted in better quality parts for Toyota.
 - (D) It allowed workers to spot defective parts easily.



Chapter 5

Vocabulary Questions

Necessary Skills

- Identifying the meaning of individual words and phrases as they are used in a specific reading passage
- Choosing the correct meaning of a word or phrase in order to understand its relevance within a passage

Example Questions

- The word _____ in the passage is closest in meaning to
- In stating _____, the author means that

Strategies

- Do not choose an answer only because it may be a correct meaning of the word or phrase; choose the meaning that is being used in the passage.
- Try rereading the sentence in which the vocabulary word appears, substituting the answer choices for the word.

01 Literature

Read the following passage. Then fill in the diagram with the information that you read. Track 28

Ernest Hemingway, 1899–1961

Ernest Hemingway was awarded the Nobel Prize for Literature in 1954. His simple, terse language had a significant effect on 20th-century British and American fiction. His topics, which included hunting, fishing, bull fighting, war, and the lonely lives of the elderly, often reflected his own personal experiences. Together, the style and subjects of his works formed a very distinctive voice that is immediately identifiable to readers.

Hemingway's unique style of prose contributed to his reputation as a great writer. Through his writing, his main goal was to present an account as objectively as he could. He felt that the most effective way to realize this goal was through the use of straightforward language. His style was free of embellishment and wordiness. His style is best reflected through his response to criticism from William Faulkner. Referring to his writing style, he wrote: "Poor Faulkner. Does he really think big emotions come from big words?" Hemingway's style consisted of simple nouns and verbs with little reliance upon modifiers. Hemingway's mastery of this style resulted in prose that was simple, yet deeply emotional, supplemented with uncomplicated, natural dialogue.

Hemingway's topics included the many struggles that humans often experience. For Hemingway, the world was defined by strife: full of chaos, moral decisions and ambiguous moral boundaries, and inevitable pain. Yet Hemingway's writing was hopeful rather than depressing, and he believed that any situation could be endured if one had courage, perseverance, honor, and dignity. These came to be known as "the Hemingway code" and were prevalent themes through his work. This is best shown in *The Old Man and the Sea*, in which Santiago, a fisherman, catches a fish he had long been struggling to catch. However, on his way back home, his fish is suddenly eaten by sharks. Even though Santiago suffers terribly, his courage and bravery allow him to endure.

Hemingway explores many similar themes in another of his popular topics: the lives of the elderly. To Hemingway, the elderly symbolized uncertainty and loneliness. "A Clean, Well-Lighted Place" is a simple short story about an old man who seeks refuge in a café until the late hours of the night. An observant waiter spots the man and speculates that the old man comes to the café for the light and the cleanness. These can be understood as metaphors: the old man wants happiness and order in life. Then, through a short monologue by the waiter, Hemingway shows that the waiter feels the same feeling as the old

terse:

brief; concise

realize:

to accomplish

embellishment:

an exaggeration;
a decoration

modifier:

a word that serves to
change the meaning of
another

strife:

the state of experiencing
conflict or trouble

perseverance:

the quality of continuing
under difficult conditions

refuge:

a shelter; a protected state
or place

man: he too is reluctant to leave a place of happiness and to disappear into the night. In its simplicity, the story touches upon very deep human emotions and allows the reader to connect with unique, deep characters.

The Style of Ernest Hemingway

Characteristic 1:	Example:
Characteristic 2:	Example:
Characteristic 3:	Example:

- The word straightforward in the passage is closest in meaning to
 - uninteresting
 - believable
 - simple
 - ordinary
- The word inevitable in the passage is closest in meaning to
 - certain
 - possible
 - apparent
 - unexpected
- The word prevalent in the passage is closest in meaning to
 - advanced
 - common
 - well-regarded
 - hidden

Fill in the blanks to complete the summary.

According to the passage, Ernest Hemingway had a unique style of prose. He used simple, _____ language that often reflected his own personal experiences. His writing style was free of any wordiness or _____. One of his favorite topics was the human condition in times of _____. Through his work, he expressed his belief that any struggle could be overcome with courage, _____, honor, and dignity. Hemingway also wrote about loneliness and the elderly in stories such as "A Clean, Well-Lighted Place." The story depicts an old man seeking _____ in a clean, well-lit café as a metaphor of the desire for happiness and order.

Read the following passage. Then fill in the diagram with the information that you read. **Track 29**

Pretesting vs. Post-Testing

Pretesting and post-testing offer ways for advertisers to gain a deeper understanding of the effectiveness of advertising. Both pretesting and post-testing analyze the popularity and public opinion of a particular advertisement. These different methods of assessing advertising are used by many advertisers in order to reach consumers in the most effective ways.

In pretesting, advertisers ask the public various direct questions about the effectiveness of their advertising techniques. This takes place before the ads are aired on television, radio, magazines, or other media. Often, people are invited to view an ad in a controlled environment. The advertisers then ask if a particular ad conveys its intended message. Advertisers also want to know if the ad is likely to motivate people to purchase the product or service. In addition, advertisers want to see if it had the desired effect upon consumers. In the case of a humorous commercial, the advertisers have the opportunity to see whether or not it will actually make the viewer laugh. Through the use of direct questions, they can discover if specific goals of advertising are being met. Responses can be utilized to test possible alternative advertisements. Advertisers can increase the level of control in the early parts of a commercial's developmental stages.

On the other hand, post-testing involves methods that analyze ads after they have aired. Respondents are often asked questions similar to those in pretesting. In post-testing, though, respondents are often asked to compare a certain commercial to other commercials. The goals of both types of testing are similar. However, advertisers also ask viewers to consider their message in relation to their competitors. This allows advertisers to discover the extent to which a commercial will be remembered amongst competing ads. This feedback from recall tests gives an idea of how memorable, and thus impactful, the advertising technique was. A commonly used means of testing the efficacy of a campaign is the attitude test. This test evaluates the feelings of the respondents toward a particular advertisement after repeated exposure to it. If the respondents begin to dislike an ad after only a few viewings, the advertisers know that their commercial was not effective.

Pretesting and post-testing each have benefits and drawbacks for advertisers. Pretesting allows advertisers to receive feedback before their commercials air. This allows issues involving weak or ineffective advertising to be resolved before going public. Thus, advertisers can avoid wasting money on an ad that does not have the desired effect. On

assess:

to estimate the value of

convey:

to communicate a message

utilize:

to use

respondent:

one who replies to something

feedback:

a response

efficacy:

the degree of effectiveness

simulated:

artificial

the other hand, post-testing allows the effectiveness of ads to be tested based upon real market findings. This is in opposition to being tested in a simulated situation. Because pretesting is performed in a controlled environment—often an advertising agency—results may differ significantly from when the ad is viewed on television. The results of post-testing, however, come directly from those who viewed the ad in a natural setting. The findings, then, will be similar to the experience of the general public.

Pretesting Vs. Post-Testing

Pretesting	Both	Post-Testing
•	•	•
•	•	•

- The word aired in the passage is closest in meaning to
 - rejected
 - begun
 - delayed
 - broadcast

- The word finding in the passage is closest in meaning to
 - result
 - research
 - experiment
 - decision

- The word extent in the passage is closest in meaning to
 - effectiveness
 - time
 - degree
 - use

Fill in the blanks to complete the summary.

The passage compares pretesting and post-testing in advertising. Both methods _____ advertising in order to most effectively reach consumers. Pretesting occurs before the advertisement is aired. Advertisers ask people whether or not a certain ad _____ its intended message, and they _____ people's responses in testing possible alternative ads. Post-testing occurs after an ad has been aired. Advertisers use _____ from recall tests to determine how memorable a particular advertising technique was. While some favor pre-testing because it can identify problems before an ad is aired, others favor post-testing because it is based on real findings, rather than on a _____ situation.

03 Biology

Read the following passage. Then fill in the diagram with the information that you read. Track 30

Sugar Consumption

Scientists studying the harmful effects of sugar on the human body recently made a claim that avoiding sweets leads to a longer life. According to their research, the consumption of sweets has been proven to reduce life span and have degenerative effects on the body. Their findings were based on results found after studying sugar's effects in worms. They believe that sugar's harmful effects are similar for all species, including humans. The researchers supported their findings with three key pieces of evidence.

First of all, a look at basic physiology helps explain the effects of glucose on longevity. When one consumes sugar, whether in the form of regular sugar or as carbohydrates, the body must break it down into glucose, which is the simplest form of sugar. Glucose, the main supply of energy for the body, is available in many carbohydrates in the form of starches or other kinds of sugar, such as sucrose (regular table sugar), fructose (found in fruit), and lactose (found in milk). Cells need a consistent supply of glucose through the blood in order to function optimally. But when blood glucose levels rise higher than what cells require, the body stores the excess in order to adjust to this influx of glucose. The pancreas reacts by secreting the hormone insulin. Insulin acts as the messenger to the cells, telling them to absorb the excess glucose to return the blood to more normalized glucose levels. Upon consumption of large amounts of sugar, the pancreas continues to produce insulin, regardless of the negative effects of the hormone itself. Problems with insulin balance and pancreatic function result in diseases such as diabetes and obesity.

Secondly, an experiment on glucose deprivation led by a team of researchers at the University of Jena in Germany found that restricting intake of glucose lengthened worm life span up to twenty percent. If the results hold true for other animals, then the findings propose that this extension of life span in worms could translate to an extension of fifteen years in humans. The research pointed to the involvement of mitochondria to fuel the bodies of these glucose-deprived worms. Mitochondria are organelles that exist in the cytoplasm of all cells. Food molecules such as amino acids, fatty acids, and sugars are broken down by mitochondria with the help of oxygen. They are then converted to usable energy in the form of ATP, which allows energy transport. In fact, mitochondria are practically energy factories that manufacture ATP as the cell demands it. Since in the experiment the worms could not rely on glucose for energy, their mitochondria

degenerative:
characterized by a gradual decline

key:
important

longevity:
the duration of life

optimally:
in a most desirable manner

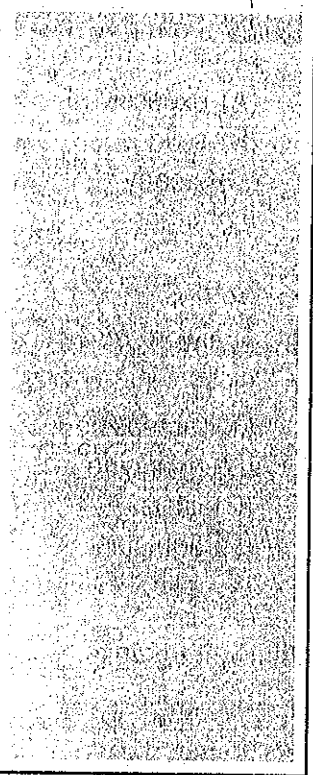
Influx:
arrival, flood

Inflammatory:
characterized by swelling in an area of the body

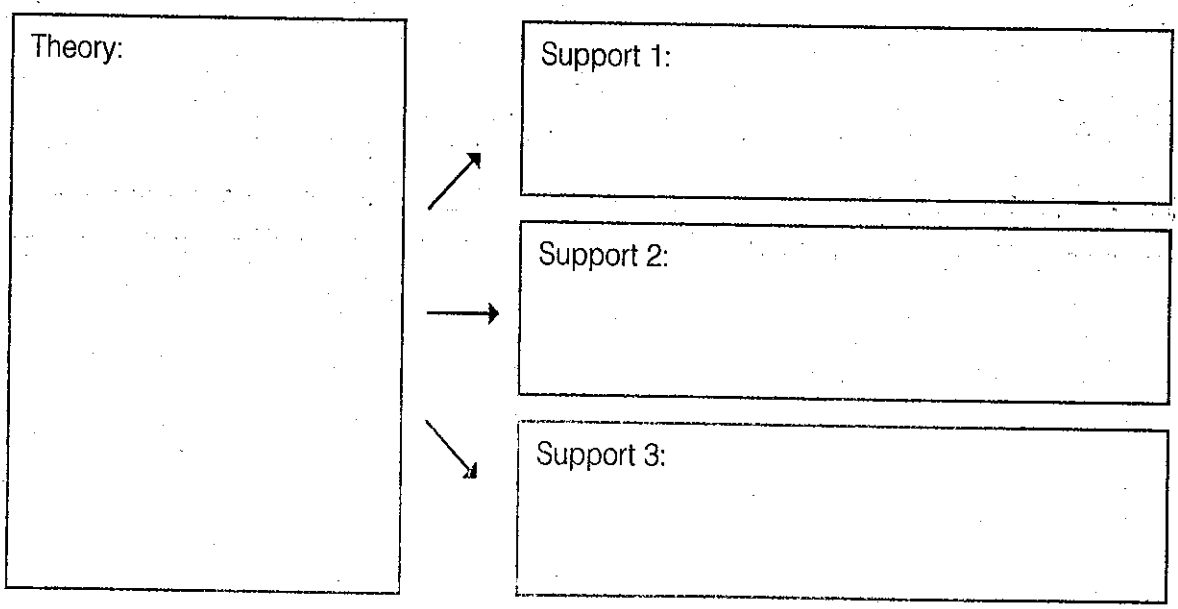
affix:
to attach oneself to something

increased ATP production to create fuel. Essentially, the lack of glucose allowed the body to strengthen its ability to fuel itself naturally.

Finally, Nicholas Perricone discusses the various life-shortening effects of sugar in his book *The Perricone Promise*. He describes the process of the effects of sugar on human bodies, in which the overconsumption of sugar produces an inflammatory effect. This leads to the acceleration of the aging process and various diseases such as cancer, Alzheimer's, and arthritis. In an experiment with sugary cereals, he found that due to the rapid rise in blood sugar, not only did the body produce more of what are called inflammatory markers, but the body's ability to fight inflammation was also compromised for up to four hours after consumption. According to Dr. Perricone, eating sugar causes the production of stiff sugar-protein bonds, which accumulate in the body over time. These glucose molecules affix themselves not only to collagen in the skin, but to veins, ligaments, bones, arteries, and even brain cells. This leads to stiff joints, hardened arteries, and failing organs. Therefore, sugar causes a slow deterioration of bodily functions, which leads to a shorter life span.



Sugar Consumption



1. The word **consistent** in the passage is closest in meaning to

- (A) excessive
- (B) solid
- (C) steady
- (D) strong

3. The word **compromised** is used in the passage to mean

- (A) included
- (B) replaced
- (C) endangered
- (D) increased

2. The word **restricting** in the passage is closest in meaning to

- (A) increasing
- (B) changing
- (C) limiting
- (D) tightening

Fill in the blanks to complete the summary.

The passage discusses the _____ effects of sugar on the body. Three _____ pieces of evidence support this claim. First, while cells in the body require a consistent supply of glucose in order to function _____, a(n) _____ of glucose can cause insulin imbalances and diseases. Second, an experiment done on worms showed that limiting sugar extended their _____. It is believed that this extended lifespan could apply to humans. Last, sugar-protein bonds that are produced by sugar consumption _____ themselves to veins, ligaments, bones, and arteries, which has a negative effect on organs and leads to the deterioration of bodily functions.

Read the following passage. Then fill in the diagram with the information that you read. **Track 31**

Naegleria fowleri Outbreak

In 2007, the number of reported cases of deaths caused by *Naegleria fowleri*, a rare amoeba that primarily resides in soil, sharply increased in the United States. The amoeba was found in warm bodies of water such as freshwater lakes and ponds that range from twenty-five to thirty-five degrees Celsius. *N. fowleri* was detected not only in freshwater sources, but increasingly so in domestic water supplies, groundwater supplies, and recreational water sources as well. Investigations by environmental scientists were carried out in order to determine the causes of the outbreaks, which were linked to warm water stagnation, the amoeba's ability to propagate, and sudden changes in environments.

The amoeba attacks the human central nervous system by entering via the mucous membranes of the nasal passageway. When it reaches the olfactory bulbs through the nose, it causes hemorrhaging, which is the loss of blood, and necrosis, which is the death of living tissues and cells. From the olfactory bulbs, it reaches the brain by traveling along nerve fibers. One of the first symptoms to emerge is a noticeable change in the ability to smell and taste; following that, vomiting and nausea, headaches and fevers, and ultimately, coma and death will ensue. *N. fowleri* became an immediate concern as the frequency of reported cases increased in the United States. Between 1995 and 2004, the US Centers for Disease Control and Prevention determined that twenty-three *N. fowleri*-caused deaths took place in the United States. In 2007, a sharp increase was noted: six cases were reported in the United States that year, marking almost a 250 percent increase in reported cases. Scientists struggled to determine the cause.

Water stagnation was suggested as a cause after researchers determined that *N. fowleri* could be found even in domestic dwellings. In an experiment conducted by Francine Marciano-Cabral, samples were collected from homes in an Arizona town where two boys had died due to an infection with *N. fowleri*. It was discovered that seventeen of nineteen sites tested positive for the amoeba, particularly in the residual water in the sink pipes. It has been speculated that the two boys, who had had no history of freshwater swimming but had taken regular baths, died due to the presence *N. fowleri* in the water supply of their homes. The researchers suggest that *N. fowleri* can proliferate in the stagnant parts of home water supplies, which was probably the case in this incident.

Other research conducted in the southwestern state of Arizona showed that groundwater supplies were contaminated with *N. fowleri*. Of the 188 wells sampled, sixteen percent tested positive for the presence

amoeba:

an organism with only one cell.

stagnation:

the process of becoming stale or foul through not flowing or moving.

propagate:

to reproduce

olfactory:

pertaining to the sense of smell.

ensue:

to follow closely after something.

municipal:

relating to a town or city.

outlet:

an opening to let something out.

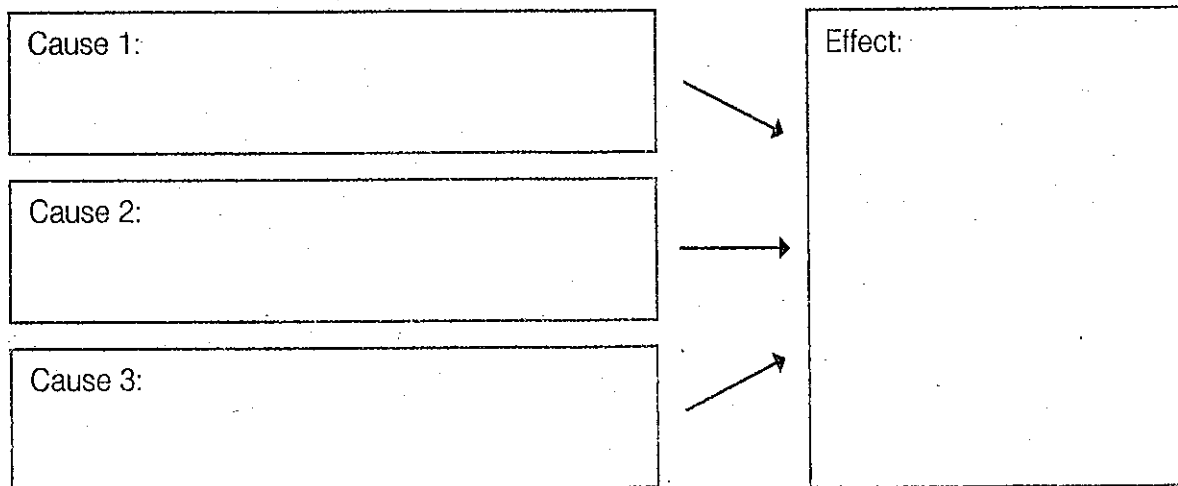
fluctuation:

a variation or change.

of the amoeba. These were not private wells but rather high-volume public wells run by private water companies and municipal facilities. The researchers also found that a certain kind of bacteria, called heterotrophic bacteria, was present in the water. These bacteria served as food for *N. fowleri*, allowing them to propagate in water supplies that were usually free of such bacteria and, thus, free of *N. fowleri*. The researchers concluded that the presence of these bacteria allowed *N. fowleri* to invade the municipal water supplies. They also discovered that *N. fowleri* is very resistant to the purification treatments common in municipal treatment plants, including treatment with chlorine. Therefore, the treatments widely used to remove harmful organisms from water were futile against *N. fowleri*.

In an experiment by Detterline and Wilhelm, the presence of *N. fowleri* in government-owned recreational waters was linked with changes in the environment. Fifty-nine sites were tested for *N. fowleri*, of which thirty-four tested positive. These sites include Yosemite Creek of Yosemite National Park and other federal water sources throughout the United States. The investigation found that the presence of this amoeba was highly correlated with environmental disturbances, such as unnaturally high iron content (usually due to limited outlets), disruptions in biodiversity, land clearings, or fluctuations in water temperatures. The experiment found that the amoeba was especially tolerant of waters above twenty-six degrees Celsius. Thus, the amoeba's presence can be connected to the increase in water temperatures across the United States as global warming continues to alter ecosystems.

Naegleria fowleri



1. The word **sharp** in the passage is closest in meaning to
 - (A) thin
 - (B) pointed
 - (C) violent
 - (D) sudden
2. The word **speculated** in the passage is closest in meaning to
 - (A) dared
 - (B) deposited
 - (C) suspected
 - (D) pledged
3. The word **contaminated** in the passage is closest in meaning to
 - (A) stopped
 - (B) increased
 - (C) infected
 - (D) destroyed

Fill in the blanks to complete the summary.

The passage discusses the outbreak of *Naegleria fowleri*, a rare amoeba that was found in freshwater sources throughout the United States. It attacks the central nervous system, causing coma and death to _____. The *N. fowleri* outbreak was linked to water _____, natural propagation, and sudden changes in the environment. The amoeba can live in stagnant water, even in homes. It can also live in high-volume wells and _____ facilities. Bacteria found in these wells fed the *N. fowleri*, which allowed the amoebas to _____ and invade water supplies. The presence of *N. fowleri* was also found to be linked to environmental disturbances such as disruptions in biodiversity, land clearings, or _____ in water temperatures.

05 Astronomy

Read the following passage. Then fill in the diagram with the information that you read. Track 32

Jovian Planets

Jovian planets, or "gas giants," are distant planets that share similar compositions. These planets include Jupiter, Saturn, Uranus, and Neptune. Jovian planets are different from the other planets of the solar system and form their own subcategory. However, each one possesses unique qualities relating to composition and formation. The four planets are placed into the category of Jovian planets due to their composition. Unlike the planets that make up the inner solar system such as Mercury, Venus, Earth, and Mars (also known as terrestrial planets) that have solid surfaces, Jovian planets consist mainly of the gases hydrogen and helium, with traces of methane, water, and ammonia.

Since the outer solar system is far from the sun, it is a cold region where ice is plentiful. Its low temperatures affected the formation of the Jovian planets. First, planetesimals formed from tightly packed flakes of ice as well as metal and rock slivers. The planetesimals expanded as ice flakes accumulated, forming the cores of Jupiter, Saturn, Uranus, and Neptune. Since these cores were large enough to have their own gravitational pull (equal to at least fifteen times the mass of the Earth), they were able to attract hydrogen and helium gas from around them in a process called nebular capture, leading to the formation of a denser atmosphere. The cores heated up as the particles falling inward generated more heat. The heavier elements sank to the core, which in turn became denser. Thus, the planets, dense with gases, formed.

Jupiter, which is five angstrom units (a.u.) from the sun, is chemically and compositionally different from the other Jovian planets. Jupiter has a high proportion of hydrogen and helium in its upper atmosphere. Its outer layer is made of molecular hydrogen covering a layer of metallic liquid hydrogen, which then surrounds a denser solid core. The layer of metallic hydrogen underneath the layer of molecular hydrogen (which can be seen from afar as a layer of tumultuous clouds) makes up most of Jupiter and is responsible for the planet's powerful magnetic field. Its interior is extremely hot, averaging at around 20,000 Kelvin (K). Jupiter's surface is rendered different shades of reds, yellows, oranges, and browns due to sulfur reactions.

Saturn, which is twice as far from the sun as Jupiter, also has a unique composition. In contrast to the vivid red of Jupiter, Saturn can be described as a dull yellow. This color is due to the presence of ammonia in the atmosphere. The ammonia covers the atmosphere as either a solid or a liquid. Saturn's atmosphere is made up of about ninety-four percent hydrogen, with very small amounts of helium, methane, and

terrestrial planet:

any of the four planets nearest the sun

trace:

a small amount

planetesimal:

a small rocky astronomical object that merged with others to form the planets

angstrom unit:

an astronomical measurement roughly equal to the distance between the Earth and the sun

tumultuous:

chaotic

render:

to put something in a particular state

featureless:

lacking defining qualities

dominant:

more common

ammonia. The lower levels of Saturn's atmosphere contain many of the same red colors as Jupiter. However, due to the dense covering of ammonia clouds, this layer is rendered invisible.

Uranus, which is nineteen a.u. away from the sun, is relatively featureless. The planet lacks cloud bands and forceful weather patterns, instead appearing as a solid bluish-green color. Uranus is considered to be an "ice giant," since it consists mostly of ice and rock, whereas Jupiter and Saturn are made up primarily of gases. While all of the Jovian planets started out with red and yellow colorations due to the initial domination of ammonium hydrosulfide, Uranus later developed its blue color when its temperatures dropped below seventy K during its process of formation. This caused ammonia gas to freeze and eventually leave the atmosphere. Methane became more dominant over time. Though its outer layer consists mostly of hydrogen, the amount of methane (also present) gives Uranus its blue color.

Neptune, thirty a.u. away, is also considered an "ice giant." Neptune has a similar blue color to Uranus, though the blue is much brighter. The atmosphere of Neptune contains a higher concentration of methane gas than Uranus. Thus, due to the higher concentration, Neptune appears bluer than Uranus. Atmospheric features, such as clouds, are more easily seen on Neptune than on Uranus, presumably due to the planet's heat allowing the clouds to rise higher in the atmosphere. The weather patterns on Neptune, which are characterized by winds in excess of 1,500 kilometers per hour, lead to the frequent appearance of colored bands. Winds more easily move storm systems, which tend to wrap around the planet.

Jovian Planets

Definition:	Example 1:	Characteristics:
	Example 2:	Characteristics:
	Example 3:	Characteristics:
	Example 4:	Characteristics:

1. The word **accumulated** in the passage is closest in meaning to

- (A) gathered
- (B) spread
- (C) formed
- (D) changed

3. The word **presumably** in the passage is closest in meaning to

- (A) actually
- (B) seemingly
- (C) hardly
- (D) definitely

2. The word **vivid** in the passage is closest in meaning to

- (A) plain
- (B) obvious
- (C) bright
- (D) impressive

Fill in the blanks to complete the summary.

This passage discusses the Jovian planets, which share similar compositions. Jupiter, Saturn, Uranus, and Neptune consist mainly of hydrogen and helium, with _____ of methane, water, and ammonia. Jupiter's magnetic field comes from its thick layer of metallic liquid hydrogen lying under _____ clouds of molecular hydrogen. Saturn's dense covering of ammonia clouds _____ the red colors of its atmosphere invisible. Uranus's atmosphere is relatively _____, appearing a solid bluish-green color due to the _____ presence of methane. Neptune has dynamic wind patterns presumably because of its heat, which allows its clouds to rise higher in the atmosphere.

Read the following passage. Then fill in the diagram with the information that you read. Track 33

Diego Velázquez

Diego Velázquez, considered one of the most prominent Spanish painters to have emerged from the 17th century, was also one of the best portraitists in Western art. From the early part of his career until his later life, he underwent a process of evolution as an artist. Nonetheless, he always preserved realism in his works.

In the first stage of his artistic career, Velázquez apprenticed under Francisco Pacheco, an artist who believed firmly in the importance of staying true to realistic form. During this time, Velázquez began to contrast light and shade sharply, which became a hallmark of his style. While he was Pacheco's student, Velázquez studied proportion and perspective. He practiced painting scenes from everyday life, and it was then that he began still-life paintings of kitchen scenes. This kind of composition, called the *bodegón*, became wildly popular. In *Vieja Friendo Huevos* (*An Old Woman Frying Eggs*), painted in 1618, he depicted a simple scene of a young boy standing next to an old woman hunched over a stove. What stands out in this painting is the natural contours and illuminations of the subjects' skin: the young boy's youthful blush and the depth of the old woman's eyes and cheekbones. Though simple in detail, the attention to shadow and lighting are suggestive of Velázquez's characteristic style.

In the following period of his artistic career, Velázquez's life became heavily intertwined with the court, and his artistic style changed to fit royal demands. He won royal approval in 1623 by presenting a portrait of Philip IV during a trip to Madrid. It was then that he lived as a court painter, creating portraits of the royal family. Even in these portraits, one can see the realism that he liked to preserve. Their shadows of light and darkness left out the embellishments and distortions that usually accompany royal portraiture. During this period, he softened the tones that he used, and the austerity of the scenes that he had painted in the earlier part of his life changed to reflect a happier tone. He used brighter colors such as gold and deeper jewel-tones such as ruby to accent the subject. Yet he still used his technique of contrasting light and shadow and kept figures proportionately accurate. He depicted the royal family perhaps more honestly than most artists of his time. In his portraiture of Philip IV, he used a darkened background to bring out the king's royal pallor and refinement without glorifying him, keeping his stance and features natural.

The next stage of transformation came after his first visit to Italy, which resulted in a change in his painting style. After 1631, when he

prominent:

famous; well-known

apprentice:

to work under someone in a trade

proportion:

the relationship of size between different objects

perspective:

the technique of portraying different distances in a painting

composition:

a piece of art

intertwined:

joined with

austerity:

a sense of harshness or severity

remnant:

a small remaining part

returned from his trip, he took up studying the Renaissance masters. He incorporated elements of their style into the continuation of his work as a portrait painter. He was asked to paint a military triumph, but unlike the usual Rubenesque portrayal, he adhered to his devotion to realism. In his painting of *La Rendición de Breda*, which depicted the scene of the Dutch city of Breda being conquered by the Spanish army, the head of the Dutch army is handing the key of Breda to the leaders of the Spanish military. Several of the soldiers in the painting appear to be looking outside of the painting, others are smirking at each other, and one is even looking at his own fingernail, keeping the portrayal of the characters realistic and mundane. He kept the painting topographically accurate, with some parts of the scene obscured by the remnant smoke from the battle. The colors he chose for the scene differed from his more recent choices. He opted for true greens, beiges, browns, and pinks, and the mood that he created was significantly lighter.

His final stage of development was characterized by a style that experts now call *manera abreviada*, which refers to a bolder, sharper style. His fame was culminated by a portrait of Pope Innocent X in 1650. The crimson curtain and the pope's own costume stand out from this portrait, with the pope's smug countenance subtly possessing its own significance. By this time, he had truly become proficient in the art of portraiture, eloquently bringing out the expression of the subject. In what is considered to be his greatest work, *Las Meninas* contains his own self-portrait as an artist in the background. The painting is considered representative of the Baroque art movement, which saw paintings defined by grandeur and exuberance.

Diego Velazquez's Artistic Career

Stage 1:



Stage 2:



Stage 3:

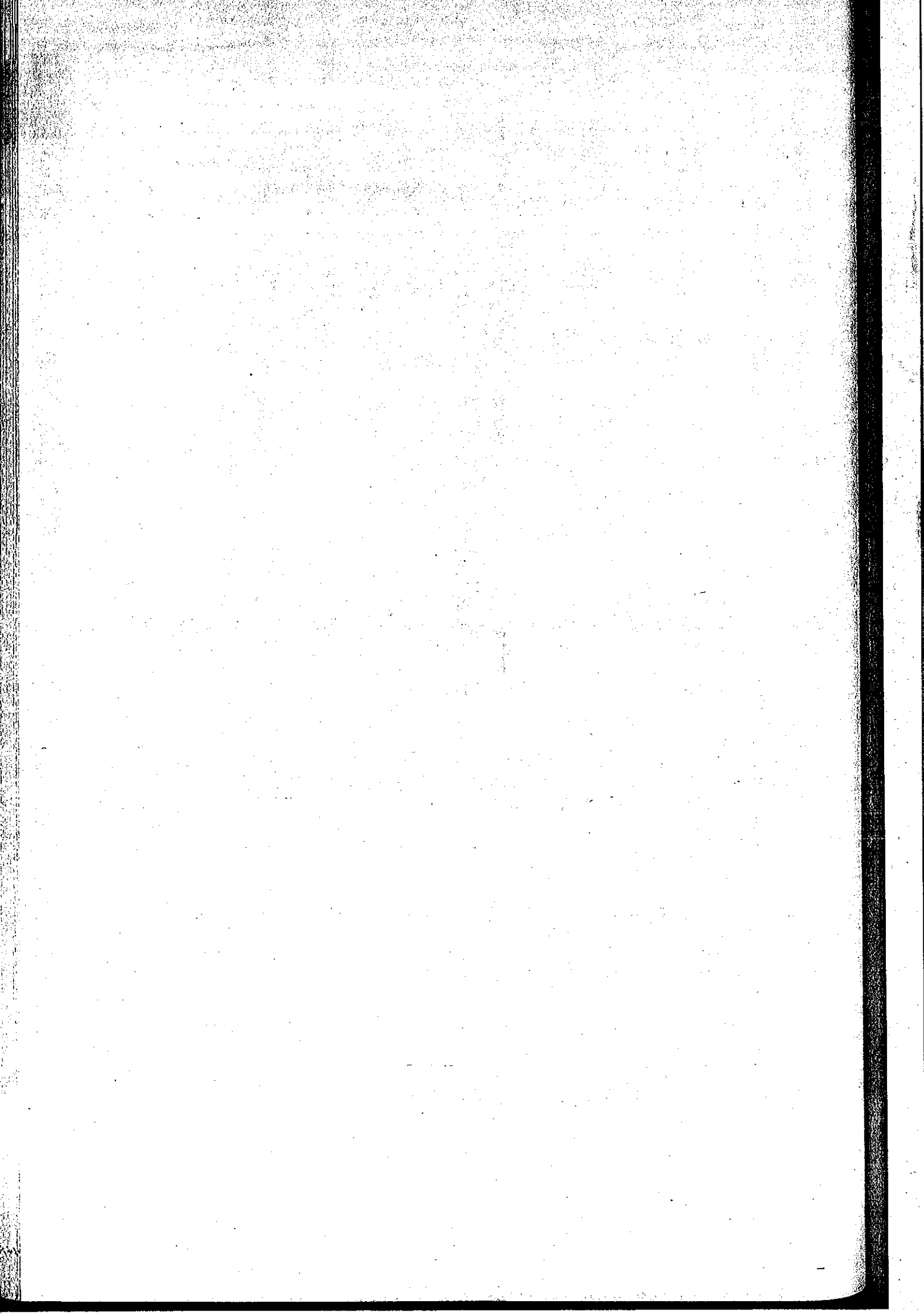


Stage 4:

1. The word **hallmark** in the passage is closest in meaning to
 - (A) technique
 - (B) change
 - (C) characteristic
 - (D) sign
2. The word **accent** in the passage is closest in meaning to
 - (A) emphasize
 - (B) reveal
 - (C) hide
 - (D) enlarge
3. The word **mundane** in the passage is closest in meaning to
 - (A) boring
 - (B) ordinary
 - (C) indifferent
 - (D) accurate

Fill in the blanks to complete the summary.

According to the passage, Diego Velázquez was one of the most _____ Spanish painters in the 17th century. His career went through four stages. The first began as he _____ under an artist who believed in the importance of realism. After studying proportion and perspective, Velázquez began producing _____ of kitchen scenes from everyday life. His life later became _____ with that of the court. He began to use brighter colors in contrast to the _____ of scenes he had painted previously. After spending time in Italy, he returned and began to use more greens and adhered to realism. Last, in a style called *manera abreviada*, Velázquez's style became bolder and sharper.



Chapter 6

Reference Questions

Necessary Skills

- Identifying the relationships between pronouns and their referents in a passage
- Determining to which person, place, or thing a pronoun refers in the context of a passage

Example Questions

- The word _____ in the passage refers to

Strategies

- Ensure that your answer choice matches the same number (singular or plural) and the person (first, second, third) as the pronoun being asked about.
- Try substituting your answer choice for the pronoun in the passage to see if your choice is sensible.
- Since there is often more than one answer choice that may seem correct, read the sentences around the pronoun's sentence carefully to ensure you choose correctly.
- Remember that the grammatical referent for a pronoun may appear in a preceding clause or sentence.

01 History

Read the following passage. Then fill in the diagram with the information that you read. **Track 34**

Ancient Egyptian Languages

For quite some time after European historians began studying ancient Egyptian ruins, the writing found there was undecipherable. Many ancient Egyptian artifacts and tombs were engraved with letters from the ancient civilization's alphabet. What they actually meant remained unknown. While it was relatively easy to deduce certain things about ancient Egyptian ways of life, not having an understanding of their language severely hindered any historical research.

The Egyptian alphabet is a combination of two distinct written language types. The first, alphabetic, is most common in contemporary languages. Each glyph represents a sound. Glyphs are combined into strings to form words. Words, then, contain a concept. Logographic languages, on the other hand, are written so that a single glyph represents a concept. Occasionally, glyphs are strung together to create a more complex concept. Ancient Egyptian writing used both, and, as such, it remained a mystery to modern linguists.

When French explorers unearthed the Rosetta Stone by the Mediterranean coast in 1799, they unwittingly opened up the ancient Egyptian alphabet. When it was discovered, French scholars immediately suspected that they had found something valuable. In a historically unclear series of events, the Rosetta Stone eventually fell into the hands of the British, who went about translating the text on the large stone tablet. They finished the translation around 1824.

The Rosetta Stone, written around 196 BCE, actually presents the same decree in three different languages. The message itself is relatively mundane, ordering the repeal of various taxes and requesting the construction of statues in temples. Even though the message remains a simple bureaucratic edict, it is written in Ancient Greek and two Egyptian written languages, hieroglyphic and demotic (Coptic). Linguists were already quite familiar with the Greek and had a working knowledge of Coptic, which was used by later Egyptian states. The translation of the hieroglyphic text involved honing linguistic understanding of the Coptic language by comparing it to the Greek language, which was relatively well known. The subsequent understanding of Coptic would be compared to the written hieroglyphic text on the tablet. By working out the definition of particular hieroglyphs and then inferring the meaning of others, translators were able to effectively decode the ancient Egyptian writing system.

The impact of the Rosetta Stone is undeniable. For years before its discovery, scholars had been attempting to translate hieroglyphs

engrave:

to cut into stone

concept:

an idea or general notion

valuable:

extremely useful or important

mundane:

lacking interest or excitement; dull

bureaucratic:

pertaining to a government

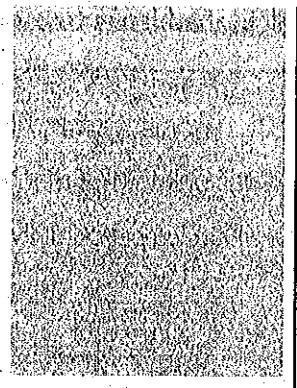
decode:

to convert something into intelligible text

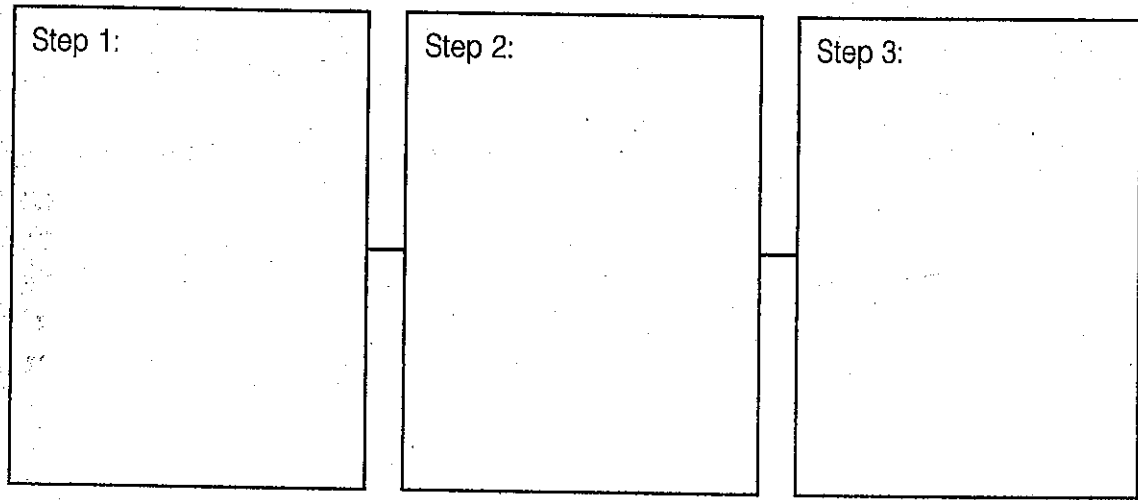
Idiom:

an expression whose meaning is not apparent from the meanings of its individual words

with no success. The discovery of the Rosetta Stone was pivotal, as the meaning of hieroglyphs could be discerned. The subsequent insight into Egyptian culture was vast—large retellings of historical events were inscribed on the walls of Egyptian structures. Being able to read them offered an unprecedented understanding of the ancient Egyptian people. Given its impact on language, the term “Rosetta stone” has worked itself into our own language as an idiom for a key to a decryption process or puzzle. It is arguably one of the most important known historical artifacts.



Ancient Egyptian Writing



1. The word *it* in the passage refers to
 - (A) concept
 - (B) alphabet
 - (C) linguistics
 - (D) writing
2. The word *They* in the passage refers to
 - (A) British scholars
 - (B) French scholars
 - (C) French explorers
 - (D) Egyptian writers
3. The word *which* in the passage refers to
 - (A) the Greek language
 - (B) the Coptic language
 - (C) the Egyptian hieroglyphs
 - (D) the later Egyptian states

Fill in the blanks to complete the summary.

For many years, the meaning of letters _____ on ancient Egyptian ruins was unknown. French explorers found the _____ Rosetta Stone in 1799, which was eventually translated by British scholars. Although its message was relatively _____, the three languages on the tablet allowed translators to effectively _____ the ancient Egyptian hieroglyphs. Its value in providing insight into ancient Egyptian culture resulted in the term "Rosetta stone" becoming an _____ that today refers to a key to a decryption process or puzzle.

Read the following passage. Then fill in the diagram with the information that you read. Track 35

Fertilizers

Farmers know that one of the most important parts of having a healthy crop is ensuring that the soil is properly fertilized. Soil that has the right balance of nutrients can yield hearty vegetables and flowers. Plants use the nutrients in soil for many of their basic processes, so it is important to ensure that the soil is fertilized properly. The first step is figuring out the relative amount of nutrients in the soil. Most local gardening centers can test the soil using a sample provided by the customer. Alternatively, some gardening centers offer do-it-yourself testing kits. The results of the soil test will reveal what type of fertilizer needs to be added to the soil to maximize plant growth.

Nitrogen is used by plants of all types to produce chlorophyll, a chemical pigment that allows plants to absorb light and turn it into energy. When applying nitrogen, growers should be particularly careful. If too much nitrogen is already in the soil around a plant, it will produce an excess of foliage. While more foliage might seem like a good thing, it can actually hinder the growth of fruit or vegetables in plants. In cases where far too much nitrogen is applied to an area, a plant's foliage might wither from the high concentration of nitrogen. There are chemical fertilizers, as well as organic alternatives, available to put nitrogen into soil. Cottonseed, alfalfa, or manures can all be used as natural alternatives to chemical fertilizers.

Phosphorous is another important nutrient that needs to be monitored and occasionally supplemented in gardens. Phosphorous provides materials for essential cellular functions, especially the transport of energy within an organism. In most environments, a lack of phosphorous is primarily responsible for slow plant growth. By adding it to the soil, a farmer can maximize the rate of growth and maturation of plants. While it is difficult to harm plants with too much phosphorous, farmers near bodies of water should be careful when applying it. Too much phosphorous can easily upset the chemical balance in aquatic environments.

Potassium is the third nutrient that gardeners should monitor in their soil. This substance plays a key role in many cellular functions, providing plants with nutrients needed to form proteins, sugars, and starches. In many garden centers, potassium is commonly referred to as potash, a naturally occurring form of potassium. It is essential that potassium levels in soil are kept relatively high, as it is foundational to the functioning of a plant. There are chemical fertilizers available that contain potassium. Gardeners can also apply wood ashes, granite sand, or crushed granite to increase potassium levels.

yield:

to produce

maximize:

to make as large or as great as possible

foliage:

the leaves on a plant

hinder:

to create difficulty for

supplement:

to complete or enhance something else when added

aquatic:

relating to water

essential:

absolutely necessary

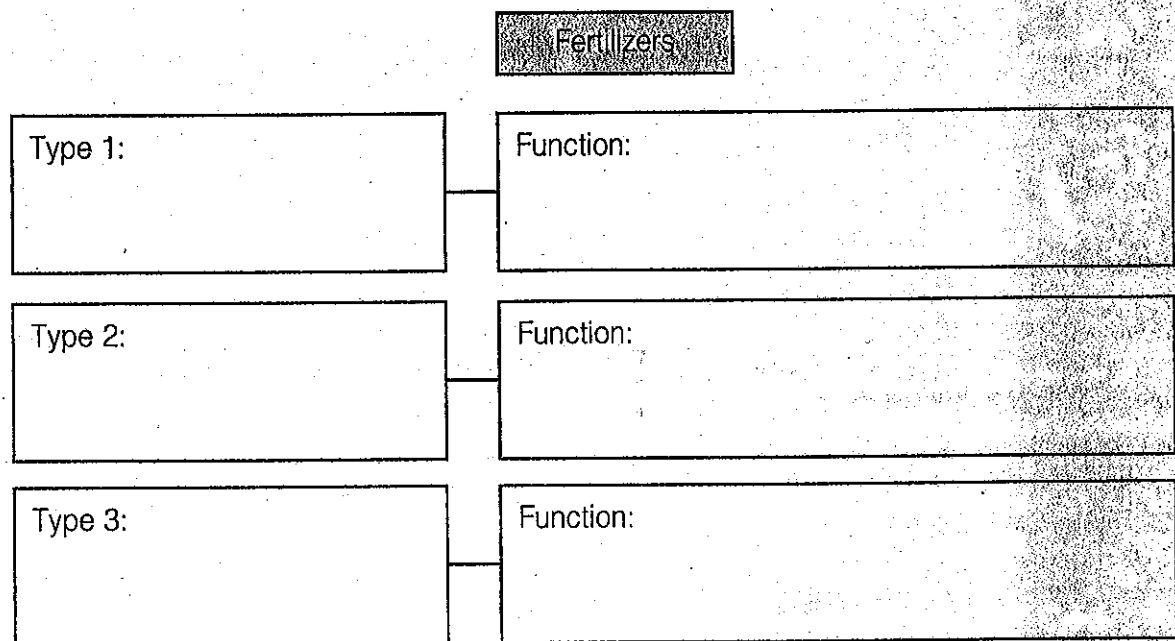
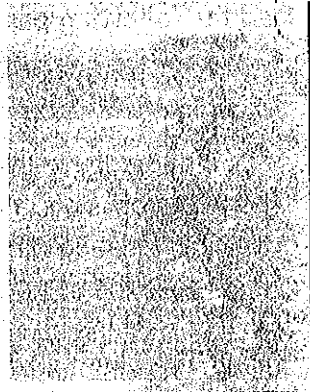
combination:

a group of things that have been put together

hesitant:

unsure

Many fertilizers offer a combination of nitrogen, phosphorous, and potassium in particular ratios that gardeners can add to their soil. Alternatively, each one can be purchased and applied separately. There is some question about whether one should use chemical fertilizers or organic fertilizers. Some chemical fertilizers can release nutrients over time in a controlled manner. However, some people are hesitant to put chemical elements so close to their food. Regardless of one's preference, balanced nutrient levels are essential to having a healthy garden.



- The word *their* in the above passage refers to
 - plants'
 - vegetables'
 - nutrients'
 - farmers'

- The phrase *This substance* in the passage refers to
 - Nutrient
 - Fertilizer
 - Potassium
 - Cellular

- The word *it* in the above passage refers to
 - phosphorous
 - nitrogen
 - energy
 - plants

Fill in the blanks to complete the summary.

An important part of maintaining a healthy garden is to ensure that the proper amounts of nutrients are in the soil. Nitrogen, phosphorous, and potassium all play important roles in ensuring plants _____ hearty flowers, fruits, and vegetables. Nitrogen helps plants produce chlorophyll, but at high levels can actually _____ the growth of fruits and vegetables. Gardens can also be _____ with phosphorous, which can _____ the rate of plant growth and maturation. Potassium can also be added to soil, which plays a key role in a plant's cellular functions. Many fertilizers have a _____ of all three chemicals, or they can be applied separately.

03 Literature

Read the following passage. Then fill in the diagram with the information that you read. Track 36

Magical Realism

Literature is broken down into smaller categories, called genres, which describe the type of story or book that is being read. Magical realism is a 20th-century literary genre. The literature of this genre is varied, but it can generally be characterized by the occurrence of magical aspects in otherwise realistic settings.

The term "magical realism" originated in the art world. It was coined by a German art critic named Franz Roh. Interestingly, it was originally used to describe art that portrayed very common and boring scenes. But when a Venezuelan writer named Arturo Uslar-Pietri used the term, it had a different meaning. Uslar-Pietri applied it to the work of a group of Latin American writers that had emerged in the 1960s. In their work were the first elements of magical realism as it is known to literary critics today. Contrary to its original meaning, there is nothing boring about magical realism in literature.

Although the definition for magical realism is broad, there are six features recognized as essential to any work created in the genre. The first is that the story is told from the perspective of "the Other." The concept of "the Other" in literature refers to a person who is different and outside of society because of it. For example, in Jorge Luis Borges's short story "The Shape of the Sword," very little is revealed about the main character and narrator. Through the course of the story, however, the reader learns that the main character is actually a traitorous soldier who betrayed his captain. His narrative focuses on how different he is from his peers and emphasizes his feelings of isolation.

Another element common to magical realism is the assumption of the "evolved duties" of the reader. This means that writers presuppose that, in deciding to pick up one of their books, the reader implicitly agrees to go farther than the literal meaning of the text. Instead, the author requires the reader to accept the magical and unrealistic aspects of the story, as bizarre as they might seem, in order to decipher the rest of the text. This element underscores one of the primary concerns of magical realists: how to get the reader involved in the story.

The third characteristic of magical realism is that the setting is always very specific to a particular history, culture, or geography. These features are seen as essential in creating an altered reality. By doing this, the author uses specific examples to try to impart universal messages. For instance, in *The Gesticulator* by Rodolfo Usigli, the main character assumes the identity of a missing war hero. As he becomes more entangled in his web of lies, the character feels that he is becoming the person he is emulating until their histories are completely one and the same.

coin:

to use first; to invent

perspective:

the point of view from which a story is told

traitorous:

disloyal

isolation:

the state of being alone and away from others

underscore:

to highlight or stress

emulate:

to try to be like; to imitate

sequence:

an arranged series of things, actions, or events

The fourth aspect is that reality is treated as a subjective human experience. Therefore, each reality is different. Additionally, in order to reveal each reality more completely, authors often include dream sequences and private thoughts of their characters. For example, in Juan Rulfo's *Pedro Paramo*, the narrator and main character is a man who returns to his hometown to find his mother. Instead, he meets the ghosts of the city's inhabitants. Through a series of supernatural dreams and encounters, he learns about the harsh history that they suffered at the hands of the cruel Pedro Paramo.

The next element is that the style of writing in magical realism is generally very open and influenced by post-structuralism. The authors always assume that the meaning that they try to express is secondary to how the reader interprets it. In other words, there is no single function to any story because it is yet to be analyzed by someone else. Also, the events in stories are often out of order and seemingly chaotic. The non-linear storyline adds to the feeling of a disrupted history and also forces the reader to pay attention to other aspects of the story.

Finally, magical realism is defined by inexplicable events or sequences. Those sequences play a significant role in the stories. It would be erroneous to suppose, however, that the magical events that happen in the story are just parts of the setting or otherwise something that could be ignored. Instead, the fantastical is used to force people to be critical of their own realities.

Magical Realism

Feature 1:	Explanation:
Feature 2:	Explanation:
Feature 3:	Explanation:
Feature 4:	Explanation:

Feature 5:	Explanation:
Feature 6:	Explanation:

1. The word **which** in the passage refers to
 - (A) story
 - (B) literature
 - (C) genres
 - (D) book
2. The word **it** in the passage refers to
 - (A) scenes
 - (B) art
 - (C) meaning
 - (D) the term
3. The word **who** in the passage refers to
 - (A) author
 - (B) Jorge Luis Borges
 - (C) person
 - (D) captain

Fill in the blanks to complete the summary.

The passage discusses a genre of literature called magical realism. The term was first _____ by a German art critic. There are six features common to all magical realism works. First, it is always told from the _____ of "the Other." For example, in "The Shape of the Sword," the main character is a _____ soldier who feels isolated from his peers. Second, magical realism requires readers to involve themselves in evolved duties, which _____ a primary concern of magical realists. Third, it emphasizes history, culture, and geography as a way to portray reality. Fourth, it includes characters' dream _____ and private thoughts as a method of expressing the subjective human experience. Fifth, it is influenced by a post-structuralist style of writing. Finally, all works feature a magical event.

Read the following passage. Then fill in the diagram with the information that you read. Track 37

Eris and Pluto

Until recently, there was no accepted list of criteria that definitively described what a planet was. When scientists finally did define the characteristics of a planet, Pluto was redefined as a dwarf planet, rather than a proper planet like Earth or Mars. Dwarf planets are bodies in space that orbit around the sun. As Pluto was no longer considered a planet, the need for further reclassification and new terminology arose. Finally, astronomers agreed that Pluto was a dwarf planet. According to the scientific definition, dwarf planets must also have enough of a mass for it to have formed a spherical shape. Additionally, dwarf planets are distinguished from other planets because they have not cleared the neighborhood around their orbit. This means that other masses or celestial bodies still exist in the orbit of dwarf planets, whereas they do not for other planets. The last criterion for a dwarf planet is that it is not a satellite. A satellite is an object in space that orbits around a larger mass, such as the moon.

Currently, there are three recognized dwarf planets: Ceres, Pluto, and Eris. The discovery of dwarf planets has been the source of much confusion amongst scientists. Since all three are relatively far away from the sun and Earth, they have been difficult to study. However, the more information that is gathered about dwarf planets, the more scientists can tell about the different features that each one exhibits.

After being reclassified, Pluto went from being the last planet in the solar system to being the second-largest dwarf planet. Pluto's mass has long been disputed, but information gathered from satellites has led to more accurate formulations. It is believed that Pluto is less than a quarter of the mass of the Earth. Furthermore, by studying eclipses, astronomers can make good guesses about the size of Pluto. Currently, scientists think that Pluto has a diameter of 2,390 kilometers.

The distinction of biggest dwarf planet, however, goes to Eris. Recently discovered, Eris is still largely a mystery to scientists. So far, they have been able to determine little about the dwarf planet. However, as technology advances, it becomes easier to study it. The mass of Eris is larger than Pluto's by about twenty-seven percent. Furthermore, the diameter of Eris is also larger than Pluto's at about 2,600 kilometers. Approximations about the size of Eris have been based on satellite information, and scientists warn that until more information is gathered, it is hard to determine the exact mass and size of Eris. Given their uncertainty, some scientists say that the actual diameter of Eris may be up to 400 kilometers more than what they currently think.

definitively:

in a way that cannot be argued; absolute

proper:

in a strict limited sense, as a designation

spherical:

ball-shaped

celestial:

relating to the sky or outer space

dispute:

to disagree or argue about something

diameter:

the width of a circle or sphere

plane:

a flat surface that continues in all directions

inclined:

sloping or forming an angle with something else

Although they have different masses and sizes, the two dwarf planets are actually similar in their chemical and physical make-up. Pluto is thought to be composed mostly of ice and rocks. By using special tools, astronomers have learned that Pluto is mostly made up of frozen nitrogen. It also contains traces of methane ice and carbon monoxide ice. Comparisons between Pluto and Eris suggest that they have similar compositions. Methane ice is also known to exist on Eris. Given their physical similarities, however, it was initially confusing to scientists why the dwarf planets appeared different. Eris looks grayish while Pluto is reddish. Later, the difference in their outward appearance was explained by the presence of tholins on Pluto's surface. Tholins are materials commonly found on icy planets. They are responsible for the darker appearance of Pluto.

In addition to having similar compositions, Pluto and Eris share orbit patterns that are very different from those of the planets. For example, they both have eccentric orbits. This means that the orbit is more elliptical, or oval-shaped. Meanwhile, the planets in the solar system have more circular orbits. The exaggerated ellipses of the dwarf planets' orbits cause each one to experience extreme temperature changes as they get closer or farther away from the sun. Unlike other planets, the orbits of Pluto and Eris are also tilted. If one imagines the planets in the solar system, it would be accurate to envision the orbit of each one lying on one plane. But the orbits of the dwarf planets Pluto and Eris are slightly inclined. Pluto is inclined by seventeen degrees while Eris is inclined by forty-four degrees. The inclination of their orbits causes them to cross Neptune's orbit. However neither dwarf planet ever approaches Neptune, so the risk of collision is impossible.

Eris and Pluto

Eris	Both	Pluto
<ul style="list-style-type: none"> • • 	<ul style="list-style-type: none"> • • • 	<ul style="list-style-type: none"> • •

1. The word **they** in the passage refers to
 - (A) scientists
 - (B) orbits
 - (C) other planets
 - (D) dwarf planets
2. The word **their** in the passage refers to
 - (A) scientists
 - (B) satellites
 - (C) diameter
 - (D) Eris and Pluto
3. The word **it** in the passage refers to
 - (A) Frozen nitrogen
 - (B) Pluto
 - (C) A special tool
 - (D) Eris

Fill in the blanks to complete the summary.

The passage discusses dwarf planets. With the establishment of criteria that _____ describe a planet, Pluto is no longer considered a _____ planet. In order to be considered a dwarf planet, an object must orbit around the sun, have a _____ shape, not have cleared its orbital neighborhood, and not be a satellite. Dwarf planets have different sizes, but are very similar. For example, Pluto and Eris have similar physical and chemical composition. Also, while each planet orbits on one _____, Pluto and Eris both have orbits that are slightly _____.

05 History

Read the following passage. Then fill in the diagram with the information that you read. Track 38

Muckraking

People read newspapers to learn about current events and to be entertained. Starting in the late 19th century, the medium was also used as a tool to promote social change. One group of investigative journalists, known as muckrakers, redefined the role of the media in society by putting a particularly reformist spin on their work. It was through their efforts that many of the social reform movements of the early 20th century were pushed into the consciousness of the public and politicians alike.

A muckraker is a journalist who investigates social injustices and brings them to public view. The term was a comparison of this type of journalism to a muck rake. The idea was that muckrakers stirred up ignored issues and placed them in clear view for people to take notice of the need for change, just as a muck rake is used to gather manure or compost and place it in an observable pile. Although the work of muckrakers was sometimes published in tabloids with sensational titles, their main goal was not to sell newspapers, but to publicize social injustices.

The first of the muckraking journalists appeared in the late 19th century. They covered a wide variety of issues, including dangers in the workplace and child labor. The advent of muckraking corresponded with a changing political climate in which politicians were increasingly looking to improve American society. The relationship between the muckrakers and politicians was undeniably an important factor in the reforms that took place during the period. Politicians aligned themselves with many of the causes covered by muckrakers. Likewise, many journalists supported the campaigns of politicians who were willing to enact social changes. However, that is not to say that tensions did not arise between the two groups, particularly when the investigations were focused on the wrongdoings of politicians.

In a 1906 speech, President Roosevelt criticized journalists in response to a series of articles written by David Graham Phillips. In the articles, Phillips exposed political corruption amongst members of the Senate, which included some of Roosevelt's closest political allies. During the speech, Roosevelt suggested that the muckrakers were not always unbiased in their coverage. It was during the same speech that Roosevelt coined the term "muckraker." Roosevelt's public condemnation of the muckrakers prompted a negative response from the journalists. Up to that point, Roosevelt had been considered a friend to the muckrakers. He had been instrumental in passing new

reformist:

advocating change

spin:

a viewpoint, bias, or interpretation meant to influence public opinion

tabloid:

a type of newspaper that features exaggerated stories

sensational:

news reports that aim to shock people

publicize:

to make well known

align:

to be on someone's side

ally:

a friendly association

regulation:

an official rule, law, or order

laws that improved working conditions and ensured the safety of food sold in the United States.

Despite the occasional tensions, muckrakers had an incredible impact on American society. Their influence is evident in the number of reforms that occurred between 1900 and 1915. Some changes that took place as a result of muckraking journalism were prison reforms, the adoption of child labor laws, and the nation's first environmental conservation efforts. Of the reforms, the most widely known are those that took place as a result of the most famous muckraking book ever published, *The Jungle*, by Upton Sinclair. Set in the harsh world of the Chicago slaughterhouses, it depicts the hardships laborers encountered. Through the book, the public learned about the terrible conditions that people working in the meatpacking industry endured. Their safety was constantly threatened, and owners seemed to disregard their well-being altogether. For example, there were multiple references to workers having body parts cut off in the machines.

The book caught the attention of many. It increased public concern for the employees in certain industries. Additionally, the book also raised awareness about a different problem in the United States: the lack of quality control and regulation in the food industry. Sinclair's most notable supporter was President Roosevelt himself, who, upon reading the book, ordered a separate inquiry to investigate Sinclair's allegations. Finding that the horrors portrayed in the book were all too real for many people, Roosevelt began to work to remedy some of those problems.

Eventually, Sinclair's book led to the passage of two very important laws: the Meat Inspection Act and the Pure Food and Drug Act. The Meat Inspection Act was aimed at ensuring quality and safety of meat processed in the United States. It ordered companies to inspect all meat and refuse to sell meat that could cause illness to humans. The Pure Food and Drug Act regulated all companies that produced items for human consumption. It was through the Pure Food and Drug Act that the Food and Drug Administration (FDA) was established.

The Role of Muckraking in American Society

Definition:



Goal 1:



Example:



Goal 2:



Example:

1. The word *their* in the passage refers to
 - (A) politicians
 - (B) the American public
 - (C) muckrakers
 - (D) reformists
2. The word *which* in the passage refers to
 - (A) political corruption
 - (B) members
 - (C) President Roosevelt
 - (D) articles
3. The word *It* in the passage refers to
 - (A) United States
 - (B) Pure Food and Drug Act
 - (C) Quality
 - (D) Meat Inspection Act

Fill in the blanks to complete the summary.

The passage discusses muckraking, which is when journalists expose important social issues to the public. While the writing of muckrakers was sometimes published with _____ titles in the tabloids, their main goals were to _____ social injustices and promote change. Many politicians _____ themselves with causes covered by muckrakers. However, some, namely President Roosevelt, criticized those who exposed some of his political _____, claiming that the muckrakers were biased in their coverage. Although there were some difficulties, the effectiveness of muckraking is obvious by the number of social reforms that occurred, such as the _____ of meat processing in the United States.

06 Theater

READING

LISTENING

SPEAKING

WRITING

PRACTICE TEST

Read the following passage. Then fill in the diagram with the information that you read. **Track 39**

The Fourth Wall

The relationship between the audience and the actors in a play is often overlooked in drama studies. For a long time, it was taken for granted that there existed a distance between the two, and it is through this distance that dramatic tension was achieved in early plays. But in modern plays, more attention has been given to this relationship. Playwrights have begun to experiment more with the limits of their storytelling and have started to expand their limits beyond the distance between the audience and the actors.

In theater, the fourth wall refers to the invisible wall or screen that separates the stage from the audience. If one envisions a typical stage, there are clearly three physical walls that make up the set. The fourth wall is the one that faces the audience. Even without the presence of a physical wall, the concept of the fourth wall is easy to accept by an audience because it gives the sense that one is observing real events. Historically used as a stage term, it is now possible to conceive of the fourth wall in modern terms. For example, a fourth wall exists in television and film as well. The conventions of theater traditionally held that the division provided by the fourth wall was one never to be broken. Yet, at the beginning of the 20th century, a new technique called "breaking the fourth wall" became more common.

Breaking the fourth wall is essentially when the separation between the characters in a play and the audience disappears, such as when a fictional character on a stage or screen shows that they are aware of the audience. They can do this by talking directly to the audience or even by just referring to the audience. The fourth wall is usually broken in this manner, but other methods are also used. For example, sometimes the characters interact with stage hands or assistants, which has the same effect because the characters are separating themselves from the fictional situation. In other cases, the effect is accomplished when a character is broken through dialogue. Ultimately, breaking the fourth wall abandons the custom of fictional continuity and forces the audience to become more than just spectators. In other words, instead of merely observing the events in a fictional world, the audience becomes a part of them.

In modern theater, breaking of the fourth wall has become increasingly common. It is used to achieve many different effects. It is often employed to add a comical effect to a story. Breaking the fourth wall is especially successful in doing so because it adds an unexpected aspect to the story. In comedy, the unexpected is precisely

overlook:

to choose to ignore or disregard something

convention:

a usual way of doing things

continuity:

the state of being consistent or continuous

comical:

funny

discriminately:

with sense and reason

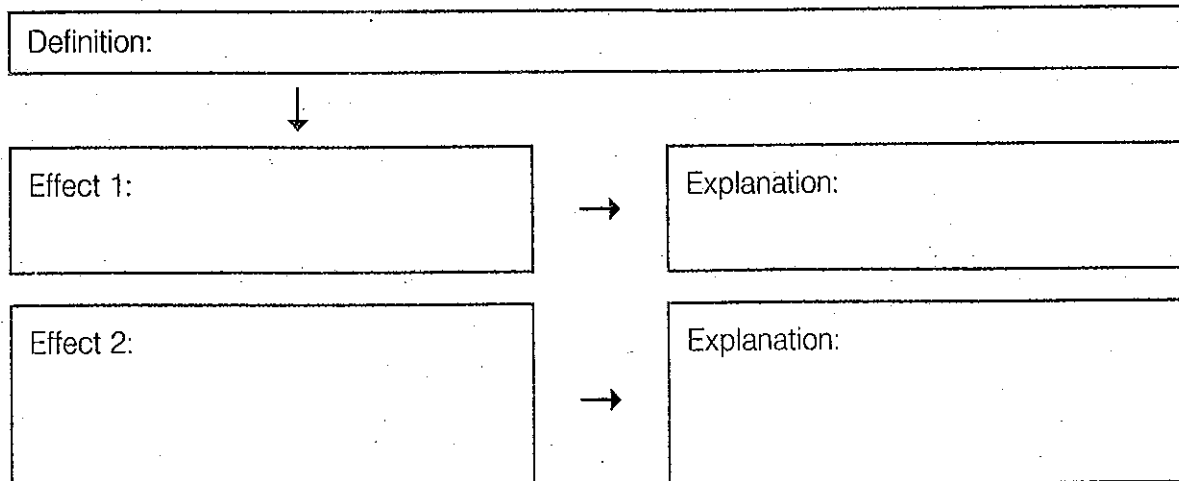
what creates humor, so, in a sense, breaking the fourth wall is just another way for comedians to surprise and delight their audiences.

The technique is used to this effect in many instances. In theater, an early example is in *The Knight of the Burning Pestle* by Francis Beaumont. The story is frequently interrupted by members of the audience, who, contrary to appearances, are not strangers but actually actors. The fictional audience demands changes in the play throughout its course, adding a different type of humor to the piece. The technique is also used in modern television shows and movies.

Breaking the fourth wall can also be used to emphasize a particular view or issue in a play. When the fourth wall is broken, the audience is no longer made up of passive spectators. Instead, they are made to be part of the play, and by reason of their implied participation, are forced into being more critical of what they are watching. When the fourth wall is broken in order for the audience to become more involved in the story, it is referred to as the alienation effect.

Breaking the fourth wall is a common feature in many modern works. It adds a comical touch to stories or can make the audience a more active agent in a play. But according to some dramatists, the overuse of the technique can have negative results. Some critics claim that when not used discriminately, breaking the fourth wall can be shocking and distracting to the audience. Furthermore, others worry that the increased use of the technique is leading to its eventual uselessness. They argue that the very reason the technique is effective, especially in comedy, is because it is not conventional. However, as it becomes more common, its element of surprise declines and the audience becomes unresponsive to interaction with the actors.

Breaking the Fourth Wall



1. The phrase this relationship in the passage refers to
 - (A) the relationship between actors and playwrights
 - (B) the relationship between actors and audience
 - (C) the relationship between drama and tension
 - (D) the relationship between drama scholars and playwrights

2. The word who in the passage refers to
 - (A) strangers
 - (B) Francis Beaumont
 - (C) audience members
 - (D) The Knight of the Burning Pestle

3. The word It in the passage refers to
 - (A) Breaking the fourth wall
 - (B) Common feature
 - (C) Comical
 - (D) Active agent

Fill in the blanks to complete the summary.

The passage discusses breaking the fourth wall in theater. The fourth wall is the invisible wall that separates the audience from the actors on the stage. The relationship between the actors and the audience was often _____ in drama. Theater _____ in the past were to never break the division between them. In modern drama, breaking the fourth wall breaks up the practice of fictional _____ and forces the audience to become more than mere observers. It can be used to add a _____ effect or emphasize a particular view or issue. Breaking the fourth wall has become so common that some critics worry about it losing its effectiveness if it is not used _____.



Chapter 7

Sentence Simplification Questions

Necessary Skills

- Identifying the answer choice that has the same essential meaning as a highlighted sentence in a passage
- Eliminating answer choices that change the meaning in important ways or leave out essential information.

Example Question

- Which of the following best expresses the essential information in the highlighted sentence? Incorrect answer choices change the meaning in important ways or leave out essential information.

Strategies

- Ensure that you understand the ways in which an answer can be incorrect. Either it contradicts a detail in the highlighted sentence, or it omits something important from the sentence.
- Be careful that your answer choice does not contradict the main argument of the paragraph in which the highlighted sentence occurs or the passage as a whole.

01 Philosophy

Read the following passage. Then fill in the diagram with the information that you read. **Track 40**

Representative Realism

Everything people know about the physical world comes to them through their senses—sight, touch, sound, taste, and smell. Most days, people put simple faith in this information as being a perfect reflection of the real, physical world. But people are also sometimes fooled by their senses. This raises the question: how accurately can the physical world be known if all knowledge of it comes through the senses? That is the problem posed by the philosophical viewpoint known as representative realism.

The father of this popular philosophical school was John Locke (1632–1704). Locke inquired into the origin, certainty, and extent of human knowledge in *An Essay Concerning Human Understanding*. While his work was hailed by many for its simple approach to difficult issues, it was attacked by others because in the end, his critics argued, it could not confirm that the world even exists.

According to representative realists, people cannot perceive the world directly, only the impressions and ideas perceived through the senses, or what is called the “veil of perception.” In other words, people do not know the objects of the world, only their ideas of them. But this raises a serious question. The problem with representative realism is that it cannot say anything for certain about the real world because every statement describes only sensations of the world, which are subjective. Looking at a table, one person might see it as brown and square, while another person sitting in a bright corner might see it as white and rectangular. How can people know for certain that others see, hear, and taste the same things they do—that one person’s brown is another’s brown? Whose perspective is correct?

Critics ask that, if all people know is their individual perceptions, which are not necessarily the same, why do people all act and exist as if they perceive the same things in the world? Representative realists address these questions by saying that our senses act together to confirm the existence of real objects with fixed characteristics. For example, a table might look different to two people, but if they walk around it and touch it, they will end up agreeing on its properties. By agreeing on the properties of the table, they have proven that the table exists in the physical world and is the source of their perceptions.

Critics do not agree on whether or not Locke definitively argued that the objects in the world, or even the world itself for that matter, are real. This is a significant problem in the field of philosophy, because the science of knowledge requires proofs of the assumptions on

fool:

to make believe that something false is true

sensation:

a physical feeling derived from the senses

hail:

to praise

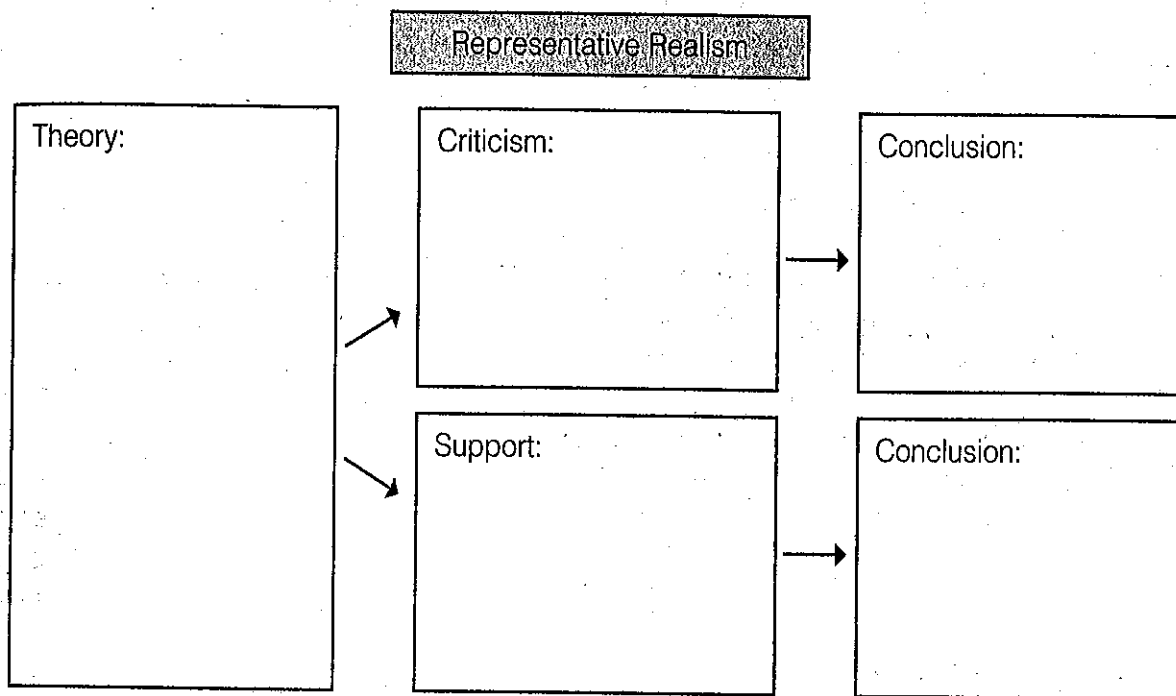
perceive:

to know or understand

subjective:

belonging to the individual mind

which all other knowledge is based. Still, most people in their everyday lives act as realists. They do not question whether the physical world exists, but believe that it is more or less as they perceive it—even though they cannot prove it.



1. Which of the following best expresses the essential information in the highlighted sentence in paragraph 2? Incorrect answer choices change the meaning in important ways or leave out essential information.

- (A) Most people felt that even though Locke's ideas were simple, they did not explain the nature of philosophy at all.
- (B) Locke's ideas were attacked because they assumed that our minds and thoughts create an illusion of the world.
- (C) Because Locke's ideas were generally simplistic, they were widely attacked for not being able to explain things adequately.
- (D) Some people criticized representative realism because it could not prove that the world was real, yet others praised its simplicity.

2. Which of the following best expresses the essential information in the highlighted sentence in paragraph 3? Incorrect answer choices change the meaning in important ways or leave out essential information.

- (A) Representative realism can state only that our perceptions are subjective sensations of the world.
- (B) Every statement made by representative realism is a description of subjective perceptions, not a proof of anything.
- (C) Representative realism has problems saying for certain that the sensations of the world are only subjective.
- (D) Representative realism cannot prove the world exists, because it can make statements only about subjective perceptions.

3. Which of the following best expresses the essential information in the highlighted sentence in paragraph 4? Incorrect answer choices change the meaning in important ways or leave out essential information.

- (A) Critics wonder why people act as if their perceptions match everyone else's if they do not perceive the real world.
- (B) Critics ask why perceptions seem to match other if they do not describe something real in the world.
- (C) If we know our individual perceptions do not match everyone else's, critics wonder, why do people act as if they perceive the same?
- (D) Critics ask, if all we know is that our perceptions do not match others', why do we all perceive the same real things?

Fill in the blanks to complete the summary.

John Locke developed a philosophy called "representative realism" that was _____ for its method of dealing with difficult issues in a simple way. He believed that people do not _____ the world as it is, but as it appears to their senses. Because senses can be _____, representative realists feel that differences in _____ perception are corrected by people sharing their perspectives to come to a common idea of an object's _____. Locke developed an explanation of how people deal with the confusion of subjective perception, but critics feel his theory does not prove the existence of our world.

02 History

Read the following passage. Then fill in the diagram with the information that you read. **Track 41**

Archimedes

His name is hardly a household word, although the word he yelled in the street after solving a difficult problem—"Eureka!"—is known by many. Yet, to mathematician Archimedes of the 3rd century, modern people owe their understanding of such fundamental physical phenomena as the principles behind the pulley as well as the fulcrum and lever. Considered by some to be among the greatest mathematicians of all time, Archimedes perfected a method for measuring the areas, volumes, and surfaces of many bodies. In his own time, however, he was known best for inventing war machines that helped defend his hometown from attacking Romans.

Archimedes, the son of an astronomer, was born in Syracuse, Sicily, in 287 BCE. He may have been related to the King of Syracuse, Hiero II, but in any case, he often ended up applying his mathematical genius to problems and needs set forth by the king. As a young man, Archimedes studied the teachings of renowned mathematician Euclid in Alexandria, Egypt. Although he preferred to study mathematics for its own sake, Archimedes was often called upon to apply his knowledge in the defense of Syracuse, which was an object of contention between the great powers of Rome and Carthage. When the Romans attacked Syracuse in 214 BCE, Archimedes displayed a number of his impressive war machines. According to witnesses, some of these could sink ships using weights that thrust out of a wall, or lift a ship high by one end, swing it around, then throw it against rocks or to the bottom of the sea. But the inventor called these "mere amusements in geometry" compared with his complete absorption in solving abstract problems.

Among Archimedes's practical inventions for the king was a device used to draw rainwater out of a ship using a crank and a spiral. This method of irrigation is still used today in some countries. He also found a way to prove his suspicion that a goldsmith had cheated the king in making a crown. Observing the displacement of water when he got into the bath, Archimedes realized that he could measure the crown's volume thus and calculate its density to determine whether or not the jeweler had cut the gold with silver. In fact, he had. This discovery led Archimedes to run down the street shouting "I found it!" ("Eureka!")

Archimedes left nine books of mathematics that set out the fundamental principles of mechanics using geometry. His work paved the way for the calculus of the infinite, which was perfected in later centuries. He was most proud of the work he did showing the relationship between the surface area and volume of a cylinder

pulley:

a lifting device made up of a rope in a grooved wheel

renowned:

well-known, famous

contention:

a dispute or struggle

thrust:

to move something quickly and powerfully

crank:

a device for turning

displacement:

an amount (of water) moved

circumscribe:

to surround or enclose

READING

LISTENING

SPEAKING

WRITING

PRACTICE TEST

circumscribing a sphere, and this is what marked his tomb. So respected was Archimedes that this tribute was ordered by the Roman general who ultimately defeated Syracuse and whose soldier killed the seventy-five-year-old mathematician. Legend has it that Archimedes was too caught up in a mathematical problem to notice the invading soldier and was struck dead.

The Accomplishments of Archimedes

Accomplishment 1:	→	Solution:
Accomplishment 2:	→	Solution:
Accomplishment 3:	→	Solution:
Accomplishment 4:	→	Solution:

- Which of the following best expresses the essential information in the highlighted sentence in paragraph 2? Incorrect answer choices change the meaning in important ways or leave out essential information.
 - Archimedes was called upon to defend Syracuse, even though he would rather study than apply mathematics.
 - Archimedes used mathematics to defend Syracuse, which caused conflict between the powers of Rome and Carthage.
 - Archimedes preferred to study mathematics for its own sake, rather than apply his knowledge to an object of contention.
 - Archimedes's knowledge in the defense of Syracuse was an object of contention between Rome and Carthage.
- Which of the following best expresses the essential information in the highlighted sentence in paragraph 3? Incorrect answer choices change the meaning in important ways or leave out essential information.
 - Observing the water's movement allowed Archimedes to discover that he could measure the crown's volume and density.
 - Archimedes discovered that the crown's volume and density would correspond with the displacement of water.
 - Archimedes realized that displacement of water could be used to find out if the jeweler had reduced the amount of gold in the crown.
 - Observing the displacement of water, Archimedes realized that the jeweler had added silver to the crown.

3. Which of the following best expresses the essential information in the highlighted sentence in paragraph 4? Incorrect answer choices change the meaning in important ways or leave out essential information.

- (A) Archimedes was so respected that the Roman general who defeated Syracuse ordered a tribute to him.
- (B) Archimedes respected the Roman general who defeated Syracuse and whose soldier killed the mathematician.
- (C) After a tribute was ordered, the Roman general's soldier killed Archimedes out of respect for the mathematician.
- (D) The Roman general's soldier who killed the mathematician ordered a tribute to Archimedes in respect.

Fill in the blanks to complete the summary.

Archimedes was one of the greatest mathematicians in history, albeit relatively unknown. He lived in the city of Syracuse, which was a point of _____ between the battling powers of Rome and Carthage. During his lifetime, Archimedes was famous for designing weaponry to defend Syracuse, including a machine used to sink ships by _____ weights from a wall, and a pump that used a _____ and a screw. Historically, he is most known for discovering a method of using water _____ to determine the density of a material, although he was most proud of his work that showed the relationship between the surface area and volume of a cylinder _____ a sphere.

03 Music History

Read the following passage. Then fill in the diagram with the information that you read. Track 42

Scott Joplin and Ragtime

Most people think first of jazz when asked to name a distinctly American form of music. However, the first homegrown musical genre was actually ragtime. Ragtime originated as a form of popular entertainment in African-American dance halls between 1900 and 1920. It gained standing as a serious musical form only later in the century, with the revival of interest in composer Scott Joplin. A piano player and the best known composer of ragtime, Joplin is now seen as the founder of "classical" ragtime. It consists of a unique synthesis of African-American folk music and syncopation with 19th-century European classical music.

Joplin was born in Texas sometime in late 1867. He received early training in classical music from a German piano teacher. Joplin was also exposed to the marches and waltzes of popular band music of his time. Before the age of twenty, he was earning a living as a piano player. He traveled with bands around the Midwest and performed in black "gentlemen's clubs" in his home base of Sedalia, Missouri. The music played in these clubs in the latter half of the 19th century was ragtime, an African-American modification of the march that was usually played on the piano. Like other African-American musical styles, ragtime is defined by a certain type of syncopation. Melodic accents fall between beats that make the beats more easily heard, encouraging people to dance. Casual listeners recognize ragtime piano by the repeated pattern of left-hand bass notes and chords accompanying a syncopated melody played by the right hand.

Like many ragtime performers, Joplin composed original numbers and sold sheet music. Yet he always sought to elevate his ragtime compositions to the status of classical music. Despite the enormous popularity of his 1899 composition "Maple Leaf Rag," which attracted a wide audience to ragtime and established it in the musical culture of the early 20th century, Joplin focused on more serious pieces, such as an opera called *Treemonisha*. Joplin's sheet music publisher, John Stark, claimed that the composer had "lifted ragtime from its low estate and lined it up with Beethoven and Bach." This praise was not echoed, though, until long after Joplin's death. Ragtime waned in popularity with the emergence of jazz and the onset of World War I. Joplin's death in 1917 at the age of fifty was little noticed.

Two decades later, jazz bands began reviving some ragtime tunes in the 1940s. There was a nostalgic craze in the 1950s starting with publication of the book *They All Played Ragtime: The True Story*

genre:

a category or class of art form

synthesis:

the combination of separate units into a coherent whole

syncopation:

a shifting of the accent in music to a weak beat

modification:

a changed version

novelty:

a passing fad

realize:

to make real; to bring to reality

potential:

the possible outcome

Innovation:

an invention or improvement on an existing technique or tool

of an American Music. New rags were composed in the manner of light-hearted novelties. A more significant revival, which placed Scott Joplin finally in the ranks of major American composers, began in the 1970s. Classical pianist Joshua Rifkin released a recording of Joplin rags in 1971 that became nominated for a Grammy award, and the public was finally reintroduced to Joplin in the context he had desired: not as a nostalgic stereotype, but as a serious composer who had stood the test of time. Widespread interest came with the 1974 movie *The Sting*, which featured adaptations of Joplin's rags by popular composer Marvin Hamlisch. The film's theme song, "The Entertainer," reached number three on the Billboard 100 list of popular hits. Joplin's triumph came many years after his death, with the 1976 Pulitzer Prize for his special contribution to American music. In 1983, the US Postal Service issued a stamp of Scott Joplin in its Black Heritage series.

Today, some music historians consider classical ragtime a form of classical music, since it was based more on written sheet music than recordings or performances, but it is more likely the leap in quality taken by Scott Joplin that realized the potential of ragtime as a creative form. Joplin used African-American folk rags as raw material to break new musical ground. He carefully put together compositions known for their interesting themes, subtle relationships, and rich harmonies. As a synthesis of multiple musical genres, ragtime paved the way for an explosive era in American musical innovation. It continued with jazz and rock 'n' roll, earning performers an international following that continues to this day.

Scott Joplin

Achievement 1:



Achievement 2:



Achievement 3:

1. Which of the following best expresses the essential information in the highlighted sentence in paragraph 3? Incorrect answer choices change the meaning in important ways or leave out essential information.
 - (A) The popularity of "Maple Leaf Rag" led Joplin to focus on more serious pieces.
 - (B) A wide audience established ragtime as a musical culture focusing on serious pieces.
 - (C) Although "Maple Leaf Rag" was very popular, Joplin focused on more serious pieces.
 - (D) "Maple Leaf Rag" and more serious pieces established the musical culture of the early 1900s.

2. Which of the following best expresses the essential information in the highlighted sentence in paragraph 4? Incorrect answer choices change the meaning in important ways or leave out essential information.
 - (A) Rifkin's recording introduced Joplin to the public, showing his music stood the test of time.
 - (B) Joplin wanted to be introduced to the public through a serious recording like Rifkin's.
 - (C) Rifkin's recording established Joplin as the serious composer he wanted to be.
 - (D) Joplin was not a nostalgic stereotype, but a serious composer, as Rifkin's award proved.

3. Which of the following best expresses the essential information in the highlighted sentence in paragraph 5? Incorrect answer choices change the meaning in important ways or leave out essential information.
 - (A) By writing sheet music rather than performing, Joplin realized the potential of ragtime as a classical form.
 - (B) It is not only the written form, but the leap in quality that makes Joplin's ragtime into classical music.
 - (C) The leap in quality of Joplin's music was realized by writing sheet music in a creative classical form.
 - (D) More than recordings or performances, sheet music realizes the potential of ragtime as a creative form.

Fill in the blanks to complete the summary.

Scott Joplin developed an original _____ of American music in the early 1900s called ragtime, which was a _____ of African-American folk with classical European music. Joplin hoped ragtime would become as popular as the classical music in which he had trained, but this _____ was not _____ until long after his death. It was not until the mid 1970s that ragtime finally gained a reputation for beginning the major period of _____ in American music that continues today.

04 Business

Read the following passage. Then fill in the diagram with the information that you read. **Track 43**

Psychological Pricing

Nearly everyone is aware that prices displayed in odd fractions, like \$9.99, are meant to encourage the belief that an item costs significantly less than the whole number, although it is just a penny less. Yet, most people claim not to be fooled by this tactic. They say they simply round up the figure to \$10. The fact is, this strategy would not be used consistently for so many years if it were not effective. Studies have shown that not only does the penny difference increase sales disproportionately, but many more pricing strategies are also effective despite working against consumers' best interests. Together, these are known as psychological pricing.

Psychological pricing consists of techniques to improve sales by using certain numbers in prices. Many economic theories assume that consumers always act rationally. This assumption is the basis for standard pricing formulas that predict, for example, that for every ten percent drop in prices, a retailer will see a twenty percent increase in sales. Psychological pricing strategies like setting a price to end in 99 contradict these assumptions, since it should be in consumers' rational interest to notice that a penny difference is negligible. Yet, multiple studies have shown that sales can be increased greatly by using psychological pricing strategies. A study at the University of Chicago found that lowering the price of margarine from 89 cents to 71 cents increased sales by sixty-five percent. But when the price was lowered to 69 cents—just two cents less—sales increased by 222 percent. A 1996 study found that prices ending in 99 generated eight percent more sales than prices ending in 88 or 00 for otherwise identical products from mail-order catalogs of women's clothing.

Psychological pricing may work because consumers try to save time and effort in their calculations by focusing less attention on the fractional, right-hand part of a price than on the more significant, larger digits. This would explain why a price ending in 99 generates even greater sales increases when the extra penny would bump the price by another digit, as from \$9.99 to \$10. A different study in 2007 found the opposite "right-digit effect." Consumers saw a bigger discount when the last digit of a price was small. Thus, a \$222 item on sale for \$211 was considered a better deal than a \$199 item on sale for \$188, even though the discount is the same in both cases. The researchers in that study concluded that "comparative price advertising can distort consumers' perceptions in ways unintended by the seller." In other words, not only do the sellers stand to gain by using some type of psychological pricing effectively, they also stand to lose by remaining unaware of its effects. This suggests that there is more at stake

disproportionately:
to an extent that is out of proportion

fractional:
relating to fractions

exclusive:
high-priced; expensive

rationalization:
a reasonable explanation that is not the true, possibly subconscious reason

self-justification:
the making of excuses for one's behavior

READING

LISTENING

SPEAKING

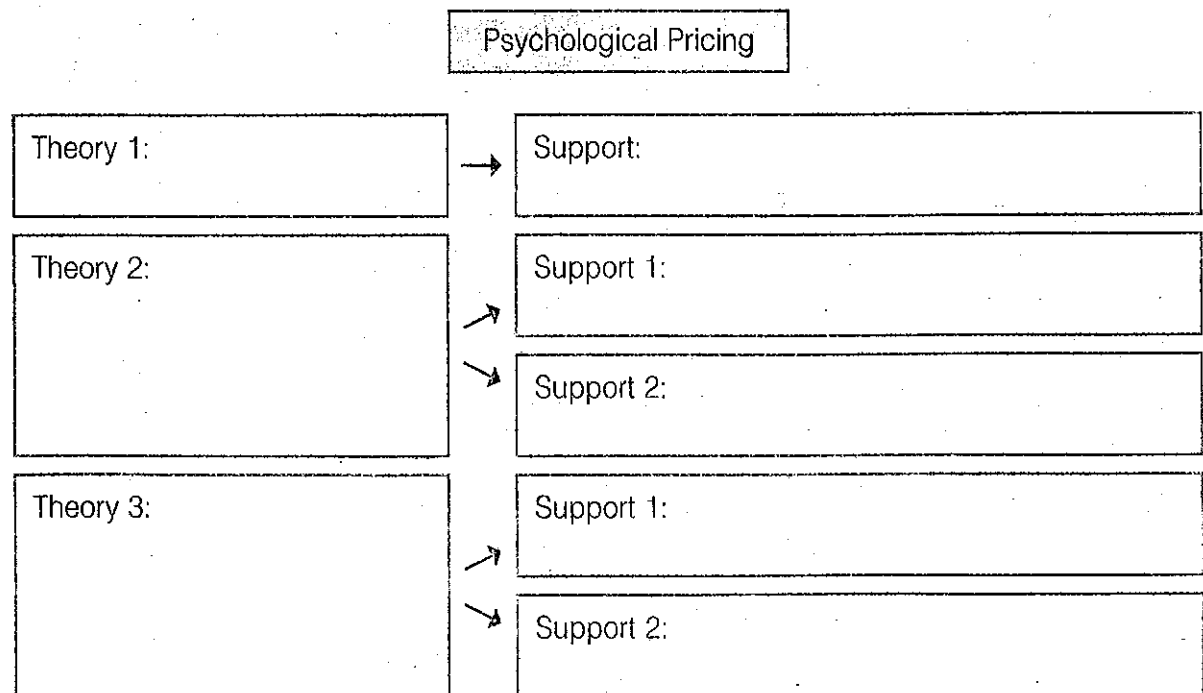
WRITING

PRACTICE TEST

behind the widespread use of psychological pricing strategies than sellers thinking they have nothing to lose by trying it except the need to stock up on pennies.

Even retailers who do not use fractional pricing often turn out to be applying psychological pricing strategies, in contrary fashion. People have grown so accustomed to thinking of prices ending in nine or five as a good value that prices ending in 00 project an image of quality and sophistication, according to a study from Ohio State University. Luxury shops, restaurants, and catalogs reject fractional pricing because they want to appear exclusive rather than low-priced. "By consistently looking at the numbers in prices and making a determination of the quality of those items, we learn what to expect, and it becomes a part of our culture," says researcher H.G. Parsa. "It's a subconscious learning."

Indeed, social psychologists have found that people do not always make decisions in their best interest on the basis of reason. Often, they exhibit what is called cognitive dissonance. This means that they might hold two inconsistent ideas simultaneously and adopt various forms of rationalization and self-justification to ease the resulting tension. For example, it makes sense to save money for retirement, yet many people fail to do it. The reason may be that they fear contemplating old age and saving would force them to think about it. Instead, they choose not to save and defend their choice with all kinds of reasons and justifications. The fact that psychological pricing works even though almost everyone sees through the ruse demonstrates the significant role that subconscious desires and thoughts play in economic decisions.



1. Which of the following best expresses the essential information in the highlighted sentence in paragraph 1? Incorrect answer choices change the meaning in important ways or leave out essential information.
- (A) Changing prices by just a penny raises sales, proving that consumers act in their best interests.
 - (B) Marketers have found many ways to increase sales disproportionately that contradict the idea that consumers always act rationally.
 - (C) Not only do pricing strategies help increase sales, they also have a disproportionate effect on consumers' best interests.
 - (D) Marketers have found that strategies like lowering the price by a penny can increase sales disproportionately.
2. Which of the following best expresses the essential information in the highlighted sentence in paragraph 2? Incorrect answer choices change the meaning in important ways or leave out essential information.
- (A) Psychological pricing strategies play on consumers' interest in noticing small differences in price.
 - (B) If consumers act rationally, they will not be fooled for long by psychological pricing strategies.
 - (C) Setting prices to end in 99 assumes that consumers will not notice the penny difference.
 - (D) Psychological pricing strategies assume that consumers always act in their best interests.
3. Which of the following best expresses the essential information in the highlighted sentence in paragraph 3? Incorrect answer choices change the meaning in important ways or leave out essential information.
- (A) Sellers who use psychological pricing will lose ground to competitors if they are unaware of all its effects.
 - (B) Psychological pricing will cause sellers to gain or lose, depending on how it is used.
 - (C) Some sellers might not care about the gains from psychological pricing, but ignoring the strategy's outcome could hurt them.
 - (D) Using psychological pricing effectively will lead to gains, while remaining unaware of it will lead to losses.

Fill in the blanks to complete the summary.

Psychological pricing is a technique used by marketers to improve sales by using certain numbers in the price of an item. Studies have shown that sales of an item rise _____ when the price is displayed in certain ways. By displaying a _____ price that ends in nine or five, such as \$4.95, consumers believe the item to be a good deal. Marketers found that prices ending in zeros, like \$5.00, gave shoppers the impression that the item was more _____, or of higher quality. Though there may be no difference between two items priced so differently, a shopper will buy an item based on subconscious _____ and _____, even if the decision makes no sense.

05 Psychology

Read the following passage. Then fill in the diagram with the information that you read. **Track 44**

Imprinting

It is often used as a striking image for the importance of early childhood experience: newly hatched ducks and geese follow the first moving object they see and treat it as their mother. This is a phenomenon known as imprinting. This special form of learning, explored by Konrad Lorenz in 1935, has drawn continuous interest by researchers in animal behavior and human psychology. This is because it stands somewhere between innate and learned behavior. The imprinting theory of learning states that animals have an innate tendency to respond to certain external stimuli, creating behavior that is important to the survival of the individual and the species.

Lorenz was not the first to describe or name the behavior known as imprinting. However, he went further than previous researchers by laying out its defining characteristics and generating interest in further study. Lorenz raised half a set of goose eggs in an incubator, and left the other half with their mother. When the incubated eggs hatched, the goslings followed Lorenz as if he were their mother, while failing to recognize their real mother. As adults, they preferred the company of humans to geese, and would not mate with their own species. Lorenz suggested that imprinting differs from other types of learning in two important ways: it takes place during a critical period—a window of time in which the learning can occur—and is irreversible once it has happened. He also proposed that its effects continue in adulthood, leading to the choice of a mate from the same species as the mother.

Later research has expanded on and modified Lorenz's findings. Imprinting is now known to affect not only birds, but other species, including mammals and even fish. It turns out that salmon learn how to return to their home stream to lay eggs after spending their lives at sea by imprinting on the stream's unique smell. Imprinting was originally thought to take place early in life, but it is now recognized also in adults, with critical periods of varying lengths. Just as baby birds imprint on their mother, adult birds imprint on their chicks: during the critical period of nesting, parents will adopt chicks of foreign species introduced into their nest, even though they would kill and eat a strange chick at other times.

Also, studies have found that imprinting is not necessarily irreversible, especially in adults. Some birds raised with a foreign species during the critical period of youth preferred to mate with those foreigners, but eventually switched to mating with their own. Songbirds imprinted with songs from other species that they learn from tape recordings eventually

Innate:

existing since birth

tendency:

an inclination to do something

stimulus:

something that encourages a response

incubator:

a heated box for hatching eggs artificially

modify:

to change

pathology:

the science of disease

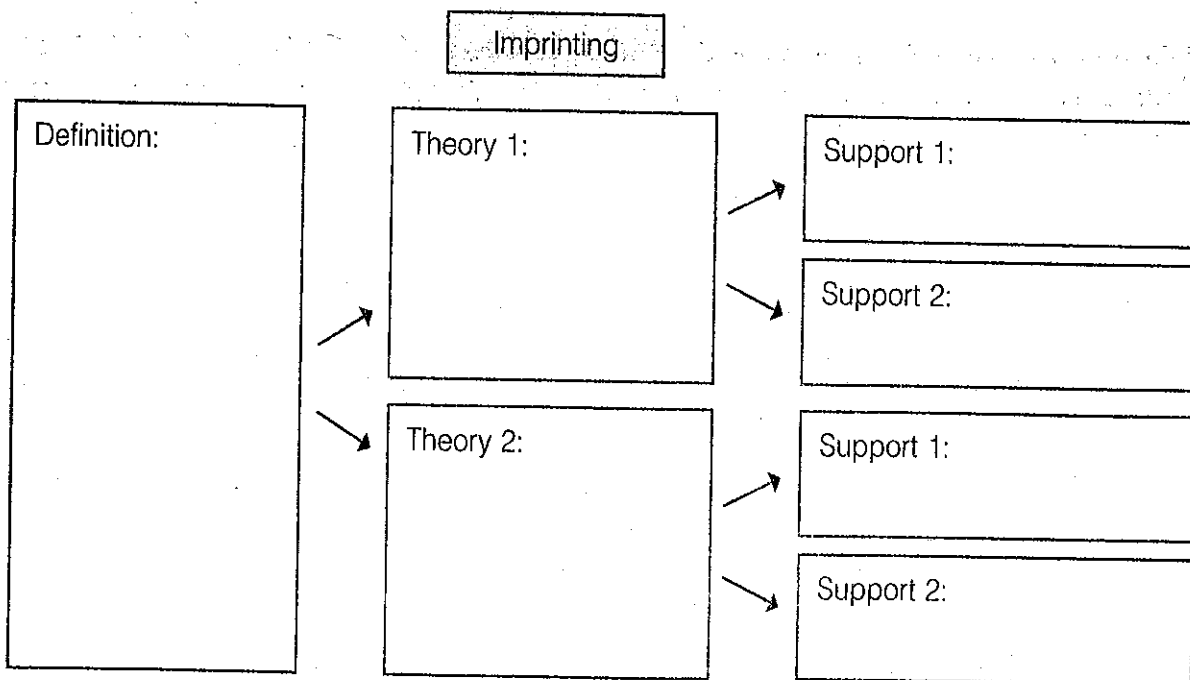
speculation:

a contemplation;
a consideration

start singing their own species' songs if they hear it from live birds—another case where imprinting is modified by experience. In humans, we know there is a critical period for learning speech. Additional languages are learned most easily during childhood, but adults can also learn them with extra time and effort.

Some psychologists believe that imprinting is just another example of learned response to a new stimulus, as when a cat learns to come running at the sound of its feeding bowl being picked up. The term is now used loosely to refer to many types of learning. Imprinting continues to be a subject of interest for its possible applications in human developmental psychology, social pathology, and even philosophy. Lorenz himself suggested that emotional problems in humans might be somehow related to imprinting in childhood. Many books of advice on parenting emphasize the importance of newborn "bonding" with mother or father figures.

For centuries, people have debated "nature versus nurture." This questions how much of who we are is due to genetics and how much to environment. The only agreement seems to be that most behavior falls somewhere in between. Lorenz's geese were born with the tendency to follow the first thing they saw, especially if it made a sound. But they had no tendency to recognize their own mother or even their own species. Many years after it was first described, imprinting continues to fascinate psychologists. It focuses attention on the mysterious interaction between what we are born with and what the world provides.



1. Which of the following best expresses the essential information in the highlighted sentence in paragraph 2? Incorrect answer choices change the meaning in important ways or leave out essential information.

- (A) Imprinting is defined by taking place during a critical period and being irreversible.
- (B) Lorenz suggested that imprinting during a critical period is irreversible.
- (C) Imprinting during a critical period differs from other learning in that it is irreversible.
- (D) If imprinting takes place during a critical period, it is irreversible.

2. Which of the following best expresses the essential information in the highlighted sentence in paragraph 3? Incorrect answer choices change the meaning in important ways or leave out essential information.

- (A) If baby birds imprint on their mother, they will not be treated as a foreign species during nesting.
- (B) Baby birds and parent birds imprint during the critical period with foreign chicks introduced into the nest.

- (C) The behavior of nesting birds toward chicks of foreign species shows that imprinting also happens in adults.
- (D) Both baby birds and adult birds show imprinting behavior—killing foreign species around the time of nesting.

3. Which of the following best expresses the essential information in the highlighted in paragraph 4? Incorrect answer choices change the meaning in important ways or leave out essential information.

- (A) Learning foreign songs from recordings leads birds to sing their own songs if imprinting is modified by experience.
- (B) Songbirds imprinted with foreign songs can be taught to sing their own species' songs, showing that imprinting can be modified.
- (C) Imprinting can be modified by teaching songbirds to sing other species' songs from recordings.
- (D) Songbirds will imprint with songs learned from recordings, just as they eventually imprint from hearing live birds.

Fill in the blanks to complete the summary.

The phenomenon of imprinting is a form of learning in which animals react to external stimuli. Konrad Lorenz researched the _____ of geese raised in a(n) _____ to treat him as their mother as opposed to those raised by their natural mother. He noticed that geese raised by humans tended to _____ their behavior so dramatically that, later in life, the geese refused to mate with their own species. Lorenz's research led to _____ in problems of human developmental psychology, social _____, and even philosophy.

Read the following passage. Then fill in the diagram with the information that you read. **Track 45**

The Call of the Wild

The story of a dog that is kidnapped, beaten, put to work, and forced to live in such harsh conditions that he turns on humans and kills one can hardly be considered an advertisement for the natural friendship between man and dog. But Jack London's classic novel *The Call of the Wild* is not an indictment of how humans treat animals. Rather, the story told from the perspective of a dog, Buck, is a metaphor for human experience. Since Buck represents humankind, it is not humans' relationship to animals that is at issue, but the struggle to balance the comforts of civilized life against the ancient longing for the wild.

It is true that the humans Buck encounters after he is forced out of his leisurely domesticated life are nearly all cruel and stupid. The dog traders who take him to Alaska to work on sled teams beat him to teach obedience. He is bought first by mail carriers who overwork the dogs, shooting one that becomes ill. He then works for a trio of inexperienced gold prospectors who overload the dog sled, bicker with each other, and end up plunging to their deaths through the ice because of their foolish mistakes. However, Buck is saved from being beaten to death by a wise prospector named John Thornton, who earns the dog's devotion and love. Buck later returns the favor, saving Thornton from drowning. Even after Thornton is killed by Indians, freeing Buck to join a pack of wolves, the dog returns every year to the place where his master was killed to mourn his death.

The relationship between Buck and Thornton forms an important counterpoint in the novel, not only to the insensitive humans in Buck's early life, but also to the growing attraction of living in the wild. The novel's main theme is Buck's inborn attraction to the ways of his ancestors, which he begins to learn while working outdoors with the sled team. Even though this leads to his transformation into a bloodthirsty pack animal, the novel portrays the change as positive, because the domestic dog thus fulfills his highest destiny. In other words, violence and savagery in the novel must be understood in the context of a larger theme.

Similarly, rather than understand the characters in *The Call of the Wild* literally as humans or dogs, we need to consider the novelist's deeper purpose in telling the story. Buck is portrayed with human qualities. He experiences shame, wonder, and justice. We witness his life through human eyes. The fact that Buck ends up torn between his love for a man, Thornton, and the call of his wild ancestors implies that there is something in the relationship between humans and dogs

Indictment:

an accusation of wrongdoing

bicker:

to argue

counterpoint:

a parallel but contrasting element

savagery:

the condition of being cruel, violent, uncivilized

literally:

in a strict sense, according to the original meaning

compelling:

strongly attractive or forceful

servitude:

the condition of having to serve and obey others; slavery

that is as compelling, and nearly as ancient, as instinct. In fact, as he is rediscovering the ways of the wild, Buck has visions of the humans around him wearing animal skins and living in caves or trees, and he runs alongside, protecting them. His relationship with Thornton is a realization of this vision, so Buck finds it difficult to leave Thornton, even as he longs to be primitive.

The obstacles that Buck encounters in *The Call of the Wild* do not point to the ignorance and savagery of humans versus the innocence of dogs as much as the struggle faced by all creatures to attain their highest calling, which the novelist portrays as a fulfillment of their original nature. As Buck's friendship with Thornton shows, this does not necessarily exclude attachment to the world of humans—the civilized world. But greatness and mastery do mean choosing the more demanding path in the end.

Jack London's classic American novel ultimately supports the primitive forces in humans and beasts above the forces of civilization, which appeared so mighty at the time the book was written in 1903. Despite the conflicts Buck faces, the novel does not promote animals as nobler than humans. Both humans and dogs can be violent out of stupidity or necessity. Either can also live lazy lives of comfort or take a nobler path toward fulfilling their destiny. Because they share this position of choice between civilization and the wild, humans and dogs can have a relationship based on mutual decency or servitude.

The Call of the Wild

Point 1:	→	Support 1:
	→	Support 2:
Point 2:	→	Support 1:
	→	Support 2:
Point 3:	→	Support:

1. Which of the following best expresses the essential information in the highlighted in paragraph 3? Incorrect answer choices change the meaning in important ways or leave out essential information.
- (A) According to the novel, Buck fulfills his ultimate purpose in becoming a savage animal.
 - (B) Buck is transformed into a bloodthirsty beast, which is harmful despite his achievement of his highest destiny.
 - (C) The domestic dog fulfills his destiny as a bloodthirsty pack animal, but it is only the novel's portrayal of this that is positive.
 - (D) The novel takes a positive view of Buck's transformation into a violent animal because it fulfills his top purpose.

2. Which of the following best expresses the essential information in the highlighted in paragraph 4? Incorrect answer choices change the meaning in important ways or leave out essential information.
- (A) Buck's love for Thornton implies that even instinct is not as compelling and ancient as the call of his wild ancestors.

- (B) Buck finds it hard to leave Thornton, even though the call of his wild ancestors is not nearly as compelling.
- (C) Humans' relationship with dogs is as compelling as instinct, as we see from Buck's struggle to choose between Thornton and the wild.
- (D) Buck ends up torn between Thornton and the wild because the call of his ancestors is compelling and more ancient.

3. Which of the following best expresses the essential information in the highlighted in paragraph 5? Incorrect answer choices change the meaning in important ways or leave out essential information.
- (A) Buck's obstacles point primarily to the struggle of all creatures to fulfill their original nature.
 - (B) Humans versus dogs is portrayed by the novel to be much like the struggle of all creatures.
 - (C) The highest calling portrayed by the novelist is the struggle faced by all creatures.
 - (D) Buck's obstacles excuse the savagery of humans as the struggle to attain their highest calling.

Fill in the blanks to complete the summary.

Jack London's 1903 novel *The Call of the Wild* is more than a(n) _____ of the _____ with which dogs were treated in the North. The book follows the journey of Buck, a dog taken from a life of leisure and comfort to one of beatings, hard work, and wilderness. *The Call of the Wild* can be read _____ as the story of Buck's transformation from a pet to an almost wild animal. However, the novel offers an interesting _____ in which the dogs represent human characteristics. Read in this way, *The Call of the Wild* is a _____ story of humans and animals struggling to reach their full, natural potential.



Chapter 8

Text Insertion Questions

Necessary Skills

- Understanding the logic of a reading passage and grammatical connections between sentences

Example Question

- Look at the four squares [■] that indicate where the following sentence could be added to the passage.

[You will see a sentence in bold.]

Where would the sentence best fit?

Strategies

- Try inserting the bolded sentence in place of each square.
- Pay attention to both the structure of the bolded sentence and the logic of its placement.
- Watch for logical connecting words as they can give important clues about where the sentence should be placed.
- Ensure that the bolded sentence connects logically to both the sentence preceding it and the sentence following it.

Read the following passage. Then fill in the diagram with the information that you read. Track 46

Vitamin A Deficiency in the World

The human body needs a host of vitamins and minerals to keep it functioning properly. ■ **A)** While one's diet supplies the majority of vitamin intake, some people must find other sources to provide the vitamins necessary to sustain them. ■ **B)** These can be derived from a number of foods such as milk, liver, eggs, red and orange fruits, and green leafy vegetables. ■ **C)** However, the amount of vitamin A in food can vary greatly, depending on geographic region and the quality of available food. ■ **D)** In developing countries, available food is generally insufficient for one's daily intake of vitamins.

Deficiency in vitamin A is quite prevalent in children, especially when exacerbated by illness. ● **A)** A lack of adequate vitamin A at a young age can lead to blindness. It is recorded as the leading cause of preventable childhood blindness. ● **B)** Vitamin-deficient children have a twenty-three percent greater risk of contracting and dying from measles or malaria. Children need vitamin A to grow. However, they lose large amounts of it when they fight infection. ● **C)** It is estimated by the World Health Organization (WHO) that 100 to 140 million children under the age of five may be suffering from vitamin A deficiency. By targeting children between six months and five years of age, agencies are working to bring vitamin A to those who need it. ● **D)**

Agency workers apply various plans of action to manage vitamin A deficiency. This is done in an effort to increase child survival rates, reduce the seriousness of childhood illness, and ease the subsequent strain on healthcare facilities. ◆ **A)** The three control strategies for deficiency are supplementation, food fortification, and dietary diversification. For supplementation, international recommendations call for the administration of high doses of vitamin A. ◆ **B)** The supplements, typically in capsule form, are given to children under the age of five every four to six months. This provides a safe, cost-efficient solution that eliminates the deficiency and improves survival. ◆ **C)** Increasingly, food fortification, the second solution, is reaching countries through mediums such as sugar, oil, milk, and other basic food items. While this option is effective overall, it can take many years to implement and reach families in need. ◆ **D)** Non-animal sources currently provide eighty percent of the intake for developing countries. However, the present need for vitamin A requires ten times the current quantity available. By increasing food from animals, agencies can provide diets richer in vitamin A.

Internationally, the goal is to eliminate vitamin A deficiency in children

derive:
to obtain from an original source

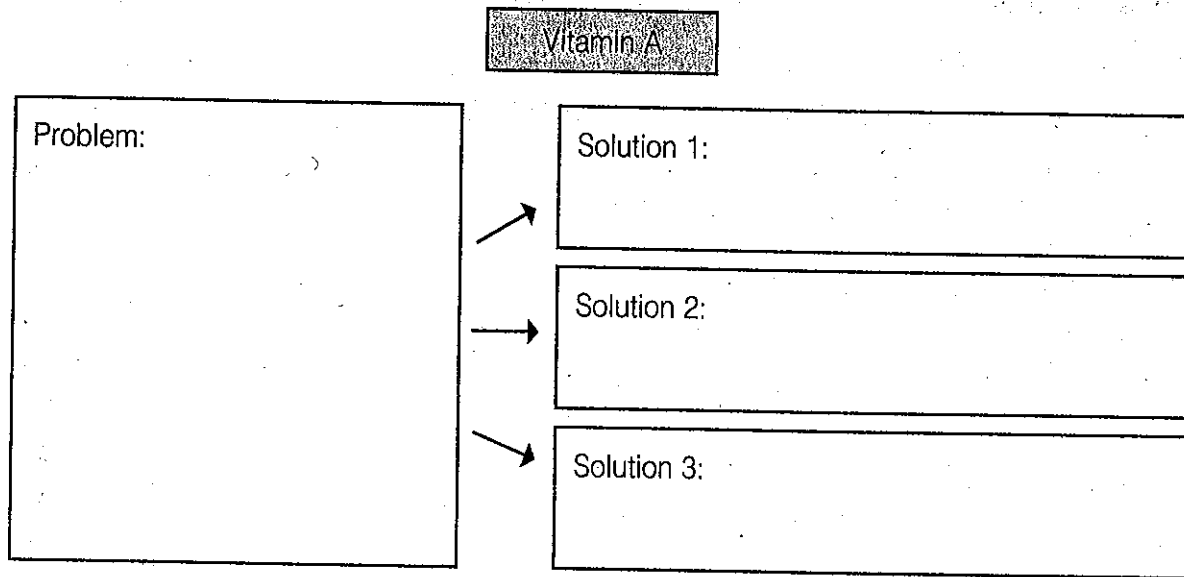
deficient:
inadequate or lacking

fortification:
the act of strengthening or improving defenses

medium:
an instrument used to convey or accomplish something

eradicate:
to eliminate or remove entirely

and thus decrease preventable health issues. Countries providing supplements twice a year reach a minimum of seventy percent of children needing treatment. This is considered effective coverage. With the continuation of supplementation and other programs, vitamin A deficiency could be effectively eradicated in the near future.



1. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

One vitamin that is vitally important to the body is Vitamin A.

Where would the sentence best fit?

- (A) First square
- (B) Second square
- (C) Third square
- (D) Fourth square

2. Look at the four circles [●] that indicate where the following sentence could be added to the passage.

While the vitamin affects eye health, it also supports the immune system and keeps it functioning properly.

Where would the sentence best fit?

- (A) First circle
- (B) Second circle
- (C) Third circle
- (D) Fourth circle

3. Look at the four diamonds [◆] that indicate where the following sentence could be added to the passage.

Dietary diversification is the pairing of animal food products with nutritious fruits and vegetables, all of which are high in vitamin A.

Where would the sentence best fit?

- (A) First diamond
- (B) Second diamond
- (C) Third diamond
- (D) Fourth diamond

Fill in the blanks to complete the summary.

A large percentage of the world's children are _____ in vitamin A, which leads to greater risk of disease, infection, and even blindness. The World Health Organization (WHO) is trying to control the problem through _____ of foods. This will help children _____ vitamin A from a greater variety of food sources. By using common foods as a _____ for vitamin A, they hope to _____ the deficiency as a world health problem.

Read the following passage. Then fill in the diagram with the information that you read. **Track 47**

Personal Control Beliefs

Whether or not people are conscious of it, they hold very specific beliefs about their perceived control, or lack thereof, over situations that occur in their lives. In reaction to a particular situation, people attempt to explain its outcome in terms of a cause-and-effect relationship. Experts in the field of psychology believe that people can be divided into two clear categories in regard to their personal control beliefs. There are those **with** a pessimistic explanatory style and those who practice a more optimistic explanatory style.

Personal control beliefs are the powers an individual feels he or she has over the outcomes of circumstances in his or her life. ■ **A)** They develop over time as an individual experiences disappointment and failure and learns different methods for coping with them. ■ **B)** A person's explanatory style is an unchanging cognitive characteristic of his or her personality. It reflects the way he or she thinks about the bad events in his or her life. ■ **C)** Negative incidents happen to everyone, but individuals differ in the ways they view the causes behind such events. ■ **D)**

Individuals who tend to take a fatalistic view of unmet expectations are said to have a pessimistic explanatory style. ● **A)** These people look internally at perceived failures, shortcomings, or what they consider to be inherent character flaws in themselves when a situation turns out negatively. ● **B)** Such people do not consider that outside factors could have contributed to the loss. Instead, they blame themselves and feel their shortcomings are too big to overcome. ● **C)** People who have this style tend to feel helpless and give up when they encounter setbacks. They feel they have no control over circumstances in their lives and therefore will likely fail. ● **D)** People who espouse the pessimistic style usually adopt negative coping mechanisms. These serve to decrease overall motivation and prompt more negative emotions.

On the other hand, those with an optimistic explanatory style generally ascribe external factors to a negative result. ◆ **A)** For example, a person with an optimistic style might say, "I lost the tennis match because my coach wanted me to use the wrong type of serve." ◆ **B)** Individuals with this style see negative events as things that can be changed and controlled. The tennis player in this example might simply try a different type of serve next time, rather than feel she is a poor player. ◆ **C)** Such people believe negative occurrences are isolated and the result of outside factors. Optimistic people are found to have more positive coping strategies. Therefore, they seem to be more

pessimistic:

anticipating only gloomy or bad things

optimistic:

expecting good things

cognitive:

pertaining to mental processes

fatalistic:

believing that negative events are unavoidable

espouse:

to make one's own

ascribe:

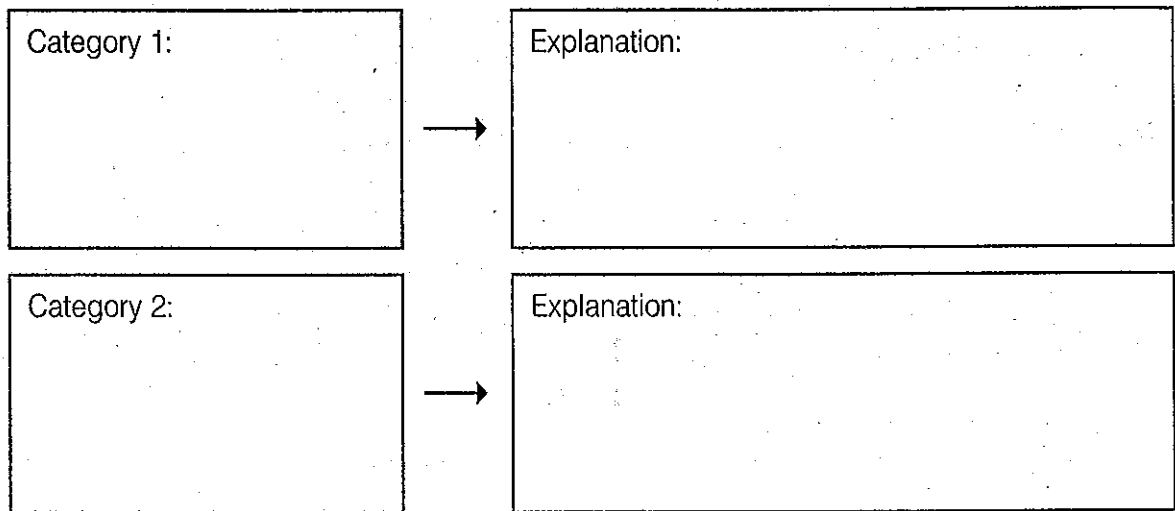
to assign or give

narcissistic:

adoring oneself above anything else

successful and have higher self-esteem. ♦ **D)** While an overly optimistic view could lead to an unhealthy and narcissistic opinion of oneself, most people consider the optimistic style to be beneficial. The key is a balance between being negatively affected by poor outcomes and realizing that while one may be somewhat responsible for a negative result, one also possesses the ability to make changes that can control future outcomes.

Control Beliefs



1. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

These beliefs govern how a person reacts when a desired outcome is achieved or when an outcome is different than expected.

Where would the sentence best fit?

- (A) First square
- (B) Second square
- (C) Third square
- (D) Fourth square

2. Look at the four circles [●] that indicate where the following sentence could be added to the passage.

For example, someone with a pessimistic style who just lost a tennis game might say, "I lost the match because I'm just not a good player."

Where would the sentence best fit?

- (A) First circle
- (B) Second circle
- (C) Third circle
- (D) Fourth circle

3. Look at the four diamonds [◆] that indicate where the following sentence could be added to the passage.

An optimistic view, however, can have negative consequences.

Where would the sentence best fit?

- (A) First diamond
- (B) Second diamond
- (C) Third diamond
- (D) Fourth diamond

Fill in the blanks to complete the summary.

Psychologists believe people hold _____ (negative) or _____ (positive) views of the level of control they have over circumstances in their lives. People who blame themselves for negative events are considered _____, and often feel helpless in difficult situations. Some people _____ negative events to things outside themselves that can be changed or controlled. These people sometimes think too highly of themselves and risk becoming _____.

03 Biology

Read the following passage. Then fill in the diagram with the information that you read. **Track 48**

Measuring Microbial Activity

Microbes, or tiny organisms, make up the majority of the Earth's living biomass. They are invisible to the naked eye. Therefore, biologists must use specific methods to study and measure the activity of these organisms. Although their minute size makes them somewhat difficult to observe, scientists have developed two tools for studying microbial activity. These are radioisotopes and microelectrodes.

A radioisotope is an atom with an unstable nucleus. It releases its excess energy as radiation. The radiation chemically alters the microorganism. When used to study microbes, this radiation allows microbiologists to assess the chemicals released. ■ **A)** Radioisotopes can be used to study microbial activity in a variety of environments. ■ **B)** They are often used in the field of medicine for certain tests and treatments. For example, doctors can inject a radioisotope into a patient suspected to have cancer. The patient then undergoes a PET scan. ■ **C)** The radioisotope highlights the tumors on the scan. This aids doctors in determining the exact cause of a medical condition. Subsequently, they can treat the illness. Radioisotopes can also be used to eliminate harmful bacteria in foods. ■ **D)** Some types of meat contain parasites or pathogenic bacteria. Radioactive isotopes can target the specific bacteria and irradiate them. This kills the bacteria without harming the rest of the meat.

A microelectrode is an electrical device that can deliver an electric current to a non-metallic surface. Microelectrodes can be used to detect metabolic, or energy-producing, processes in microbes. ● **A)** In one study, biologists tried to determine why one type of bacteria was able to multiply so quickly in a certain environment. ● **B)** They used microelectrodes to measure the levels of carbon dioxide and oxygen at different depths in a minute environment. They discovered that oxygen was depleted in the first fifty micrometers. As the oxygen decreased, the carbon dioxide increased. The toxic bacteria were allowed to thrive. ● **C)** The highly specific nature of the microelectrodes provided scientists with the exact answers they needed. ● **D)**

The radioactive nature of radioisotopes and the ability of microelectrodes to work within tiny environments render both of these methods useful to biologists in various ways. ◆ **A)** For example, microbial diseases such as the West Nile virus (WNV) and cholera negatively affect the world's mortality and morbidity rates. ◆ **B)** In 2005, 2,949 cases of WNV were reported in the United States. There were 116 deaths from the virus. ◆ **C)** In addition, many of the negative

biomass:
the quantity of living mass
in an environment

minute:
very small

radiation:
energy released in the
form of particles, rays, or
waves

PET scan:
an image of brain activity

pathogenic:
disease-causing

irradiate:
to expose to radiation

micrometer:
one-millionth of a meter

render:
to make or cause to be

changes made in the Earth's environment begin at the microbial level. Since microbes are some of nature's tiniest organisms, they provide valuable information about making positive changes in the environment that start at the most fundamental level. ◆ D) Through the study of microbial activity, biologists have discovered more about the production and consumption of gases that affect the atmosphere. They have also learned about the transformation of these greenhouse gases and other toxic elements. Scientists use this information to develop strategies that may help reverse negative climatic trends.

Radioisotopes vs. Microelectrodes

Radioisotopes	Both	Microelectrodes
●	●	●
●	●	●

1. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

This scan shows any tumors or abnormal cells in the patient's body.

Where would the sentence best fit?

- (A) First square
- (B) Second square
- (C) Third square
- (D) Fourth square

2. Look at the four circles [●] that indicate where the following sentence could be added to the passage.

In addition, their size allows them to move within tiny environments and study the electrical characteristics of microorganisms.

Where would the sentence best fit?

- (A) First circle
- (B) Second circle
- (C) Third circle
- (D) Fourth circle

3. Look at the four diamonds [◆] that indicate where the following sentence could be added to the passage.

These diseases, as they grow and spread, infect and even kill many people.

Where would the sentence best fit?

- (A) First diamond
- (B) Second diamond
- (C) Third diamond
- (D) Fourth diamond

Fill in the blanks to complete the summary.

The majority of Earth's living _____ is made up of microscopic organisms called microbes. Detection of these _____ life forms is vital to scientists and doctors because of their _____ effects in humans and their ability to _____ an environment uninhabitable. Scientists use _____ and electrical currents to detect and observe microbial activity.

04 Biology

Read the following passage. Then fill in the diagram with the information that you read. Track 49

Boom-and-Bust Cycles in Population

The population of any given species has natural growth and reduction cycles. Through these natural cycles, most species and populations tend to remain relatively stable. However, due to environmental factors, some species can experience large fluctuations between an enlarged population and greatly decreased numbers in their population. This occurrence has been coined the "boom-and-bust cycle" in population growth.

The changes in the boom-and-bust cycle are perpetual. They build upon and lead into each other. ■ **A)** When a population has an increased number of members, competition for a set amount of resources begins. ■ **B)** Also, the number of predators tends to increase as the prey population increases: more food for predators means they will reproduce in greater numbers as well. ■ **C)** Conversely, with fiercer competition for resources and an expanded group of predators, the population will begin to experience higher death rates. ■ **D)** As the population dies, the number of predators will correspondingly shrink due to the lack of food. Resources replenish during the bust period. With less predation, the population has a chance to repopulate their environment, and birth rates increase, thus beginning the cycle again.

Favorable conditions such as warmer weather and rainfall foster an environment in which species are free to reproduce and increase in number. ● **A)** Some species experience these kinds of favorable conditions on a yearly basis. ● **B)** They produce many offspring during the spring and summer, but then the entire population experiences a crash when the colder months of the year hit. ● **C)** Many populations experience this cycle at a much slower rate. ● **D)** Their growth and subsequent decline are influenced by environmental factors such as the availability of food and living space. The lemming populations of the arctic are a good example. Lemmings thrive as long as there is ample vegetation for all members of the population. As the population grows and the food supply starts to dwindle, lemmings will often emigrate from highly crowded areas. It is during these times of exodus that many lemmings die. Some accidentally drown when they try to swim across large bodies of water to find new homes. Also, the lemmings become easy targets for predators when they are on the move. In areas where numbers are depleted, the land and its resources will be replenished. Vegetation grows, and, before long, lemmings migrate again to these areas. In other animal populations, predatory behavior plays a bigger role in carrying on this cycle.

perpetual:
never-ending; continuous

conversely:
in an opposite or reverse manner

predation:
the preying of one species on another

offspring:
a child or descendant

emigrate:
to leave one's country or region

diminution:
the process of reducing or diminishing something

READING

LISTENING

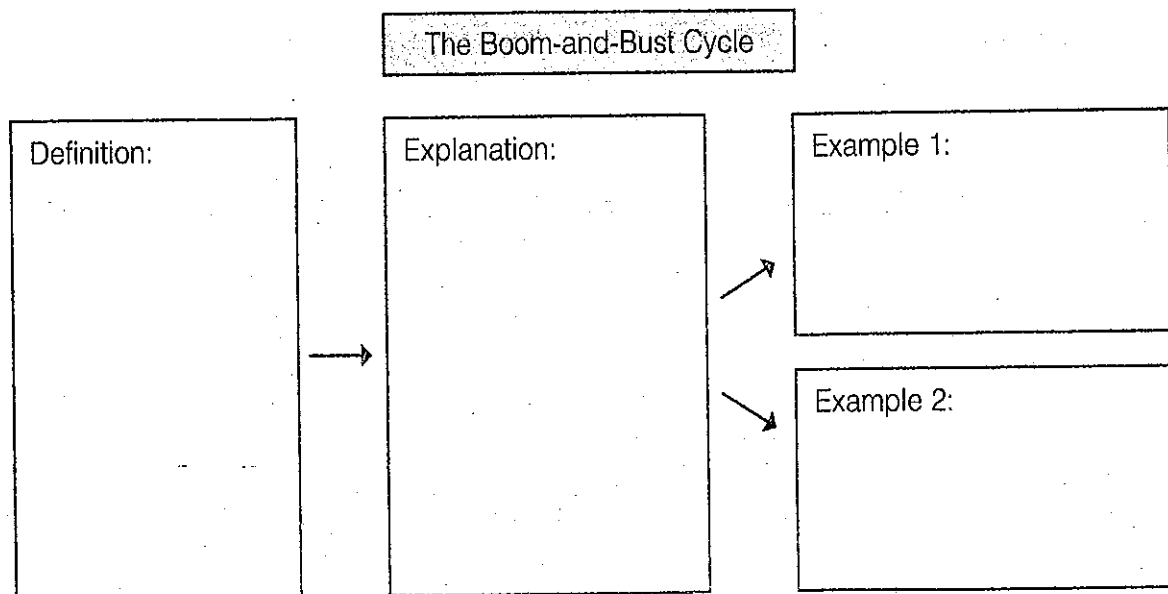
SPEAKING

WRITING

PRACTICE TEST

Rabbit populations are known for their large numbers and ability to reproduce at a swift rate. They are preyed upon by bigger mammals, which can help maintain equilibrium in their population in most cases. In one Canadian study, biologists theorized that the rabbit population might experience the boom-and-bust cycle if a particular species was their only predator. To test their theory, they studied the availability of animal pelts, or skins, on the market between 1845 and 1935. The number of pelts available would correspond with population size. Throughout the ninety years of the study, the numbers of rabbit pelts and the pelts of their predator, the lynx, rose and fell in a dramatic fashion. ♦ **A)** When the number of rabbit pelts grew to be quite large, it meant that the rabbits were thriving and reproducing. ♦ **B)** Not long after the rabbit population reached a peak, the number of pelts began to decrease, while the number of lynx pelts began to increase. ♦ **C)** Likewise, as the lynx pelts reached a peak, lynx populations decreased, and the rabbit population began to re-establish itself. ♦ **D)** Scientists believe that this example of the boom-and-bust cycle is the exception rather than the norm.

Generally speaking, populations of different species maintain a certain balance in their growth patterns. The boom-and-bust periods within this cycle are special circumstances that only occur for a limited amount of time. Just the same, there are times when environmental factors can lead to a cycle of great growth and consequent diminution in the species populations of the world.



1. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

Consequently, higher mortality rates lead the population toward the "bust" portion of the cycle.

Where would the sentence best fit?

- (A) First square
- (B) Second square
- (C) Third square
- (D) Fourth square

2. Look at the four circles [●] that indicate where the following sentence could be added to the passage.

For example, insect populations experience immense growth during the warmer months of the year.

Where would the sentence best fit?

- (A) First circle
- (B) Second circle
- (C) Third circle
- (D) Fourth circle

3. Look at the four diamonds [◆] that indicate where the following sentence could be added to the passage.

This cycle repeated itself throughout the study, with the greatest increase in rabbit pelts being soon followed by a great increase in lynx pelts.

Where would the sentence best fit?

- (A) First diamond
- (B) Second diamond
- (C) Third diamond
- (D) Fourth diamond

Fill in the blanks to complete the summary.

Changing environmental conditions cause _____ boom-and-bust cycles in populations of plants and animals. When conditions are good, a particular species produces large numbers of _____ and the population increases. _____, when _____ is high, many members of the species die to feed another species. Or if food becomes scarce, the species will have to _____ from the area. Either of these situations lead to _____ of the species that will last until conditions improve and survival is easier.

05 Medicine

Read the following passage. Then fill in the diagram with the information that you read. Track 50

Identifying and Treating Balance Problems

Balance is a state of equilibrium. It is a result of several systems working together. When a person is off-balance or experiences dizziness, it is typically a result of dysfunction within the ear and its organs. Such problems are difficult to diagnose and even more complex to treat.

The ear is composed of semicircular canals, the vestibule, and the cochlea. They work together to provide auditory senses. ■ **A)** The canals are filled with fluid, which alerts a person of movement and signals the brain about the direction and speed at which he or she is moving. ■ **B)** Two other vestibular organs are the utricle and saccule. These contain tiny calcium stones called otoconia. ■ **C)** Tilting the head or the gravitational position of the body causes these otoconia to move, slightly bending the hair cells within the organs and sending signals to the brain. ■ **D)** To maintain balance, the visual and skeletal systems work in conjunction with the auditory system when the brain compares information signals sent from each of the systems.

Problems arise when there is a disruption in the vestibular system or other systems relating to balance. From minor to severe, temporary to permanent, many balance disorders plague patients. Vertigo, a specific medical term, refers to the sensation of spinning or feeling that the room is spinning around a person. Those who suffer from vertigo experience nausea and vomiting, which are associated with dizziness. Feeling off-balance is known as disequilibrium. It is characterized by falling frequently to one side. The word "syncope" refers to fainting, and pre-syncope is the lightheadedness and weak feeling experienced when blood pressure is low or prior to a fainting spell. Labyrinthitis is another balance disorder. It is caused by an infection or inflammation of the inner ear that results in dizziness and loss of balance. Some problems begin in the ear, while others occur in the brain. Still others can be the result of outside influences.

● **A)** An individual who has difficulty maintaining his or her orientation has impaired balance. Aside from vertigo, feeling lightheaded, and feeling as if falling, other symptoms are: difficulty seeing, problems reading, and disorientation. ● **B)** If a person visibly staggers or has trouble walking, he or she is experiencing balance problems. ● **C)** Some people experience emotions such as fear, panic, or anxiety when having trouble with balance. Depression, fatigue, and decreased concentration may also result. ● **D)** The symptoms and implications of balance disorder are quite complex, and doctors are presented with some complicated issues, especially surrounding diagnosis and treatment.

equilibrium:
the state of being in balance

conjunction:
the act of joining or combining

disruption:
an interrupted state of being

orientation:
a position in relation to certain objects

analysis:
an investigation with the purpose of acquiring results

alleviate:
to lessen or relieve

Because other medical conditions such as ear infections, blood pressure, and vision problems affect balance, doctors cannot immediately diagnose a problem as originating in the ear. ♦ **A)** Therefore, doctors must utilize many different assessments when treating their patients. ♦ **B)** They incorporate a number of analyses including rotation tests, MRI (magnetic resonance imaging) scans, and tests that measure hearing activity at normal frequencies. ♦ **C)** Treatments are even more complex than diagnosing the problems because a singular treatment generally will not restore balance. ♦ **D)** Doctors may choose to treat a disease or disorder that contributes to being off-balance, such as infection, stroke, or multiple sclerosis. Medical health, general history, examination by a doctor, and test results are all considered along with current symptoms. In some cases, patients must learn to cope with their disorder by taking balance training from a physiotherapist. Some case-specific treatment ideas are available. For example, those suffering from labyrinthitis and vertigo can do therapy-type exercises to help alleviate each problem.

Regarding medication, sedatives are often given to people who experience vertigo and dizziness, but this only treats underlying problems associated with the disorders. Some medications, such as anti-nauseants, help patients deal with various sensations produced by the disease. These treatments make living with a balance disorder more bearable. The National Institute on Deafness and Other Communication Disorders (NIDCD) exists to understand the complexity of the interactions between the inner ear, other balance-sensing organs, and the brain. Research continues in an effort to understand these issues as well as to better the lives of those suffering from inner ear problems.

Balance Disorders

Type 1:	Description:	Solution:
Type 2:	Description:	Solution:
Type 3:	Description:	Solution:

1. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

This messaging is done by sensitive hair cells within the canals that are affected by the fluid's movement.

Where would the sentence best fit?

- (A) First square
- (B) Second square
- (C) Third square
- (D) Fourth square

2. Look at the four circles [●] that indicate where the following sentence could be added to the passage.

Consequently, not only does balance affect a person physically, but it also affects them emotionally and mentally.

Where would the sentence best fit?

- (A) First circle
- (B) Second circle
- (C) Third circle
- (D) Fourth circle

3. Look at the four diamonds [◆] that indicate where the following sentence could be added to the passage.

Additionally, some medications can contribute to balance problems.

Where would the sentence best fit?

- (A) First diamond
- (B) Second diamond
- (C) Third diamond
- (D) Fourth diamond

Fill in the blanks to complete the summary.

Balance is a complex system in which the ears, brain, eyes, and skeleton of a person work in _____ to maintain the person's _____ to objects around them. When there is a _____ to any part of that system, we say the person is out of _____. Because the system is so complex, doctors have trouble _____ the discomfort of people when such disruptions occur.

Read the following passage. Then fill in the diagram with the information that you read. Track 51

How a Plant Attracts Pollinators

All species of plants have basic functions. They produce oxygen and take in carbon dioxide. They use chlorophyll and sunlight to produce food. ■ **A)** They also multiply or reproduce through pollination. While all plants need to be pollinated, this can occur in several ways. For example, pollination most commonly occurs by the wind blowing, by people or insects carrying the pollen from plant to plant, or by self-pollination. ■ **B)** Scientists have researched a primitive plant called a cycad and have subsequently developed a theory regarding it. ■ **C)** This plant is pollinated by insects called thrips, but the method by which it attracts bugs makes it markedly unique. ■ **D)**

Cycads are known as "living fossils" partly because of their primitive structure, but additionally, fossils of the plant indicate that it has been around since the era known as the Permian Period, which occurred 290 to 250 million years ago. ● **A)** Along with conifers such as pine and fir, they are considered gymnosperms, meaning the plant's seeds are exposed on the surface rather than being enclosed. ● **B)** Cycads have a trunk that exists mainly underground and leafy fronds sticking up above ground situated around a single cone. The cone is a greenish color when it is young, and as it matures, it changes to a shade of yellow. ● **C)** The scales of the cone are typically close together except during pollination, when they spread to leave a tiny space in between the scales. ● **D)**

Previously, scientists believed that cycads were pollinated by the wind. This can occur when the wind blows pollen from male cones to nearby female cones, but scientists began to question this theory because the space in which the wind needed to penetrate the cycad cone was too small, preventing this means of pollination. ◆ **A)** Researchers soon began to study cycads and their miniscule pollinators, the insects known as thrips. ◆ **B)** Closer inspection led them to believe that thrips are the plant's only pollinators and that their relationship is twofold: thrips eat the cycad's pollen and cycads reproduce through the pollination carried out by thrip activity. ◆ **C)** Individual cycads have a pollination period, or coning season, that occurs once a year and lasts four weeks or less. ◆ **D)** During this time, male cones have the unique ability to raise their temperature up to twenty-five degrees Fahrenheit warmer than the surrounding air by using the store of sugars, starch, and fats generally used by the plant for normal function. This heating of the cone occurs between eleven a.m. and three p.m. and takes place each day of the pollination period.

primitive:

of the earliest kind in existence

markedly:

to a significant extent or degree

miniscule:

very tiny or small

emit:

to give off or send out

lethal:

causing death

intermediate:

being between two stages or points

herbivore:

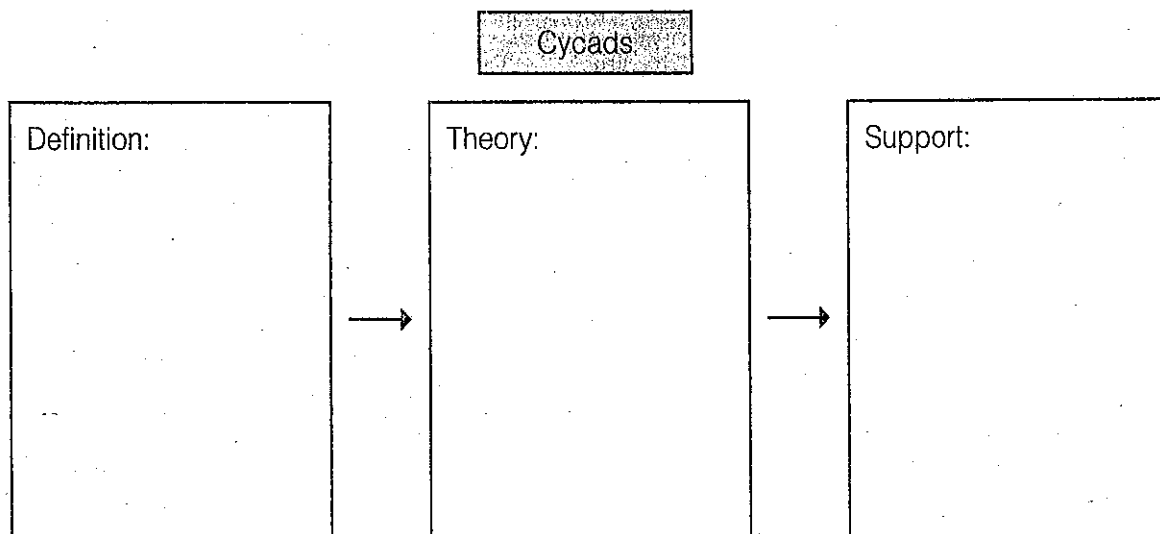
an animal that feeds on plants

sustainable:

having the ability to hold or endure without giving in

When the temperature rises, a substantial odor emits from the cone. The odor is described as harsh and overpowering, unlike any other common odor. One of the odors is a chemical known as beta-myrcene, which increases to toxic levels, proving lethal to the thrips and driving them from the cones. As they leave the male cones, they take pollen along with them on their bodies. As the plants cool down, the cones emit much lower levels of beta-myrcene, which then attracts the thrips, and the pollen they carried away, back to the plants, specifically the female cones. Thus, the thrips effectively remove pollen from the male cones and deposit it in the female cones, and the pollination process is complete.

Scientists believe that plants have evolved by producing chemical defenses in order to drive away animals that would eat them. Another belief is that flowering plants use fragrance as well as vivid color to attract the insects necessary to pollinate them. The method of pollination characterized by the relationship between cycads and thrips is referred to as "push-pull pollination." Researchers view the push-pull pollination process as an intermediate evolutionary stage for plants, using odor to attract pollinators, repel herbivores, and be pollinated by wind-blown pollen. Compelling evidence supports this theory of evolution as a means of protection and reproduction to further a species. Over centuries, plants have refined the functions they are capable of to become a sustainable species. As a result, plants such as cycads have existed over a timeline of more than 250 million years and will be in existence for millions of years to come.



1. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

Accordingly, the appropriate process varies from plant to plant.

Where would the sentence best fit?

- (A) First square
- (B) Second square
- (C) Third square
- (D) Fourth square

2. Look at the four circles [●] that indicate where the following sentence could be added to the passage.

This structure is where pollination occurs.

Where would the sentence best fit?

- (A) First circle
- (B) Second circle
- (C) Third circle
- (D) Fourth circle

3. Look at the four diamonds [◆] that indicate where the following sentence could be added to the passage.

Consequently, they watched the plants to locate the source of pollination.

Where would the sentence best fit?

- (A) First diamond
- (B) Second diamond
- (C) Third diamond
- (D) Fourth diamond

Fill in the blanks to complete the summary.

Cycads are _____ plants that have survived on Earth for at least 250 million years. Scientists have been studying the _____ unique way these plants attract thrips, the plants' only pollinators. Thrips feed on pollen until during the plants' reproductive cycle. Then, the cycad _____ high levels of beta-myrcene. The chemical reaches levels that thrips cannot survive, so the insects leave the plants, carrying pollen with them. In cooler times, beta-myrcene levels fall, and thrips return to the plants, spreading the pollen among the cycads. This process is viewed as an _____ evolutionary stage of plants called "push-pull pollination." Over time, plants have evolved their capabilities in order to be _____ species.

Vocabulary Review 2

Instructions: Choose the best word or phrase to complete each sentence.

1. The politician gave a very _____ speech regarding the need for governmental reforms.
(A) comical
(B) inflammatory
(C) simulated
(D) narcissistic
2. The gun-shot wound was not _____. Rather, it only gave the patient a lot of pain and discomfort.
(A) susceptible
(B) perpetual
(C) tumultuous
(D) lethal
3. None of his neighbors _____ that Mr. Thompson worked for the FBI.
(A) realized
(B) maximized
(C) alleviated
(D) derived
4. Albert Einstein was one of the most _____ scientists of the 20th century.
(A) sustainable
(B) renowned
(C) exclusive
(D) minute
5. The boss gave a(n) _____ reply after being asked an inappropriate question at the staff meeting.
(A) innate
(B) essential
(C) terse
(D) primitive

6. Many students living away from home suffer from feeling extreme _____ during their first year at college.
(A) isolation
(B) self-justification
(C) fluctuation
(D) fortification
7. The professor made the main _____ of the theory clear for the students.
(A) optimistic
(B) refuge
(C) modification
(D) concept
8. Life in this small town had become quite _____. People were looking for some excitement.
(A) inclined
(B) hesitant
(C) mundane
(D) intermediate

Instructions: Choose the word or phrase closest in meaning to the underlined part of each sentence.

9. The biography on the life of Marilyn Monroe was a very gripping story.
(A) proper
(B) compelling
(C) essential
(D) deficient
10. Liars try to deceive people by saying things that are not true.
(A) fool
(B) ascribe
(C) utilize
(D) convey

11. The disease was worsening and would slowly damage the patient's body.
- (A) key
(B) circuitous
(C) bureaucratic
(D) degenerative
12. The participants of the survey received gift certificates to a nice restaurant.
- (A) respondents
(B) idioms
(C) apprentices
(D) offspring
13. There has been a lot of guessing regarding which candidate will win the election.
- (A) stimulus
(B) speculation
(C) displacement
(D) indictment
14. Every adult citizen of this city can vote in the upcoming civic election.
- (A) valuable
(B) traitorous
(C) aquatic
(D) municipal
15. The message was difficult to unscramble because of the system that was used to write it.
- (A) decode
(B) dispute
(C) align
(D) ensue

Instructions: Write the missing words. Use the words below to fill in the blanks.

emulate innovation prominent
sensational perseverance

From the beginning of recorded history, humankind has changed clothing styles frequently. This idea of "fashion" has now become a major part of modern culture. Cities like Paris, New York, and Milan have become the most **16.** _____ fashion centers of the world. To become a fashion designer, one must have **17.** _____ and creativity. It is a difficult industry. Fashion designs which show true **18.** _____ are hard to find. Sometimes, older styles can once again become trendy. Many of today's fashion trends **19.** _____ styles from earlier eras. Sometimes, the clothing modeled on the runway is commercial, while other times it can be too **20.** _____ for the everyday person to appreciate.

Instructions: Match the words that are similar in meaning.

- | | |
|----------------|-----------------|
| 21. continuity | (A) excrete |
| 22. spherical | (B) plants |
| 23. foliage | (C) continuance |
| 24. emit | (D) argue |
| 25. bicker | (E) globular |

Mini Test 2

01 Zoology

Read the passage and answer the questions. **Track 52**

Territoriality

Territories offer a way for animals to set and maintain home boundaries. A territory is a region or geographic area occupied by an animal or group of animals that is protected against intruding animals. Animals must not only compete with other species, but also frequently with animals of their own species. For this reason, animals exhibit territoriality in many different ways. However, they all share one purpose: to protect members of a specific group in such a way as to avoid confrontation and aggression.

Territories are essential in that they offer certain levels of protection against other members of an animal's own species. They also establish where an animal or group of animals lives. The first priority an animal has when establishing a territory is to set a boundary in some way. For example, some animals establish their territory through the use of scent marking. After setting a boundary, the animal or group will spend time and energy defending the territory. An animal or group establishes ownership of the area in order to make rival animals respect the territory's boundaries.

Territorial animals will go to great lengths to defend their territories against rivals. ■ **A)** One might think that territories make animals more aggressive than non-territorial animals. ■ **B)** An animal or group may spend a good deal of time and energy defending its territory from rivals soon after the territory is established. However, once the area is firmly established as that animal's territory, the boundaries are usually respected. ■ **C)** Territorial boundaries are recognized by all members of the same species and will often deter a rival animal from entering the territory. ■ **D)** Neither an animal nor a group of animals wants to expend needless energy engaging in confrontations, as they are more likely to lead to injury. An animal or group will usually refrain from trespassing on a rival's territory. This is because it knows that the rival will go to great lengths to protect that territory, resulting in the possibility of harm for the intruder.

Although many types of animals exhibit a certain degree of territoriality, the type of territory depends largely on the animal. ● **A)** Certain animals, such as birds and insects, have very pronounced territories. However, the territories themselves are not large. Since many species of birds are forced to occupy shared space, it may just be the nest that is considered off-limits to outsiders. ● **B)** On the other hand, mammals usually have less pronounced territories. ● **C)** This is because they are often much larger than those of birds or insects. ● **D)** It is harder for mammals to patrol the borders of these large territories effectively. Mammals also must travel long distances to find food. Baboons and felines establish large territories, but these territories are more indistinct because they must travel constantly to search for food.

Though it may seem as if territoriality increases an animal's overall level of aggression, this is not the case. Sometimes, just the odor of another animal's scent-marked territory is enough to deter a would-be trespasser. Whether the territory is large or small, pronounced or nearly indistinct, territories provide the necessary protection against rival animals and groups.

► **scent marking** *depositing strong-smelling chemicals such as saliva or urine at key locations within an area to mark one's territory*

► **feline** *a member of the cat family*

1. The word **territoriality** in the passage is closest in meaning to
 - (A) dominant conduct
 - (B) aggressive manner
 - (C) boundary establishment
 - (D) protective behavior

2. The word **They** in the passage refers to
 - (A) Territories
 - (B) Members
 - (C) Levels of protection
 - (D) Animals

3. Look at the four squares [■] that indicate where the following sentence could be added to the passage.
In actuality, territories allow animals to avoid aggression and confrontation.
 Where would the sentence best fit?
 - (A) First square
 - (B) Second square
 - (C) Third square
 - (D) Fourth square

4. Which of the following best expresses the essential information in the highlighted sentence in paragraph 3? Incorrect answer choices change the meaning in important ways or leave out essential information.
 - (A) In order to prevent injury, animals avoid entering the territory of other animals at any cost.
 - (B) To avoid being wounded in a conflict, animals would rather avoid entering another animal's territory.
 - (C) Because confrontation is unlikely to result in injury, animal groups spend little energy engaging in territorial conflicts.
 - (D) Injuries may cause animals to trespass on one another's territory, despite the high level of energy spent doing so.

5. The word **it** in the passage refers to
 - (A) injury
 - (B) energy
 - (C) animal or group
 - (D) territory

6. Look at the four circles [●] that indicate where the following sentence could be added to the passage.
Large numbers of gannet birds, for instance, nest in the same area, building their nests just out of reach of being pecked at by other birds.
 Where would the sentence best fit?
 - (A) First circle
 - (B) Second circle
 - (C) Third circle
 - (D) Fourth circle

7. The word pronounced in the passage is closest in meaning to
 - (A) maintained
 - (B) regular
 - (C) exact
 - (D) definite

8. Which of the following best expresses the essential information in the highlighted sentence in paragraph 5? Incorrect answer choices change the meaning in important ways or leave out essential information.
 - (A) An animal may choose to avoid an area if it smells another animal's scent.
 - (B) Animals that mark a territory with their own scent may successfully avoid confrontation.
 - (C) Smells are sometimes enough to prevent animals from marking a territory.
 - (D) A territory that has been scent-marked will always discourage other animals from entering it.

02 Linguistics

Read the passage and answer the questions. **Track 53**

The Latinization of English

Language has enabled our species to formulate ideas and exchange information. One characteristic of language is that it is ever-evolving, changing to meet the needs of the people speaking it. Countries tend to adopt a national language that makes it easy for their inhabitants to communicate with one another as well as with outside entities. While this encourages the spread of certain languages, it can also lead to the death of others. Consider the spread of Latin in the ancient world as it pertains to English usage today.

Latin was the language spoken in the Roman Empire, which included the Mediterranean and parts of Europe. Latin became so widespread that the languages of many modern European countries are based on the Latin language. English in particular owes much of its existence to this now dead language. ■ **A)** However, despite its contributions to modern languages, Latin in itself is no longer spoken as a primary language. The eventual demise of Latin occurred because, as it spread out over hundreds of years, it took on different dialects and pronunciations based on the different regions in which it was used. Rather than adopting Latin as a language, foreign peoples took the roots of Latin words and adapted them into their own languages. ■ **B)** As Latin did centuries ago, English is swiftly becoming the world's most widely used language, spoken by people on the majority of the seven continents and declared the national language in at least thirty-four countries. ■ **C)** As with Latin, the accent and tone may differ from country to country, but the basics of the vernacular have their foundation in Standard English. ■ **D)**

● **A)** Linguists predict that, like Latin, English will experience an immense spread and then subsequent break-up as the languages that got their start in English change into languages unique unto themselves. ● **B)** They feel that this can already be seen in areas such as the islands of the Caribbean. ● **C)** The country of Jamaica, especially, has altered the English language to the point that non-natives hear it as a different language altogether. Local words that have no meaning outside of Jamaica have taken the place of words generally used in English. ● **D)** In other countries, English words have taken on completely different meanings from what they were originally. In the African country of Uganda, for example, natives use the word "extend" to mean "move over" or "get out of the way" rather than the more universally understood meaning of "lengthen" or "stretch." People in the South American country of Guyana refer to "operation" when speaking of having an upset stomach or diarrhea. We can clearly see that English, like Latin, is being adapted to create other words and to take on new meanings.

English appears to be following in Latin's footsteps. Like Latin, it has spread all across the world. Its words and meanings are being adapted into territory-specific dialects. Only time will tell whether or not English will continue down this same path until it also becomes a dead language.

- > **dead language** *a language that no longer has any native speakers*
- > **linguist** *someone who studies languages and how they work*

1. Which of the following best expresses the essential information in the highlighted sentence in paragraph 1? Incorrect answer choices change the meaning in important ways or leave out essential information.
 - (A) Nations are more likely to choose a national language that is easy for their people to use.
 - (B) National languages are chosen by people who wish to communicate with neighboring countries.
 - (C) A country's inhabitants will speak whichever language is chosen by its leaders.
 - (D) Outside individuals are likely to choose a language similar to that of their neighbors.

2. The word *this* in the passage refers to
 - (A) adopting a national language
 - (B) communicating with each other
 - (C) one characteristic
 - (D) language

3. The word *pertains* in the passage is closest in meaning to
 - (A) affects
 - (B) relates
 - (C) connects
 - (D) compares

4. Which of the following best expresses the essential information in the highlighted sentence in paragraph 2? Incorrect answer choices change the meaning in important ways or leave out essential information.
 - (A) The transformation of Latin as it moved to different countries actually led to its death.
 - (B) Hundreds of years after Latin spread to different regions, it was used much differently than its original form.

- (C) Latin became an unrecognizable language because of the ways different regions used it.
- (D) Once different people began speaking Latin, it began to lose its popularity.

5. Look at the four squares [■] that indicate where the following sentence could be added to the passage.
Hence, Latin's popularity is one of the reasons why it ultimately fell out of use.
 Where would the sentence best fit?
 - (A) First square
 - (B) Second square
 - (C) Third square
 - (D) Fourth square

6. The word *vernacular* in the passage is closest in meaning to
 - (A) accent
 - (B) tone
 - (C) verbal skills
 - (D) language

7. Look at the four circles [●] that indicate where the following sentence can be added to the passage.
While English is recognized as the national language of these countries, it has quite a different sound than English spoken everywhere else in the world.
 Where would the sentence best fit?
 - (A) First circle
 - (B) Second circle
 - (C) Third circle
 - (D) Fourth circle

8. The word *they* in the passage refers to
 - (A) English words
 - (B) local words
 - (C) different meanings
 - (D) other countries



Chapter 9

Prose Summary Questions

Necessary Skills

- Recognizing the organization and relative importance of information presented in a passage
- Understanding and locating specific points in a passage key to the gist of a passage as a whole
- Organizing information presented in a passage into a mental outline

Example Question

- An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. **This question is worth 2 points.**

[You will see a sentence in bold here.]

Strategies

- Distinguish main ideas from minor ideas, and essential information from non-essential information.
- Remember that correct answer choices will not be identical to any particular sentence in the passage.

01 Zoology

Read the following passage. Then fill in the diagram with the information that you read. **Track 54**

Intelligence in Dogs

Nearly all pet owners believe that their animal companion has a personality of some sort. Although it is clear that animals act differently, it remains unclear if pets are capable of reasoning. A number of studies have been conducted in the past several years that suggest that animals are, in fact, quite intelligent, but are nonetheless influenced heavily by the presence of their owners. A recent case studying the cognitive ability of dogs was performed by researchers at a university in Budapest. It revealed that canines are incredibly able thinkers under the right circumstances.

The study took a sampling of forty-two adult dogs of varying ages and breeds. There were no limitations on the selection of the dogs except that they had to enjoy playing with toys. Each dog was brought into a room with a researcher, who would place a ball under several small pots and show the dog which pots did not contain the ball. The pots would then be shuffled around on a surface. In this first round of the study, the researcher would occasionally pause and pay attention to one of the pots that did not contain the ball. He or she would look at the pot, stare at the dog, and then go back to shuffling. In most cases, the dogs picked out the pot to which the researcher gave special attention, not the pot with the ball underneath it.

In the second round, the same dogs were placed in a room with the same pots. However, in this second round, the pots' movement was controlled with wires, and no human was visible. Once again, the pots not containing the ball would be revealed and the pots would then be shuffled. With no visible human cues, most dogs in the second round were able to quickly pick out the pot containing the ball.

Researchers concluded from this experiment that dogs were capable of deductive reasoning. Since the dogs were capable of picking out the correct pot in the absence of a human, researchers concluded that they had the ability to make deductions and solve simple problems. Other animals known for their remarkable intelligence, such as chimpanzees and grey parrots, have displayed similar reasoning abilities. The inclination to be influenced by researchers, however, suggests that the dogs are social animals as well and are open to being taught. The dogs' behavior was strikingly similar to that of infants, who possess basic problem-solving abilities but are strongly influenced by cues from their parents.

While the study is by no means conclusive, it does suggest that the domesticated animals people keep as pets are capable of

capable:

having the ability to do or achieve something

limitation:

an imposed restriction

shuffle:

to change the order of items in a group

cue:

a signal; a hint

strikingly:

attracting attention for being unusual or remarkable

conclusive:

offering strong proof; definitive

thoughtful analysis. This analytical ability, however, may not always be readily apparent in the presence of humans, since dogs are influenced heavily by the behavior of humans. Furthermore, the study suggests that animals may be more psychologically advanced than we have traditionally thought. Clearly, further research will be necessary to determine the extent of animal intelligence.

Testing Canine Intelligence

Round 1:

Round 2:

Round 1:

Round 2:

Conclusion:

1. An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. ***This question is worth 2 points.***

The passage discusses the process by which researchers studied the intelligence of dogs and what they concluded.

<ul style="list-style-type: none">•••

Answer Choices

- (A) When in the presence of researchers, dogs were more likely to rely on the researchers' hints.
- (B) When the tests were controlled by wires instead of people, the dogs displayed deductive reasoning.
- (C) The dogs chosen for the study were not chosen by their breed or specific age.
- (D) Dogs possess problem-solving ability, but can be easily influenced by cues from humans.
- (E) It is hard to understand how smart a dog may be, as it is influenced by visual cues.
- (F) Other intelligent animals, like chimpanzees and grey parrots, have similar reasoning abilities.

Fill in the blanks to complete the summary.

A scientific study in Budapest looked into the intelligence of dogs. Researchers found that dogs are _____ of solving simple problems and that they are open to learning from their human masters. They also found _____ in dogs' ability to find a ball when a human tried to hide it from them. The dogs would respond to _____ from the human, rather than simply follow the location of the ball. The researchers found evidence that dogs are _____ similar to human infants in their levels of intelligence, but the studies were not _____ enough to be certain.

Read the following passage. Then fill in the diagram with the information that you read. Track 55

Troubadours and Trouveres

Musical historians are hard-pressed to find sources of music outside of the church prior to the Renaissance. There are sparse records of folk songs, but liturgical chants are by far the most common songs from this period. The troubadours and trouveres of the 12th and 13th centuries, however, provide a valuable glimpse into the history of music outside of the confines of the church. While records of them are by no means extensive, they are nonetheless considerable and worthwhile.

Troubadours and trouveres were similar kinds of musicians that inhabited different areas and spoke in different languages. Their positions were not exclusive to class in either case. Although most of them were from the nobility, anyone who was lyrically talented and appreciated the concept of love could adopt their craft. Troubadours resided primarily in southern France and northern Italy. They performed mostly using Provençal, a popular language of the time. Trouveres were found in northern France and used a variety of similar regional languages from England, Picardy, Normandy, and Champagne. The origin of their musical style is debated. Some have argued that it has roots in Celtic culture, and others have argued that it was a musical tradition borrowed from the Arabic world. Regardless of its actual origins, the music was truly unique for its day and age.

The musical compositions of both the troubadours and trouveres were concerned primarily with the subject of love. The subjects of their songs covered a broad range of situations and feelings. These included simple declarations of love, discordant verses on love, a lover's defense of his feelings, stories of a romantic encounter between a knight and a female shepherd, and many others. While the subject was almost exclusively love, the works of the troubadours and trouveres also reveal a remarkable awareness of style and an amazing technical ability.

Whereas the liturgical chants popular in the church were primarily focused on verse, it is believed that the work of troubadours and trouveres placed equal emphasis on the lyrics of a song and its musical accompaniment. Their musical style certainly popularized the use of musical instruments in songs in Renaissance Europe. Yet while the verse was strongly associated with the music, the songs could easily be adapted for a variety of tones and rhythms. Songs were passed among musicians orally, although the works of trouveres in northern France were sometimes documented by literary groups. Given their mostly oral tradition, the songs were typically not documented. Moreover, the musical aspect was very rarely documented.

liturgical:

of or relating to public religious worship

regional:

characteristic of a particular geographic area

discordant:

quarreling; harsh

accompaniment:

a musical part that is joined with verse or other instruments

orally:

by speaking rather than writing

declamatory:

in a dramatic way

As such, it is difficult to pinpoint if the work of the troubadours and trouveres was centered on the lyrical aspect or the musical aspect of their songs. Scholars have suggested that the songs were written to be performed in a declamatory way. However, such an assertion clearly puts the emphasis on the verse, not the music. In spite of the lack of consensus surrounding their work, the troubadours and trouveres no doubt made an important contribution to the musical world with the introduction and widespread use of musical instruments.

Troubadours and Trouveres

Definition:



Point 1:

Point 2:

Point 3:

1. An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. ***This question is worth 2 points.***

The passage discusses the music developed by troubadours and trouveres in the 12th and 13th centuries.

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-
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Answer Choices

- (A) The origins of the troubadour and trouveres tradition are not clear.
 (B) Troubadours and trouveres were lyrical musicians in the south and north of France, respectively.
 (C) Their music contained remarkable stylistic and technical elements and was usually centered on the subject of love.
 (D) Trouveres were from the northern portion of France and spoke a number of related regional dialects.
 (E) Scholars have argued that their work was meant to be performed like a dramatic poetic story.
 (F) Their music was not well-documented, and it remains unclear if it was oriented around musical elements or lyrical elements.

Fill in the blanks to complete the summary.

Troubadours and trouveres were musicians in 12th- and 13th-century Europe. They produced some of the only music of the time that was not _____, Christian chants. These musicians sang love songs in a way that was more emotional and _____ than the chants, which focused on worship and verse. The compositions included simple declarations of love, _____ verses on love, and stories of romantic encounters. The differences between a troubadour and a trouveres were _____, mostly related to the languages they spoke. Because the music of these musicians was passed down _____, music historians have difficulty in studying the songs as they were sung. The lyrics remain, but the music itself has been lost.

Read the following passage. Then fill in the diagram with the information that you read. **Track 56**

The Function of the Appendix

The appendix is a small organ shaped like a pouch located along the intestinal tract of the human body. Since its discovery, physicians have been unable to reach a consensus regarding its purpose. They have, however, been able to confirm that the inside of the appendix is lined with tissue called biofilm, designed to kill harmful bacteria. Although there are a number of harmful bacteria that can enter the intestinal tract, the contents of the digestive tract do not enter the appendix, nor is the appendix known to secrete anything into the intestine. Thus, it was unclear how this immune tissue was used. Given the lack of an apparent purpose for the appendix, many physicians went so far as to suggest that it served no purpose whatsoever. However, recent studies have shed some light on the possible uses of the appendix.

Researchers from Duke University began their study by examining the inner wall of the appendix coated in a thin biofilm. They found that the biofilm is a mixture of mucus, bacterial colonies, and immune system molecules. These immune molecules in the biofilm protect helpful bacteria colonies. Meanwhile, the biofilm extends outward into the actual intestinal tract where the appendix connects. Because of protection the biofilm offers to helpful bacteria that inhabit the intestine, researchers suspect that the appendix is used to house this bacteria and to keep a "reserve" of them on hand.

With this hypothesis, scientists began conducting research into the contents of patients' intestinal tracts. Normally, helpful bacteria exist within the intestinal tract to aid in the digestive process. The digestive tract houses these helpful bacteria, and the immune molecules keep harmful bacteria from entering. However, the immune molecules cannot always keep out the harmful bacteria. When they do enter, they can cause ailments such as diarrhea. When a person has diarrhea, the contents of the intestinal tract, including the helpful bacteria, are entirely flushed out. Researchers found that patients' intestinal tracts were quickly repopulated with good bacteria shortly after they were emptied. This observation reinforces the hypothesis that the appendix acts as a reserve for good bacteria. After the intestinal tract was emptied, the appendix could release a portion of the good bacteria back into the gut.

Other observations support this hypothesis. In third-world countries where harmful intestinal viruses are common, it is possible that the biofilm coating the appendix and a part of the intestine are flushed

tract:

a major passage in the body

secrete:

to produce and discharge

inhabit:

to live in or occupy

entirely:

completely; totally

third-world:

developing, usually in reference to a region or country

markedly:

clearly noticeable

out. The theory also helps explain why removal of the appendix—a common procedure in developed countries—has no discernable effect on a person. Since the reserves of helpful bacteria are not needed, their absence has no negative impact on people without appendixes in civilized countries.

This hypothesis remains untested, however. It is difficult for doctors to actively monitor the intestinal activity so closely in a normal human being. Furthermore, accurate tests cannot be performed in other animals. Only rabbits, possums, and wombats are known to have appendixes. Furthermore, their appendixes are markedly different from their human counterparts. As such, science cannot be sure of the precise function of the appendix.

The Appendix

Observation 1:

Conclusion:

Observation 2:

1. An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. ***This question is worth 2 points.***

The passage discusses a new theory regarding the purpose of the appendix.

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-
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Answer Choices

- (A) Researchers found that the biofilm coating the appendix allowed helpful bacteria to thrive in the appendix.
- (B) When the intestine was emptied completely, researchers found that helpful bacteria returned to the intestine very quickly.
- (C) The appendix is covered in a thin coating of mucus, immune molecules, and bacterial colonies.
- (D) Researchers concluded that the appendix could act as an area to hold reserves of helpful bacteria.
- (E) Rabbits, possums, and wombats also have appendixes.
- (F) Since a functioning appendix is difficult to actively observe, discovering its purpose can be difficult.

Fill in the blanks to complete the summary.

The appendix in humans is _____ different from those found in other animals, which makes it difficult to understand the function of the organ. Doctors believe it is helpful in protecting the intestines from harmful bacteria, even though the appendix does not _____ anything into the intestines. Helpful bacteria are known to _____ the intestines, and doctors have discovered that the appendix releases these into the intestines when helpful bacteria have been _____ flushed out. Research into the appendix is important for _____ or developing countries, where intestinal diseases are very common.

Read the following passage. Then fill in the diagram with the information that you read. Track 57

Personality Disorders

Personality disorders are a class of mental disorders. They affect the way people view themselves, other people, and the world around them. Personality disorders are broadly classified. They include multiple-personality disorder, which describes a person who thinks of himself as more than one person. He behaves differently according to each personality. They also include extreme narcissism. This describes a person who focuses on herself so much as to severely hinder her behavior and perceptions of the world. Personality disorders are typically identified by psychologists late into their development. Thus, their original causes are difficult to pinpoint. There are a number of possible factors, however, that may contribute to the formation of a personality disorder.

The most obvious factor—and perhaps the easiest to identify—are biological causes. Particular traits that infants inherit from their parents may contribute to the development of a personality disorder. Some researchers have also suggested that there may be a genetic basis, independent of heritable traits, that makes an individual more likely to develop certain disorders. However, it has been determined that nearly all known personality disorders are not caused entirely by genetic makeup. Socio-cultural and other psychological factors inevitably play a role.

Psychological factors are most likely to play a role in personality disorders. It is believed that individuals are most affected by experiences early on in life. Interestingly, there is very little research to support this notion. One study reported that seventy-one percent of patients with borderline personality disorder claimed that they had been abused as children. Another study found that eighty-one percent of borderline patients reported some form of trauma in early childhood. However, such evidence is by no means conclusive. The research is based on the reports of patients already believed to have a personality disorder. As a result, their perceptions of the past may be distorted. A patient with borderline narcissism disorder, for instance, may exaggerate a past experience because of his sense of self-importance. Further research has suggested that perceived trauma may not have actually occurred early on in a patient's life, but rather much later. As such, it is unclear how much of a role traumatic situations have on one's personality. Many experts suspect a connection. Nonetheless, they are unable to verify it.

Social factors are also thought to play a significant role in the development of personality disorders, perhaps more than any other. Some researchers, for instance, have argued that infants go through a phase in which they believe that all events of the world revolve

personality:

the non-physical qualities that define individuals and make them unique

heritable:

able to be carried on through the genes of a parent to a child

notion:

a belief about something

borderline:

related to the division between two distinct conditions

distorted:

twisted or misleading

retain:

to continue to have something

overwhelmed:

to supply with an excessive amount of something

arbiter:

a person with ultimate authority over a dispute or issue

around them. In most individuals, this phase eventually passes and infants come to terms with social reality. However, this period is key in helping individuals retain a sense of self-confidence. If parents do not provide some assurance that their child deserves respect and attention, he or she may develop a personality disorder. Conversely, others have argued that too much attention from parents during childhood can result in the development of a narcissistic personality disorder.

Some psychologists have gone so far as to suggest that socio-cultural factors may contribute to personality disorders. These theories go beyond simple social situations on an individual level. They suggest that one's culture can affect personality. People, for instance, brought up in an oppressive society and taught that they exist only to serve the state may, on returning to normal conditions, feel overwhelmed by the attention they get as individuals. As a result, they may experience severe anxiety when asked to talk about themselves. Other theories suggest that many developed nations are responsible for the expectation of individuals that material goods provide meaning. Given the broad nature of socio-cultural theories of personality disorder, they are nearly impossible to prove or disprove. They remain, however, a source of debate for most psychologists.

Our understanding of personality disorders is by no means complete. Their causes may vary dramatically from person to person. Psychologists have been criticized because they claim to know what is normal. They serve as the arbiters of what is unusual. In addition, some have questioned the usefulness of broadly identifying contributing factors to personality disorders. Each individual case varies. Clearly, further research must be done to adequately identify not only causes and treatments, but also what is and what is not a disorder.

Personality Disorders

Type 1:	Explanation:
Type 2:	Explanation:
Type 3:	Explanation:
Type 4:	Explanation:

1. An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. **This question is worth 2 points.**

The passage discusses factors that may contribute to the development of personality disorders.

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•
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Answer Choices

- (A) Inherited traits and genes may contribute to an individual's development of a personality disorder.
- (B) It is unclear how worthwhile generalizations on the causes of personality disorders are, as they vary from case to case.
- (C) Psychological trauma, especially early in life, is suspected to play a major role in personality disorders.
- (D) Social factors, especially those in a child's upbringing, and socio-cultural factors can have an impact on personality disorders.
- (E) As personality disorders are typically identified only after they have developed, it is difficult to pinpoint their causes.
- (F) Psychologists have been criticized for claiming to have knowledge of what is and is not normal.

Fill in the blanks to complete the summary.

Psychologists have long debated whether people develop personality disorders because of _____ traits passed down from their parents or because of social effects on their _____. Research has been done exploring the connection between personality disorders and childhood abuse, but the results may have been _____ by the way in which people taking part in the test were selected. However, psychologists concluded that _____ personalities like extreme narcissism may be caused in part by the way a child is raised. Because personality disorders are so broad and difficult to diagnose, any _____ of how they are caused will be very hard to prove.

Read the following passage. Then fill in the diagram with the information that you read. Track 58

Giant Magnetoresistance

Hard drives and storage devices produced in the past fifteen years have been significantly smaller than their predecessors. This change would not have been possible without the contributions of European scientists Albert Fert and Peter Grünberg. The two men, independent of each other, discovered a previously unobserved phenomenon in physics. It would change the face of technology and its practical applications in everyday life. The phenomenon they observed was dubbed Giant Magnetoresistance (GMR). Although seemingly simple, it had remained undiscovered until they observed it in 1988. Their observation was based on the principle that electricity and magnetism are directly associated. Both scientists discovered that very small changes in magnetic resistance could result in rather dramatic changes in corresponding electrical resistance. While it may not seem immediately relevant to technology, the discovery was important in creating small devices capable of holding large amounts of data.

The hard drive of a computer is the best example of how the discovery of GMR changed everyday technology. The data stored on hard drives is encoded on a metal disk. An encoding process magnetizes small sections of the disk, which in turn are translated into data when the magnetized disk is read by a sensor. The sensor translates the magnetic data into electric signals. Hard drives prior to the discovery of GMR were significantly larger than those we have today. Although they operated based on the same basic relationship of magnetism and electricity, it was difficult for sensors to discern between separate pieces of data without a very large disk. Therefore, the disks used for high-capacity hard drives were much larger than a dinner plate. The insights of GMR, however, allowed engineers to shrink the hardware, while retaining and even increasing the storage capacity.

Using the principle discovered by Fert and Grünberg, the first hard drive using GMR technology was released in 1997. It quickly became the standard, thanks to its compact size. The insights of GMR allowed engineers to increase the sensitivity of the sensor heads on hard drives. As a result, the size of the magnetic strips of data on a hard drive could be drastically reduced. In fact, these sensor heads are so sensitive that the magnetized strips of data may only be a few atoms thick. The discovery and implementation of GMR would not have been possible without discoveries that allowed very thin material of this small size to be produced. GMR hard drives put a very thin

sensor:

a device that detects physical stimuli

discern:

to perceive or recognize

capacity:

a measure of the amount that can be held

sensitivity:

the quality of being quick to respond to slight changes

otherwise:

in circumstances being different from those present

lasting:

able to endure over a long period of time

mobile:

able to move easily

layer of magnetic material on an otherwise nonmagnetic disk, which can then be read by a fine-tuned sensor head.

The contribution of GMR to modern technology was massive. Hard drives prior to the application of the technology were much larger in size and relatively small in storage capacity. High-capacity drives were sometimes as large as chairs. With the new technology, hard drives the size of a human hand could be engineered to hold as much data as their high-capacity, non-GMR counterparts. Furthermore, researchers quickly found that additional magnetic layers, separated by a nonmagnetic layer, could be used to store even more data. Since the additional layer is only a few atoms thick, it does not substantially change the size of the hard drive. Additionally, the development has been accredited with contributing to the field of nanotechnology, an emerging technology concerned with the engineering of microscopic devices. Since GMR requires hard drives to use a disk plated on a magnetic material only a few atoms thick, it contributed to technology that is now being used to engineer complex mechanical devices of a similar thickness.

The impact of the discovery of GMR has had a lasting impact on technology. The sensor heads of even the most up-to-date hard drives still use the basic principles of GMR. Perhaps the most apparent benefit of the technology has been its impact in the world of mobile computing. Whereas laptop computers of the last decade were incredibly large and bulky, today's laptop computers are less than an inch thick. The end result of the discovery of GMR is still not completely apparent. We continue to use it in everyday technology, but that technology is constantly being honed and improved with time. As such, it is unlikely that we have seen the last of what GMR has to offer us.

Giant Magnetoresistance

Definition:

Impact 1:

Impact 2:

1. An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. ***This question is worth 2 points.***

The passage discusses the discovery and impact of Giant Magnetoresistance.

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Answer Choices

- (A) Two European scientists discovered that small changes in magnetic resistance lead to significant changes in electrical resistance.
- (B) GMR's impact is best seen in hard drives, where a more sensitive head sensor can be used to read data that is smaller in size.
- (C) Nanotechnology is a developing field of technology in which atoms are used to construct a very small device.
- (D) Albert Fert and Peter Grünberg discovered the phenomenon of GMR independently of one another and both received a Noble Prize for it.
- (E) Additional layers can be added to hard drives using the GMR technology, adding additional space without making hard drives substantially larger.
- (F) GMR is continuing to be used and developed today and is accredited with contributing to nanotechnology.

Fill in the blanks to complete the summary.

In 1988, Albert Fert and Peter Grünberg discovered a relationship between electricity and magnetism called Giant Magnetoresistance (GMR). Their discovery has caused a _____ shift in the way data is stored on computers. Because GMR allows for far greater _____ of disk-reading sensors, the size and bulkiness of hard drives have drastically decreased. Fert and Grünberg found a way to allow data to be stored on magnetic material only a few atoms thick, which allowed engineers to design sensors that could _____ such tiny strips of information. This discovery has let computer designers make smaller, more _____ computers than they _____ would be able to make.

Read the following passage. Then fill in the diagram with the information that you read.

Track 59

Plumpy'nut

One of Africa's greatest problems is malnutrition. Many people, particularly children, are dying because they do not have enough food to eat. Malnutrition is of particular concern for infants. While it is possible for an adult to experience malnutrition, children are more likely to be affected by it in an adverse way. A child under the age of three who experiences malnutrition is less likely to survive into adulthood. Moreover, if children experience malnutrition before the age of three, their growth into adulthood can be permanently stunted. Researchers have found ways to fight malnutrition, but until now these methods were not widely available. However, a new type of food has been discovered that may provide relief in the fight against malnutrition.

Earlier attempts to treat malnutrition have come in the form of powdered milk. The powdered milk products, known as F-75 and F-100, require a powder to be mixed with fresh water, which has to be refrigerated to avoid spoilage after mixing. F-75 and F-100 were unable to adequately treat the malnutrition crisis due to the lack of available fresh water and refrigeration facilities in most African countries. If powdered milk was mixed with impure water, contaminants could make people sick. Moreover, the powdered milk products had to be mixed in hygienic conditions. As such, the F-75 and F-100 products were only useful in hospitals, where they could be mixed with water known to be fresh in a hygienic environment.

The proposed alternative to F-75 and F-100 is called Plumpy'nut. It is a sticky substance made of peanut paste, vegetable oil, milk powder, sugar, vitamins, and minerals. It was engineered by Andre Briend, a French scientist, in 1999 and has since been adopted by a number of humanitarian organizations working to fight malnutrition. The product resembles peanut butter in texture and taste, but is fortified with a number of vitamins and minerals. It can be prepared in other locations and can remain unopened for two years. Furthermore, it is about as costly to transport as powdered milk alternatives and can be prepared by nearly anyone. It needs only to be opened and eaten. The impact of this seemingly simple development is truly remarkable.

Previously, children suffering from malnutrition had to be admitted to hospitals, where they were kept for two to four months. Doctors would mix powdered milk and give it to the children regularly until they recovered. Since the milk product had to be mixed in a hygienic environment, it was not practical to allow the children to leave until they were fully recovered. With Plumpy'nut, doctors can diagnose malnutrition,

adverse:

negative, unpleasant, or harmful

stunted:

slowed; shortened

spoilage:

the result of food becoming unfit to eat

hygienic:

clean; helpful in preventing disease

resemble:

to be similar to somebody or something in appearance or behavior

alternative:

an option; a different choice

supplement:

to complete or enhance something else when combined

panacea:

a solution or remedy to all of the problems

instruct parents on how much to give their children daily, and release children on the same day they came in. This discovery has become especially helpful in late summer, just before the harvest. This period, known as "hunger season," is the most common time for children to become malnourished, as food stocks from the previous year are nearly diminished. In most areas, the only food available is millet, a grain that is crushed and made into porridge. While millet provides calories, it does not contain any vitamins or minerals. It is effectively an "empty" food in terms of nutrition. By supplementing their children's diet with Plumpy'nut during the hunger season, mothers can prevent the onset of malnutrition. Using this method of distribution, children do not have to be taken from their homes for treatment of malnutrition. They need only return to the hospital weekly to have their weight checked.

While the benefits of Plumpy'nut are evident, it is not a panacea to the hunger problem in Africa. It is not possible to distribute the product to every single person in Africa. Instead, doctors have specifically targeted children in their infancy. If severe malnutrition can be averted in a child before he or she turns three, it is likely that the child will be able to grow into a healthy adult. The production of Plumpy'nut may also benefit the country in another way; peanut-producing regions in parts of Africa can help produce the substance. By producing and packaging Plumpy'nut, a region can sell the product to humanitarian organizations. As a result, economic growth may be an added benefit of the presence of Plumpy'nut in Africa. With economic growth, poverty can be combated in particular regions, potentially stabilizing them. Plumpy'nut may very well be a key element in treating the hunger crises in Africa.

Plumpy'nut

Definition:

Advantage 1:

Advantage 2:

1. An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. **This question is worth 2 points.**

The passage discusses Plumpy'nut, a new product used to treat malnutrition in Africa.

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Answer Choices

- (A) Plumpy'nut can be easily produced and transported, and it keeps for two years if it remains unopened, making it more practical than powdered milk alternatives.
- (B) The product is similar to peanut butter and contains a variety of ingredients that can be used to avert malnutrition in young children of Africa.
- (C) Children that experience malnutrition during infancy are less likely to thrive and are prone to development problems as they mature.
- (D) F-75 and F-100 were typically used in hospitals, where doctors could mix it with fresh water in hygienic conditions.
- (E) Plumpy'nut will not be used to fix the hunger problem in Africa, as it is not practical to distribute to everyone in Africa.
- (F) Mothers were given Plumpy'nut and instructions to administer to their children to prevent them from getting malnutrition and having to spend long periods in the hospital for treatment.

Fill in the blanks to complete the summary.

A new product called Plumpy'nut is being used to fight malnutrition in Africa. Before Andre Briend invented Plumpy'nut in 1999, humanitarian organizations had been using powdered nutrient _____ to remedy the _____ effects of malnutrition.

There were two problems with these products: they had to be mixed with clean water in _____ conditions, and once mixed, they were prone to _____.

Plumpy'nut is an effective _____ to these products, as it does not spoil and does not require clean water.

Chapter 10 Table/Chart Questions

Necessary Skills

- Recognizing the organization and purpose of a passage
- Understanding rhetorical functions such as cause-effect relationships, compare-contrast relationships, and arguments
- Identifying and organizing important ideas and points from a passage and placing them in the appropriate context

Example Question

- Complete the table below to summarize information about concepts discussed in the passage. Match the appropriate statements to the concepts with which they are associated. TWO of the answer choices will NOT be used. **This question is worth 3 points.**

Strategies

- Separate main ideas from minor ideas, and essential information from non-essential information.
- Remember that major ideas are ones that would be included in a higher-level outline of the passage.

Read the following passage. Then fill in the diagram with the information that you read. **Track 60**

Phishing

As a growing number of companies rely on the Internet for one or more aspects of their businesses, the prevalence of phishing scams has markedly increased. Phishing can be defined as an attempt by a computer user to gain another user's sensitive information by impersonating a trustworthy website. This sensitive information, which may include passwords, bank account numbers, and personal identification numbers, can then be used to steal the victim's money or even appropriate their identity. Phishing scams are often very convincing. Those behind the scams frequently create websites or emails that exactly imitate the form of a trusted site. This reduces the likelihood that a victim will recognize it as a fraud. Thus, both computer users and members of government have recognized phishing as a serious new threat to the safety of private information. A number of measures have been introduced to reduce the incidence of phishing scams. These solutions, which include education for computer users and legislation by federal governments, are the first step in protecting sensitive information on the Internet.

Educating computer users about threats posed by phishing can significantly increase their awareness of the vulnerability of online information. Due to the relatively recent emergence of phishing scams, many computer users are unaware that their information can be stolen through fake websites or emails. An organization called the Anti-Phishing Working Group has developed an online tutorial that teaches computer users to be cautious of email messages that urgently request personal information. Many similar websites also offer helpful tips for those hoping to learn how to avoid phishing scams. For instance, phishing scams often direct users to a website that looks authentic. However, the user can check the address bar on his or her browser to verify that the site has the same URL as the trusted site. Otherwise, the user will know that the site is fraudulent. In addition, many websites, including those of many major online businesses, stress the fact that an online business will never ask for personal information through email. Thus, users can immediately disregard such emails.

Governments have also joined the fight against phishing scams. In particular, the US government has developed legislation that targets phishers specifically. Those who are caught can now face fines and imprisonment. On March 1st, 2005, the US government created the Anti-Phishing Act of 2005. It proposed that criminals who develop fraudulent websites and email messages could be fined up to \$250,000

scam:

a fraudulent business activity

impersonate:

to pretend to be someone or something else

appropriate:

to steal

incidence:

a frequency

browser:

a computer program that allows a user to access pages on the Internet

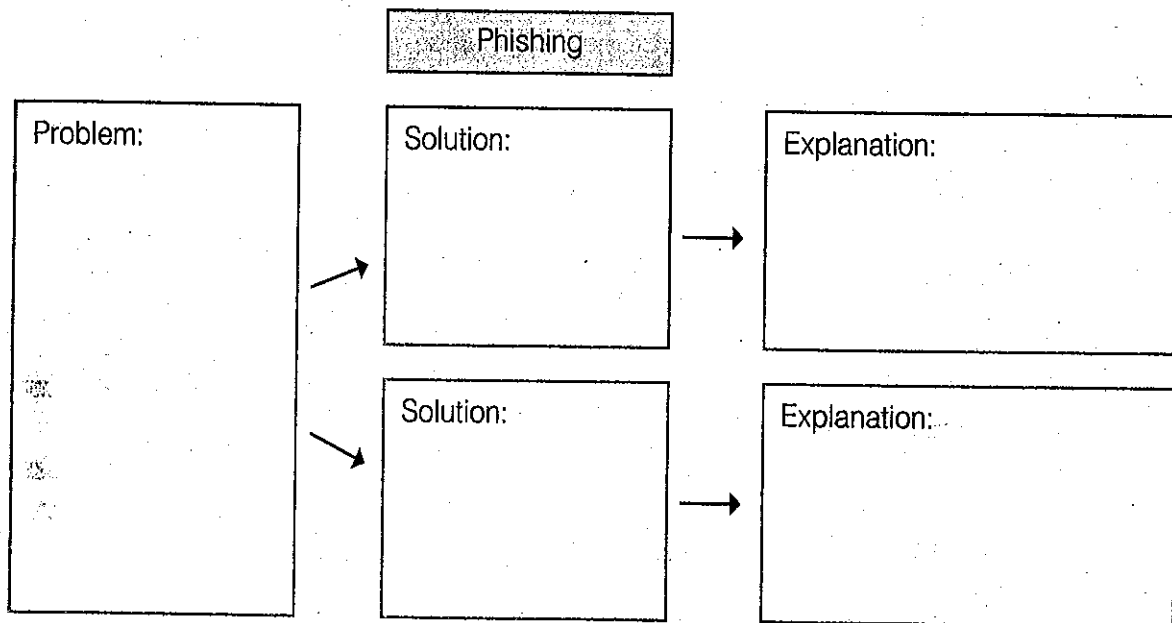
disregard:

to ignore

impose:

to establish as compulsory

and jailed for up to five years. In addition, governments are increasing their efforts to catch suspected phishers. A man was convicted in 2007 of sending fraudulent phishing emails to thousands of users of a popular online service provider. The courts did not take his offence lightly. He faces over 101 years in prison due to the many counts of fraud he was convicted of. Governments around the world hope that similar convictions will deter future phishers and reduce the overall frequency of phishing scams.



1. **Directions:** Complete the table below to summarize information about phishing discussed in the passage. Match the appropriate statements to the concept with which they are associated. TWO of the answer choices will NOT be used. ***This question is worth 3 points.***

Concept	Statements
Education	<ul style="list-style-type: none"> • • •
Legislation	<ul style="list-style-type: none"> • •

Answer Choices

- (A) Online tutorials help users identify phishing scams.
- (B) Internet companies demonstrate how phishing works.
- (C) Conviction of phishers can prevent future scams.
- (D) Users can verify a website using the address bar.
- (E) Governments create anti-phishing organizations.
- (F) Businesses state that they do not ask for personal information.
- (G) Phishers are caught and fined or placed in jail.

Fill in the blanks to complete the summary.

With the widespread use of computers for banking and shopping, police and government agencies have noticed increased _____ of phishing. Phishing is a new type of fraud, in which the criminal _____ a trusted company, financial institution, or website in order to steal personal information from computer users. After an individual's banking information has been _____, the criminal can use it to make purchases or transfer money into another account. Authorities have warned consumers to _____ emails from companies unless they are sure the email is genuine. The problem has become so great that many countries have begun to _____ stiff penalties for phishing scams.

Read the following passage. Then fill in the diagram with the information that you read. Track 61

Types of Business Mergers

When companies want to expand their operations in an attempt to create long-term profitability, they often rely on mergers. A merger is a form of corporate restructuring that occurs when two or more companies combine to form a single entity. There are three types of mergers: horizontal, vertical, and conglomerate.

Horizontal mergers occur when companies in the same industry combine. This is done in order to expand product lines, reduce costs, or eliminate competition. Horizontal mergers can have either an insignificant or considerable impact on a particular industry depending on the sizes of the companies merging. If two small, local grocery stores merge together, there will likely be no effect on the market as a whole. On the other hand, mergers between companies with large shares of the market can significantly change the industry so much that such mergers are often blocked. For example, the US government prevented a merger between two major US office supply chains after finding that the merger would have given the new company an unfair advantage over its competitors, allowing the company to raise prices by as much as thirteen percent.

Another type of merger is the vertical merger, in which a company purchases another company that is involved in a different stage of the sales or production process. This cuts costs since the company that supplies the materials and the company that produces and distributes products are now one organization. For instance, if a publishing house buys a paper company, the publishing house can reduce its expenditures on paper. The publishing house can purchase paper at base cost, so there is less money tied up in the production process. Vertical mergers can negatively affect competition; materials may be harder to obtain or more expensive to purchase since a rival company now owns the material manufacturing company.

In a conglomerate merger, companies in different markets combine. The companies operate in separate industries and by merging, there is little effect on competition in either market. For example, a clothing company might merge with a soft drink company. If the soft drink market goes down, the soft drink side of the company may lose profit. However, if the clothing market is good, the clothing side of the company might be able to make up for the losses sustained by the soft drinks. Conglomerate mergers are often done as a way to reduce risk and create a more stable pattern of sales, since the company's capacity for profit is not concentrated in one specific market.

restructure:

to organize something in a different way so it will operate better

share:

an equitable portion of capital stock

base:

serving as the foundation of something

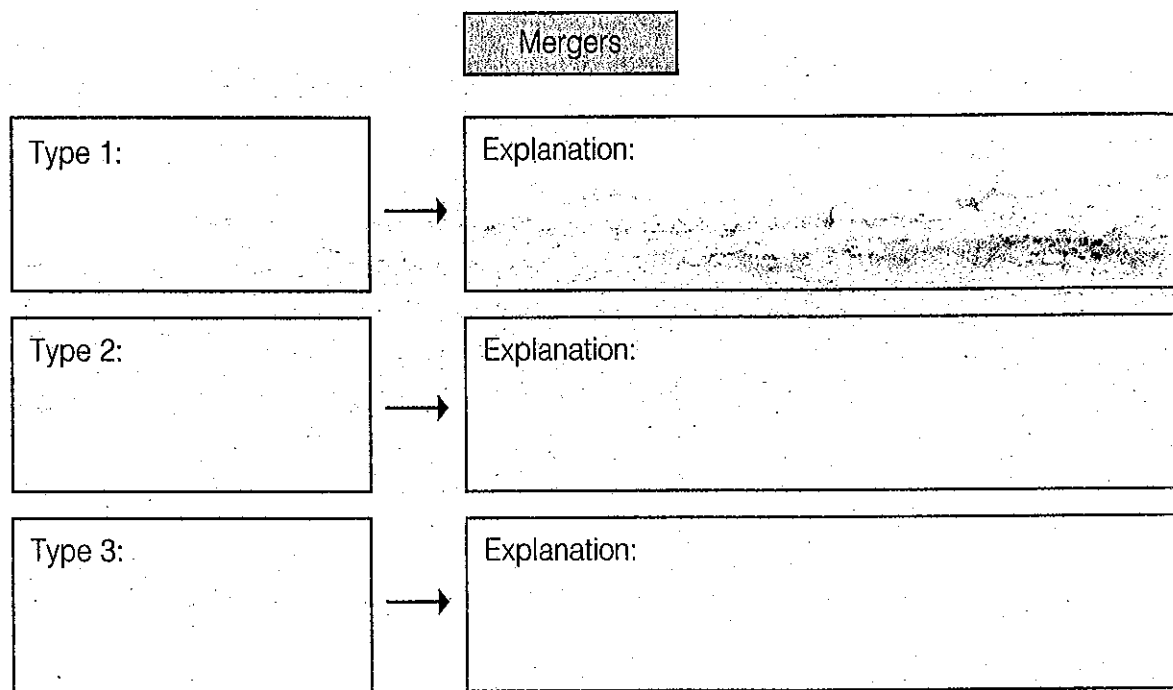
rival:

a business, team, or person that competes with another

concentrate:

to give attention to one aim or activity

Companies initiate mergers for a number of different reasons. Each type of merger can save on costs by allowing merged companies to reduce the number of employees if positions overlap. Instead of having two marketing directors, one at each company, a single marketing director will suffice for the newly formed company. Business mergers can help expanding companies grow at a rapid rate without having to put in the money and time to create another company from the ground up.



1. **Directions:** Complete the table below to summarize information about mergers discussed in the passage. Match the appropriate statements to the type of merger to which they relate. TWO of the answer choices will NOT be used. **This question is worth 3 points.**

Merger	Statements
Horizontal	• •
Vertical	• •
Conglomerate	•

Answer Choices

- (A) Companies are involved in different aspects of sales or production.
- (B) The companies want to ensure future losses.
- (C) A small or giant impact on a sales market may result.
- (D) The manufacturing costs for a merged company are reduced.
- (E) Companies having similar products become one enterprise.
- (F) An increase in the number of employees may occur.
- (G) The companies have unrelated products.

Fill in the blanks to complete the summary.

Business mergers are important ways that companies _____ in order to improve their profits, competitiveness, and costs. They may merge with another company in order to better compete against _____ companies. Another type of merger involves a company merging with one of its major suppliers, which allows the purchase of materials or supplies at _____ costs. Sometimes, a company will merge with one in a different business. Mergers allow a business to _____ on one aspect of its operations the partner company focuses on its own. In general, the larger the companies that are merging, the greater the effect on market _____.

Read the following passage. Then fill in the diagram with the information that you read. Track 62

The Evolution of the Short Story

The earliest forms of the short story were oral folk tales, fairy tales, fables, and parables. All shared common characteristics of having moral lessons and being brief. While the modern short story evolved from these early narrative forms, the only characteristic it retained was brevity. From the time short stories began to be written down, they continued to evolve until the 19th century, when they developed into the genre known today.

Around the 14th century, short narratives began to appear in popular written works. The audience for these first collections of short stories was the upper class, who could afford books and were literate. Most notable was Geoffrey Chaucer's *Canterbury Tales*. It is a collection of short stories within a larger frame narrative about a pilgrimage to Canterbury Cathedral in England. Some of the pilgrims' stories mention socioeconomic issues of the time, like class divisions between the nobility, the clergy, and the commoners. The common man is frequently portrayed as a buffoon, as demonstrated by his ridiculous actions, and is not given a lengthy character description. Impressions about the fictional characters are made as they tell their stories. They are satirical representations about those who held such positions at the time, not individuals in their own right. Similarly, in the latter part of the 17th century, Charles Perrault published a book of fairy tales, many of which were adapted from earlier versions to entertain the adult audiences of French literary salons. Perrault's fairy tales were a combination of the rustic folklore and sophisticated mannerisms with which his readers were familiar. Perrault's fairy tales later became known as the Tales of Mother Goose.

It was not until the middle to late 1800s that the short story really emerged as a literary genre and gained popularity. In these tales, the small number of characters allows the author to fully develop the personalities of each one. The modern short story also starts at or near the main action that the story revolves around. American authors Edgar Allan Poe and Nathaniel Hawthorne each produced a collection of short stories during this time. Their works were well received by the massive literate middle class, who could sympathize with the motivations and emotions of the characters. The settings were enormously detailed and often took place in the present time or in recent history. The most influential factor of the rising popularity of short stories was the growing number of print magazines and journals. There was an increasing demand for short narratives that told a complete story within a single

brevity:

the use of few words

pilgrimage:

a trip a spiritual person makes to a holy place

socioeconomic:

involving a combination of social and economic matters

buffoon:

someone who behaves in a silly and annoying way

satirical:

using humor to criticize people or things to make them seem silly in writing or art

installment:

one of several parts of a story that is published at different times in a magazine

issue, unlike novels that had to be printed in installments. By publishing short stories in magazines and journals, they became accessible to the population at large for the first time.

The first literary theories about the short story were published during the latter part of the 19th century. This ensured its place as a literary genre. Many magazines today still publish short stories, and authors release collections of short stories to showcase their talents. Perhaps the reason short stories have always been so popular is because they give people the chance to escape into another world, if only for a brief amount of time.

The Early Short Story vs the Modern Short Story

Early Short Story	Both	Modern Short Story
<ul style="list-style-type: none"> • • • 	<ul style="list-style-type: none"> • 	<ul style="list-style-type: none"> • • •

1. **Directions:** Complete the table below to summarize information about the short story discussed in the passage. Select the appropriate phrases from the answer choices and match them to the time period to which they relate. TWO of the answer choices will NOT be used. **This question is worth 3 points.**

Time Period	Statements
Pre-19 th century	<ul style="list-style-type: none"> • • •
Post-19 th century	<ul style="list-style-type: none"> • •

Answer Choices

- (A) Written as entertainment for those of high social rank
- (B) Popularized through periodical media
- (C) Contained longer length of story
- (D) Generalization of characters
- (E) Highly developed settings and characters
- (F) Were told strictly to teach others morals
- (G) Was considered a distinct genre of literature

Fill in the blanks to complete the summary.

The short story has evolved from folk tales and fables to a literary genre accepted by academics. The most important characteristic of a short story is its _____, which allows an author to publish a complete story at once, rather than in _____, like some novels. One of the first recognized collections of short stories was Geoffrey Chaucer's *The Canterbury Tales*, which told the tales of people taking part in a _____. Chaucer used short tales to describe people of different _____ groups, usually in a very _____ manner.

Read the following passage. Then fill in the diagram with the information that you read. Track 63

Conflicts

Conflicts, whether minor or significant, are present in many parts of people's lives. While the necessity of conflict is common to all, the manners in which individuals solve their conflicts vary widely. Many psychologists study what they have termed personal conflict styles. While each style varies in many ways, three of them are generally considered negative conflict styles. Called direct aggression, passive aggression, and nonassertive behavior, these styles are distinctly different and rarely solve a given conflict successfully.

Direct aggression can be understood as one of the most harmful conflict styles for both parties involved. Direct aggression is considered a highly combative style, in which an individual verbally attacks the other person involved. This may include verbal criticism of a person's character or appearance, teasing, threats, and the use of intimidating body language. This behavior can have various impacts both upon the aggressor and the other party. Perhaps most obvious are the effects upon the target of the aggression. Victims can feel sadness, humiliation, embarrassment, or even be driven to aggression themselves. In a volatile situation, parties may be driven to physical violence, especially if both individuals use a style of direct aggression. Thus, the original aggressor may be in danger of physical harm due to the use of an aggressive conflict style. Rather than solving the conflict, aggression generally exacerbates a problem or introduces new conflicts. To exemplify direct aggression, imagine an older brother who teases or embarrasses a little brother when he wants to play with the younger child's toy. While it is likely that the older brother will not get his way, even his success may lead to further problems. Anger may grow in the younger brother, leading to an increase in conflict in the future.

A similar reliance upon aggressive behavior can be seen in the passive aggressive style. In contrast with the obvious antagonism of direct aggressors, passive aggression can be understood as an indirect communication of hostility. Generally, individuals find roundabout ways to express aggression, often avoiding direct conflict. Like direct aggression, passive aggressive behavior rarely has a positive effect upon the resolution of a conflict. Generally, the aggressor struggles to convey displeasure with a given situation. He or she attempts to send subtle messages to the other party, while perpetuating a front of friendliness. While this pretense can often last for the duration of one or many conflicts, its eventual breakdown can cause strong feelings of anger or emotional pain in the aggressor's victim. For example, a

volatile:
tending to become violent

hostility:
unfriendly or aggressive behavior

roundabout:
indirect

pretense:
a false show of behavior

amiable:
friendly

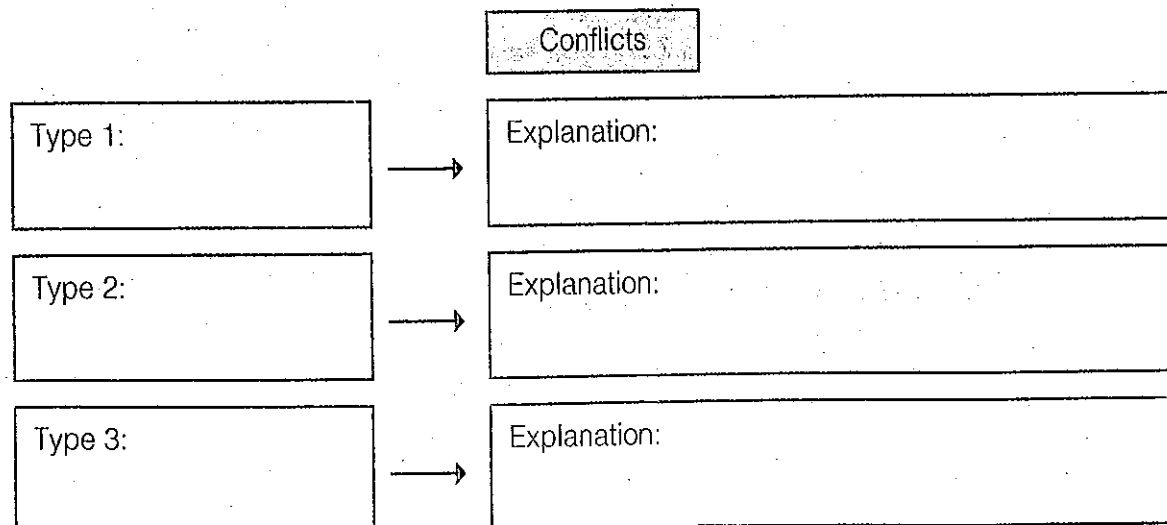
escalate:
to increase the intensity

oblige:
to accommodate; to do a favor for someone

recurring:
frequent

girl may become angry at a friend. However, instead of expressing her anger, she speaks negatively and spreads rumors about the friend to others, while remaining amiable to her face. Thus, the conflict is not resolved. The friend may not even realize that a conflict exists. However, the friend may discover after some time that the girl is behind the rumors. The conflict will understandably escalate after this point. Like direct aggression, the passive aggressive style rarely leads to a successful resolution and, instead, create new conflicts.

Nonassertive behavior is another conflict style that is generally believed to engender negative results. However, it can in some cases be successfully used to avoid minor conflicts. Nonassertive behavior is defined as an unwillingness to participate in and solve a conflict. Nonassertive behavior can be caused by a fear of the other person or a lack of self-confidence. In general, nonassertive behavior manifests in one of two ways: through accommodation, in which the individual ignores his or her own needs in order to oblige the other party, or through avoidance, in which the individual simply refuses to face the conflict. In either case, the individual believes that, by not dealing with the issue, it will simply go away. In some situations, this behavior is successful. When faced with a very minor situation, many people who use nonassertive behavior can successfully avoid a more serious conflict by either staying away from or accommodating the other person. However, this is rarely satisfying. Also, such behavior can often lead to a worse problem, especially if the conflict involves recurring behavior. For example, a roommate's thumping bass may keep an individual up one night. At first, the problem may seem minor. But if the issue persists, the individual's failure to confront the problem may lead to a resentment of the roommate. In turn, this could harm a previously strong relationship.



1. **Directions:** Complete the table below to summarize information about conflicts discussed in the passage. Match the appropriate statements to the conflict style to which they relate. TWO of the answer choices will NOT be used. **This question is worth 4 points.**

Conflict Style	Statements
Direct Aggression	• • •
Passive Aggression	• •
Nonassertive Behavior	• •

Answer Choices

- (A) Always involves physical force to solve conflicts
- (B) Sometimes leads to a positive outcome
- (C) Often humiliates the other person
- (D) Avoids the problem until it goes away
- (E) Fakes kindness to avoid a confrontation
- (F) Communicates anger through subtle hints
- (G) Leads to depression after failed solution
- (H) Can negatively impact both people involved
- (I) Often creates anger in the other person

Fill in the blanks to complete the summary.

Psychologists have defined three unsuccessful ways of dealing with conflict. Direct aggression involves a person becoming verbally abusive or showing other signs of _____. This type of confrontation will often _____ into violence if both parties use direct aggression. In passive-aggressive behavior, a person may behave _____ to the face of the person with whom they have a problem, while they spread rumors and speak negatively behind their back. There is still aggression in passive-aggressive behavior, but the aggressor goes about it in a _____ way. Nonassertive behavior involves complete avoidance of a problem or source of conflict. Rather than seeking a resolution to a problem, a person might put on the _____ of comfort, or of not being bothered.

Read the following passage. Then fill in the diagram with the information that you read. **Track 64**

Political Orders

Small societies around the world have various systems of political order that differ greatly from the typical conception of government. Due to the complexity of modern major nations, government has become similarly complex, consisting of thousands of officials within a single nation. However, many small societies often do not require the same level of authority. Such governments can be placed into three categories: band governments, tribe governments, and chiefdoms. While each has a similar goal of organizing and controlling the behavior of the societies' inhabitants, each system reflects the social needs of their respective societies.

The political orders of bands exhibit an adaptation to the needs of a mobile society. A society is generally labeled a band if its primary means of survival involves foraging for wild food in groups of less than 100. Due to their reliance upon finding food, bands generally do not settle in a single location. Instead, they move in order to discover new sources of food. Their societies, then, are not static and well-organized. This lack of organization is also evident in their political systems. Generally, bands do not form governments with any sort of hierarchy. Instead, due to their small size, all members of a group are given a voice in addressing problems. Since political problems are likely to affect all members of a band, each member may give an opinion on the issue. Some members may, through charisma or persistence, end up with more of a voice than others, though formal systems of leadership are rarely established. Similarly, laws are not written in band societies. Instead, the general consensus that emerges from a discussion becomes the equivalent of societal rule. An example of such a society can be seen in the Inuit of northern Canada. To address the issue of an overly aggressive band member, another member visited the other members individually to ask for opinions on the aggressor's behavior. When the consensus was reached that the member was a threat to the band as a whole, the agreement acted as authorization for the man to retaliate against the aggressive member.

Tribes can be understood as larger societies that domesticate food sources and generally settle in one place. Tribes also have no established, full-time governmental body. However, their larger size makes the system used in bands impractical. Instead, tribes leave small issues up to families to resolve and form voluntary governmental associations called sodalities to handle larger issues. These organizations consist of at least one member from most families in the tribe. While the associations

conception:

an idea

mobile:

capable of easy movement

charisma:

personal magnetism or charm

consensus:

a state of agreement

retaliate:

to take action in response to another action

domesticate:

to adapt a plant or animal in order to benefit humans

welfare:

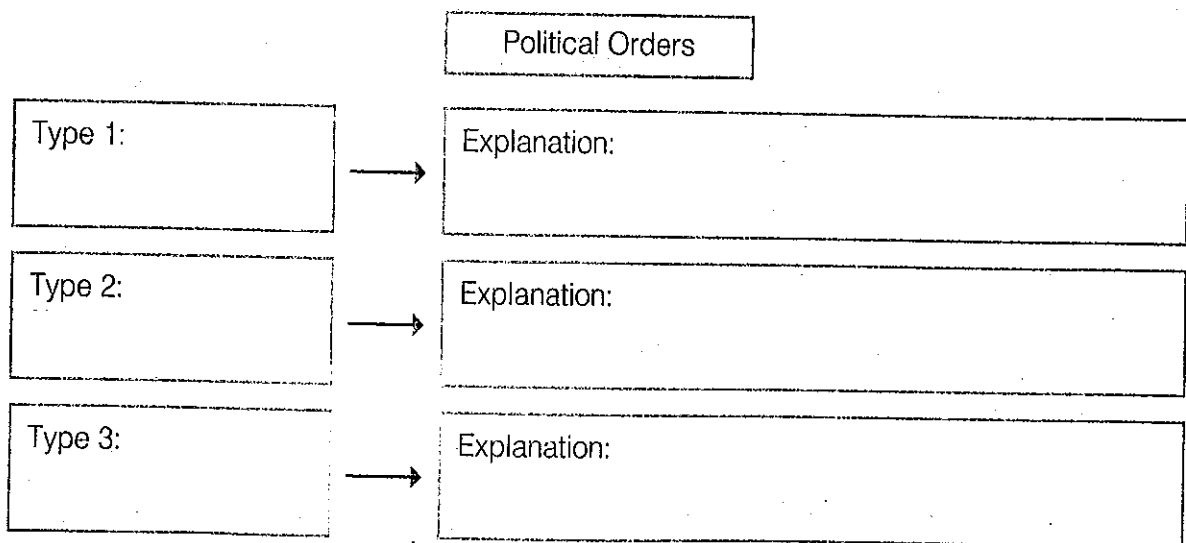
the state of mental and physical health

dispute:

an argument

do not have regular meetings, they will convene to address a problem within the community. Sodalities have two roles in the community: a policing role and a social role. Members of the sodality will attend to any matters of behavior deemed inappropriate by the members of the society. For example, a tribe of Plains Indians protected the tribe's welfare through their enforcement of societal guidelines. If a hunter accidentally scared away wild game during a hunt, the hunter was likely punished for threatening the tribe's food supply.

Chiefdoms unite more than one village under a central political figure, called a chief. In a chiefdom, the villages recognize a chief as the official with the most political power. However, individual families retain a very similar role to that of a tribe. In order to properly govern villages that may be far from the chief's own village, many smaller matters are left to family law, in which relatives from the village decide the result of a familial conflict. Larger crimes affecting the entire village—or even all villages under the chiefdom—require the involvement of government officials, such as the chief, in order to bring about a truly authoritative resolution. Often, the chief will meet with other appointed village officials to decide the fate of an individual involved in a dispute. Unlike bands or tribes, the chief has the power to create laws, punish offenders, and wield power over those who are not a part of his or her own family or community. Chiefs have the power to tax individual villages, regulate the distribution of food and other resources, and draft labor for community building projects. The Rwala people of the northern Arabian Peninsula structured their societies around chiefs, which they called sheikhs, who governed individual villages. There was also a central chief, sometimes called a prince, who held power over each of the regional chiefs.



1. **Directions:** Complete the table below to summarize information about political orders discussed in the passage. Match the appropriate statements to the type of government to which they relate. TWO of the answer choices will NOT be used. ***This question is worth 4 points.***

Political Order	Statements
Bands	• • •
Tribes	• •
Chiefdoms	• •

Answer Choices

- (A) Base governmental organization on central political leaders
- (B) Allow all members to aid in the development of laws
- (C) Consist of numerous villages connected through a governmental system
- (D) Adapt political structure to small, unstructured societies
- (E) Require that punishments be approved by each individual member
- (F) Write laws prohibiting the endangerment of the group
- (G) Create familial organizations that handle major issues
- (H) Does not form any system of hierarchical leadership
- (I) Inhabit one area and form basic political structures

Fill in the blanks to complete the summary.

Societies with a small population have a different _____ of government than the massive nations of today. Smaller groups of people have an easier time settling a _____. Groups of people that forage for wild food are usually _____ and rarely have more than 100 individuals. These groups organize into bands, where individuals speak with one another to reach a _____ on a problem. As people began to stay in one location and farm, larger groups lived in one place, and decisions about the _____ of the people grew more difficult. This led to the development of tribes and chiefdoms. Chiefdoms are usually a collection of villages with a single person as leader, whereas tribes are only one village or group.

Read the following passage. Then fill in the diagram with the information that you read.

Track 65

Red and Black Figure Pottery in Ancient Greece

Much of what we know of ancient Greek civilization has been learned from studying their pottery. The durable vessels created by the ancient Greeks were often decorated with scenes from daily life, giving scholars insight into their culture. The two most recognized forms of ancient Greek pottery are black figure pottery and red figure pottery. Both share similarities and differences in their artistic designs.

The black figure technique developed around the 7th century BCE. At the beginning of the process, reddish brown clay was shaped into the desired form and then brushed with a glaze where shading was needed for the design. The glaze was produced with the same clay used to make the vessel and ground into a fine paste using alkaline water. Decorations were then painstakingly incised into the clay using sharp, wooden tools. Black figure pottery featured elaborate geometric patterns and narrative decorations depicting battle scenes, mythological subjects, animal motifs, and legendary episodes. Figures were often shown in flat silhouette. Images had to be spaced out to ensure they did not overlap, or else they would blend together and become unrecognizable after the firing process. Once the design was completed, the pottery would be placed in the kiln.

Using air vents, artisans manipulated the amount of oxygen allowed in the kiln. More oxygen would keep the reddish brown color, and less oxygen would result in grays and blacks. When the kiln was at its hottest temperature, a piece of green wood would be inserted into the chamber. The wood would create carbon monoxide, which reacted with the iron in the clay. The kiln vents would be opened to let in oxygen, allowing the unglazed portions of the vessel to return to their natural reddish brown color. The glazed parts would remain black due to the combination of the glaze and iron. These two compounds together blocked the oxygenation that would have turned exposed areas back into their original reddish brown color.

The red figure technique developed around 530 BC. It used a reverse firing process from the black figure method. This more advanced technique allowed for painting on the vessel using brushes rather than incising designs into the clay. The red figure technique offered more possibilities for artistic images, since smaller details could now be made. Figures first were outlined in a liquid glaze, and then contours and inner lines were added. However, since the paint color only appeared during kiln firing, artists had to work from memory to ensure hundreds of invisible lines ended at the right points to prevent overlapping of the intricate detail work. Since features could be outlined in black, red

durable:

able to resist damage

incise:

to cut words or a design into something

silhouette:

an image or drawing showing only the shape of something

kiln:

a type of oven used for baking clay or brick

contours:

the shape of the outside edge of something

intricate:

very detailed in design or structure

advent:

the introduction of a new product, idea, or custom

figure pottery allowed for three-quarter profiles and a more detailed rendering of anatomical details, such as individual fingers or the curved outline of an ankle bone. With this technique, each figure had a natural silhouette against the black background. This meant that overlapping designs could be painted, allowing for more elaborate compositions and giving a more natural look that suggested movement.

Black figure and red figure pottery both usually depicted popular themes in Ancient Greek art such as battles, mythological stories, and heroic deeds. Both also contained a dramatic contrast between the image and the background. However, the rendering of the designs on the pottery contained many differences. Black figure pottery used many geometric patterns in its design for borders and on clothing. However, red figure pottery did not, favoring a simpler look. The overlapping technique used in red figure pottery allowed for more elaborate compositions, whereas if images overlapped in black figure pottery, they were likely to resemble a black blob after firing was completed. The biggest contrast of all seems to be the detail that red figure pottery allowed in its depiction of human features, emotion, and movement. Because of this ability to create more natural images (unlike the static, two-dimensional, black figure technique), the red figure technique is considered the height of Ancient Greek pottery. Soon after the advent of the red figure technique, the black figure technique was rarely used.

By 450 BCE, just eighty years after the invention of the red figure technique, very little new pottery was being produced. Despite much speculation, no definite reason exists to explain why. However, it is believed that over 100,000 intact vessels from Ancient Greece have survived to the present day, serving as the majority of painting examples from that time. These functional art objects not only convey information about the artistic ability of the Ancient Greeks, but they also provide clues about their culture as a whole.

Black Figure Technique vs. Red Figure Technique

Black Figure	Both	Red Figure
•		•
•	•	•
•		•
•	•	•
•		•

1. **Directions:** Complete the table below to summarize information about the types of ancient Greek pottery discussed in the passage. Match the appropriate statements to the type of technique with which they are associated. TWO of the answer choices will NOT be used.
This question is worth 4 points.

Technique	Statements
Black Figure Technique	<ul style="list-style-type: none"> • • •
Red Figure Technique	<ul style="list-style-type: none"> • • • •

Statements

- (A) Designs could not overlap on the pottery
- (B) First appeared around 450 BCE
- (C) Movement and images looked more natural
- (D) Designs were painted on the vessel
- (E) Geometric patterns were a popular design
- (F) Allowed more intricate compositions
- (G) Commonly depicted scenes of everyday rural life
- (H) Designs were cut into the clay before firing
- (I) Profiles did not have to be shown flat

Fill in the blanks to complete the summary.

Much of what we know about ancient Greek culture has been learned from studying two types of pottery. Black figure glazing was a technique used to depict _____ of heroes, battles, and mythology in black against a red background. This technique required that shapes to be colored be _____ into the clay. Red figure glazing, on the other hand, allowed potters to outline figures and shapes. This technique gave the artists the ability to be more _____, creating more life-like _____ of anatomy. After the _____ of the red figure technique, black figure pottery all but disappeared.

Vocabulary Review 3

Instructions: Choose the best word or phrase to complete each sentence.

1. The artist will _____ ideas from his mentor and reproduce them in his own work.
(A) emigrate
(B) underscore
(C) ensue
(D) appropriate
2. I can _____ Michael Jackson by changing my voice and dancing the way he does.
(A) dispute
(B) impersonate
(C) diminish
(D) implement
3. There was an amazingly beautiful and _____ pattern on the hand-made quilt.
(A) intricate
(B) pessimistic
(C) fatalistic
(D) tumultuous
4. Children with disabilities often suffer _____ in schools.
(A) contingencies
(B) radiation
(C) predation
(D) alienation
5. Wearing a tattoo is a clear expression of _____.
(A) individualism
(B) disruption
(C) equilibrium
(D) contention
6. People who suffer from migraine headaches often have an exaggerated _____ to light and sound.
(A) analysis
(B) impact
(C) sensitivity
(D) potential
7. Bread called *baguette* is the _____ favorite in France.
(A) inherently
(B) fractional
(C) regional
(D) novelty
8. The owner of the coffee shop was very _____ to all of her customers.
(A) amiable
(B) essential
(C) conscientious
(D) pathogenic
9. Lack of water or nutrients has impeded the growth of these new cherry tomato plants.
(A) stunted
(B) circumscribed
(C) rendered
(D) realized

Instructions: Choose the word or phrase closest in meaning to the underlined part of each sentence.

- 10. The love-struck man decided to verbally declare his eternal love to his girlfriend of three years.
 (A) literally
 (B) orally
 (C) markedly
 (D) accordingly
- 11. The newlyweds decided to live in an apartment for one year in order to save their money for the purchase of a house.
 (A) yield
 (B) maximize
 (C) inhabit
 (D) spin
- 12. Sanitary conditions are needed in the operating room in order to prevent the spread of bacteria.
 (A) hesitant
 (B) hygienic
 (C) miniscule
 (D) paramount
- 13. Teachers must enforce certain rules in the classroom to ensure the safety and fair-treatment of all students.
 (A) impose
 (B) espouse
 (C) overlook
 (D) derive
- 14. You must focus intently on your studies in order to produce good grades.
 (A) perceive
 (B) assess
 (C) render
 (D) concentrate

- 15. A heated argument occurred between the leaders of the opposing political parties.
 (A) propagation
 (B) fluctuation
 (C) dispute
 (D) remnant

Instructions: Write the missing words. Use the words below to fill in the blanks.

third-world hostility lasting
 capacity overwhelmed

The Red Cross is an international organization that provides help to nations **16.** _____ by war, disaster, or poverty. They provide immediate assistance and also try to provide **17.** _____ solutions to sustain the safety and well-being of communities. Often their efforts take place in **18.** _____ countries. The Red Cross aids people through global health initiatives, disaster relief, or by helping those experiencing the **19.** _____ of war. Although it lacks the **20.** _____ to meet every need in such places, the Red Cross does a great deal of good worldwide.

Instructions: Match the words that are similar in meaning.

- 21. notion (A) prompt
- 22. adapt (B) lasting
- 23. cue (C) belief
- 24. capable (D) able
- 25. durable (E) alter

Mini Test 3

01 Computer Science

Read the passage and answer the questions.

Track 66

Moore's Law

The use of computers has permeated every sphere of life: business, education, medicine, entertainment, and home. The explosive growth of the computer industry was first predicted by the man who wrote Moore's Law in 1965. The industry has been booming with no sign of slowing down, and his law still holds true over forty years later. The question remains: how long will the trend last?

Gordon Moore, cofounder of Intel and inventor of Moore's Law, was an engineer in the technology industry. He was in a position to study the technological trends and came up with a projection about the future of technology. Moore's Law states that the number of transistors, or basic electronic switches, on a computer chip would double every two years. If this proved to be true, chips would increase in speed and capabilities progressively every few years. He made the prediction in 1965, before many technological advances were made and before such growth was considered. Yet this principle, merely an idea at the beginning, drove the chip industry to great heights by increasing competition and setting a goal for those in the computer industry to strive toward. The transistors that Moore spoke about, when interconnected on a chip, made up an integrated circuit. His law addressed these circuits also by stating that the use of integrated circuits would keep the costs of electronics down, which it has done through the years. What began as a prediction proved to be the standard that many companies strove to meet.

Moore was the first to publish his observations about the direction technology was going. Each computer chip requires a certain number of transistors, and the more it has, the more it can do. If technology was not as advanced as it is currently, mobile phones, digital cameras, navigation systems, and other digital electronics would not be nearly as sophisticated. It was said that "practically everything digital has depended critically on the swift improvement of chip density." Businesses realize the necessity of keeping up with trends in technology because they suffer a performance disadvantage and a cost increase when they fall behind their competitors.

Chips are made of silicon, and the greater the silicon density, the more transistors there are per chip. However, there is a limit to how dense a chip can be, and researchers are reaching the realm of quantum physics, which deals with pieces as small as atoms. Once the industry maximizes its current capabilities, it will have to consider other scientific ways to advance chips. Another real issue as technology advances is updating interfaces and software on computers to match chip capabilities, or else the advanced chips will not be of any use to users. Moore realized that one day technology would meet with limitation. He recently predicted that Moore's Law will reach its end in ten to twenty years, at which point innovative technology experts will be put to work to bridge technology between its limitations and its future.

▷ **silicon** a non-metallic element used to make semiconductors

▷ **interface** a piece of equipment designed to communicate information between devices

1. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. **This question is worth 2 points.**

Moore's Law has defined the world of technology, especially the chip industry.

-
-
-

Answer Choices

- (A) With the rapid growth in computer chips, industries have seen Moore's Law at work.
- (B) The computer chip's silicon density is the link to future technology.
- (C) The standard used by technology companies was to double the number of transistors per chip every two years.
- (D) Gordon Moore's statement in 1965 was a prediction that turned out to be completely accurate.
- (E) Electronics containing newer chips have more functions and capabilities.
- (F) Integrated circuits were referred to in Moore's Law as keeping production costs down.

02 Anthropology

Read the passage and answer the questions. **Track 67**

Masks and Universal Emotion

Humans process experiences through an array of emotions. Researchers studying human behavior have raised the question of how universal these emotions truly are and if people of one culture can identify emotions expressed by those of a different culture. Some anthropologists believe that people can recognize specific emotions merely by observing facial expressions. They also claim that these emotions are truly universal and recognizable worldwide.

Charles Darwin was the first to suggest a theory stating that humans express and recognize basic emotions in identical ways, since all human faces are similar in skeletal and muscular structure. Yet, to what degree of similarity do people display emotion? Can people from different backgrounds recognize the same emotion in spite of the chasm between cultures?

Researchers Paul Ekman and Carroll Izard conducted a ground-breaking study asking individuals to identify the emotions displayed in a set of photographs. They presented photos of people experiencing certain emotions and also ones of actors simulating feelings. They wanted to see if participants from different cultural groups could identify the portrayed emotion. Most who viewed the pictures identified the correct emotion regardless of native culture. Thus, emotions speak across languages and cultural groups. They appear to be inherent in human nature and are not confined to income, culture, or circumstance.

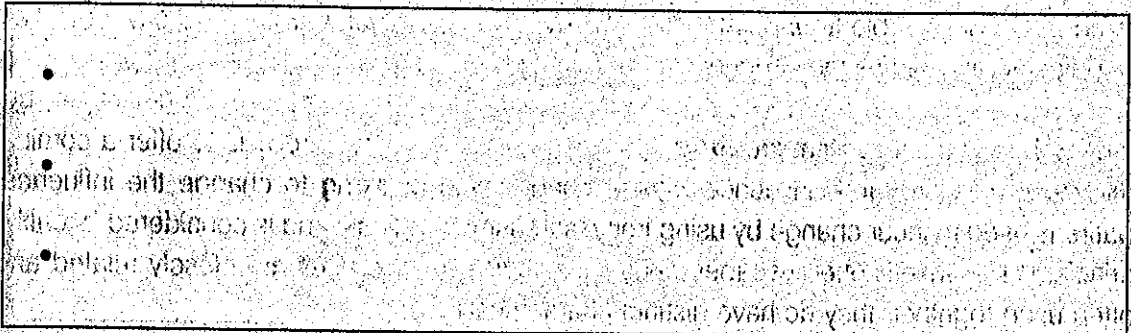
Another compelling theory takes these findings a step further. Each culture has art forms that are related to a specific territory or era in its history. These art forms illustrate the prevailing characteristics of the people within the society. The art form used in this study was a wooden mask. Psychologist Joel Aronoff compared two wooden masks, one that was fashioned to look threatening and one with non-threatening features. The facial elements on each mask were markedly varied in proportion and design, and Aronoff studied these elemental designs comprising the faces of the two masks. Masks purposefully made to look threatening were likely used to frighten off evil spirits. Thus, the eyebrows and eyes faced inward and downward. The mouth faced downward as well. This type of disguise typically had pointed heads, ears, chins, and beards. Geometrically, the threatening features were angular and created on diagonal lines. On the other hand, non-threatening masks used in rituals such as a courtship dance had softer features with curved elements on the face. The face of a baby does not appear threatening, but a face with a pointed beard tends to intimidate. Therefore, it is not only the facial features that convey emotion, but also the geometric placement and angle that offer a clue to the emotion being expressed artistically.

To further illustrate the theory, an American university asked students to associate adjectives with abstract designs. The designs incorporated angles and curves, such as artistic lines and the letters "V" and "U." They reported that people viewed the angled designs of the letter "V" as less friendly, yet more powerful than the curved shape of the letter "U." The overwhelming evidence points to the universality of emotion, crossing over cultural and other limitations, and the uncanny ability of humans to understand what others in their species are feeling.

► **prevailing** *dominant or having influence*

1. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. *This question is worth 2 points.*

Human emotion and related facial expressions are universal to humans.



Answer Choices

- (A) Regardless of native culture, people are able to understand the emotions on a stranger's face.
- (B) Facial expressions convey to others what the person is feeling.
- (C) Threatening masks and expressions are more easily understood than those that are non-threatening.
- (D) Art such as masks reflects emotion in a way that sends definite signals about meaning.
- (E) There is a difference between lower and higher classes when it comes to expressing emotion.
- (F) Photographs are not a good indicator of personal emotion expressed on the face.

03 Literature

Read the passage and answer the questions. **Track 68**

Parody and Satire

Authors create literary works for various reasons. Perhaps they wish to exercise creative liberty, inform the masses, or make a point. Regardless of the topic, they often use different methods to get people to understand what they are saying and why they are saying it. Two popular literary genres they frequently use are parody and satire.

Works created in parody or satire use an existing subject, person, or circumstance, but they differ in how they treat the existing things. The purpose of parody is to offer a comical mimicking of an original influence without condemning or trying to change the influence. Satire is used to incur change by using irony, sarcasm, or ridicule and is considered "stealthy criticism" because it often escapes censorship. While both genres are closely related and often used together, they do have distinct characteristics.

In the parody genre, the writer often uses a familiar subject or work and replicates it in a way that becomes comical. Playful, light parodies are generally referred to as spoofs. Parodies were first seen in ancient Greek literature in a *parodia*, which was a narrative poem imitating the style of an epic poem. The word "parody" has Greek roots, with *par-* meaning beside, counter, or against, and *-ody* relating to a song or an ode. Thus, to parody is to weave a tale contrary to the original subject. Some authors imitate a certain style, character, or circumstance used in a work. For example, the author may use a number of established characters, each from different works, and compile them all together to create one story that is different from the original sources while still keeping the characters intact. Others create parody by lifting whole elements of one work out of context and reusing it in their own. Writer James Joyce did this in his book *Ulysses*, where he used characters and situational elements from Homer's *Odyssey* in an Irish context during the twentieth century. Some of the ways in which parody is used overlap with its counterpart known as satire.

Writers using satire typically intend for the work to be humorous, but its primary purpose is criticism. While illustrating human vices, follies, or shortcomings, authors write in a calculated way to ridicule or show the irony of the subjects in the hope that their work will inspire change or even shame people into reform. Satire usually has a definite target, be it an idea, an institution, or a politician, and is characterized by its strong vein of irony or sarcasm. The word "satire" comes from the Latin phrase *satura lanx*, which means a dish of colorful fruits. Satirical writing was first seen in ancient Egypt in a specific work about trades. The writing described certain trades or vocations in exaggerated and disparaged terms to convince those learning the trades the importance of continuing to study the trade. Many writers of satire incorporate parody within their texts. However, the two differ distinctly and remain as two widely-used literary forms, each useful for its purpose.

- ▶ **epic** a long composition usually centered on a hero
- ▶ **vice** an immoral or wicked habit

1. **Directions:** Complete the table by below to summarize information about the types of literature discussed in the passage. Select the appropriate phrases from the answer choices and match them to the type of literature to which they relate. TWO of the answer choices will NOT be used. **This question is worth 3 points.**

Type of Literature	Statements
Parody	<ul style="list-style-type: none"> • •
Satire	<ul style="list-style-type: none"> • • •

Answer Choices

- (A) Writers use it to incite change or reform.
- (B) Its main purpose is to provide comedy.
- (C) Sarcasm and irony are the main tones used.
- (D) It involves fact mixed with fiction.
- (E) The primary purpose of the author is to criticize.
- (F) Authors choose to imitate a person or circumstance.
- (G) The writing is done mainly by seasoned authors.

04 Environmental Science

Read the passage and answer the questions. **Track 69**

Energy Efficiency in the United States

The citizens of America are becoming increasingly aware of the goods and resources they use. Currently, the US uses the greatest amount of energy in the world, consuming twenty-six percent of the world's energy. Considering these facts, America must remain aware of its many industries and carefully monitor the large amount of energy these industries expend.

Energy consumption is measured in four main areas: transportation, residential, commercial, and industrial. Around half of the US's energy is spent on the transportation and residential sectors, both of which are largely controlled by individuals. As such, citizens need to be more aware of how much energy they use. Transportation includes freight and personal vehicles. By using energy-efficient cars and limiting distances driven, individuals can decrease the resources expended for transportation. The government has helped by instituting certain incentives to entice people to make more energy-conscious decisions and purchases. For example, it created a policy offering income tax credits for users of gas/electric hybrid vehicles, and it has advocated carpooling by offering lower tolls and designated lanes to commuters. In terms of residential sectors, residences can decrease energy usage by monitoring air conditioning and heating, keeping temperatures between 18°C in the winter and 27°C in the summer. Almost fifty percent of the energy used in houses is for temperature control while the rest includes lighting, laundry and kitchen appliances, water heaters, and home electronics. Using newer, efficiently built appliances can also aid in household energy reduction. However, minimizing energy use in only one area of a residence does not have great results; individuals must work to reduce as many areas as possible within a household to have a noticeable impact.

The other two areas of use, commercial and industrial, are determined by businesses and facility managers. Commercial energy is consumed by retail stores, offices, schools, and restaurants. This is where much of the energy in the US is spent unnecessarily. Excessive lighting and continuous, unneeded heating and cooling make these environments less efficient. Some businesses are taking measures to install more efficient lighting and use natural light when appropriate. They are also encouraged to discontinue unnecessary heating or cooling, especially during the night when users are absent. Industrial energy consumption, which constitutes thirty-three percent of total US usage, is the only one of the four sectors that has decreased its usage over the past decade. With the purpose of production and processing of goods, these manufacturing, construction, farming, water management, and mining industries have been forced to implement more efficient systems because of increased energy costs.

While energy conservation is vital to the future of the US, some problems do arise with making this shift. For American home owners and small businesses, the cost of upgrading to better equipment and appliances can be very costly initially. Commercially speaking, some retailers believe that bright lighting in stores is necessary for increased sales, but retail employees actually suffer minor health issues from over-illumination. A compromise would help both parties. By making simple yet conscious efforts to decrease energy use, American

businesses and individuals alike could better use the world's energy and extend the resources available.

- ▶ **hybrid** *composed of two elements*
- ▶ **commuter** *a person traveling long distances to and from work*

1. **Directions:** Complete the table below to summarize information about the areas of energy consumption discussed in the passage. Select the appropriate phrases from the answer choices and match them to the area of energy use to which they relate. TWO of the answer choices will NOT be used. ***This question is worth 3 points.***

Area	Statements
Transportation and Residential	<ul style="list-style-type: none"> • •
Commercial and Industrial	<ul style="list-style-type: none"> • • •

Answer Choices

- (A) Are determined by businesses and managers
- (B) Cause minor health problems to employees
- (C) Are controlled primarily by individuals
- (D) Expend energy only for lighting purposes
- (E) Include businesses, schools, and factories
- (F) Include vehicles and home appliances
- (G) Are working toward more efficient systems



Mastering Skills for the

LISTENING

LISTENING

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The TOEFL® iBT Listening Section

In the listening section of the TOEFL® iBT, you will hear a variety of conversations and lectures, each of which lasts from three to six minutes. A total of six listening passages will be presented. After each passage, you will then be asked to answer five to six questions about what you heard. Like the reading section of the TOEFL®, the questions are designed to assess your understanding of the main idea, factual information, and inference. You will not be asked questions regarding vocabulary or sentence structure.

● Passage Types

1. Conversation – Two people discussing a campus-related problem, issue, or process
2. Lecture – A professor presenting information related to an academic topic
3. Classroom interaction – Similar to a lecture, but with some interaction between the professor and one or more students

● Question Types

Questions for the listening section of the TOEFL® typically appear in the following order:

Question	Type	Description
1	Main Idea	Choose the best phrase or sentence.
2-3	Factual Information / Detail / Content	Choose the statement that is true according to what was said. Select multiple answers to complete a chart.
4	Purpose / Inference / Organization	Recognize the speaker's purpose, draw an inference, or explain how the speaker communicated certain information.
5-6	Repeated Listening	Hear a particular portion of the listening passage again and recognize the speaker's purpose, attitude, or the implied meaning of a statement.

Study Tips for Listening

- Practice listening to North American English as much as possible. For the purposes of the TOEFL®, educational programs, documentaries, and news programs are excellent sources.
- When you are practicing for the listening section of the TOEFL®, listen to the material only once and then answer the questions. Then review the answers while listening a second or third time. Remember, though, during the real test you are only permitted to hear the conversation or lecture once before answering the questions.
- Pay attention to how pauses and intonation are used to organize the passage, emphasize important information, and show transitions.
- Make a recording of the programs you use to practice listening. Replay any sections you have difficulty understanding.
- Keep such things in mind as the main idea, the development and support of the main idea, and the speaker's reasons for mentioning certain points.
- Develop your note-taking skills. While you are listening, try to write down key words in an organized, graphic way that makes sense to you.
- Create a list of vocabulary words related to university campus life as well as various academic subjects.

Test Management

- A picture will be shown on the screen to allow test takers to recognize each speaker's role and the context of the conversation. Along with this picture, a subject title will be given for each lecture.
- Before you begin the listening section, listen to the headset directions. Pay particular attention to how you change the volume. It is very important that you are able to hear clearly during the listening section of the test.
- If you miss something that is said in a conversation or lecture, do not panic. Simply keep listening. Even native speakers do not hear everything that is said.
- Note-taking during the lecture is permitted. Paper will be provided by the test supervisor. These notes can be studied while answering the questions, and will not be seen by test graders.
- Like the reading section, questions cannot be viewed until after the lecture or conversation has been completed.
- In the listening section, you must answer each question before moving on; you cannot return to a question later. If you are unsure of an answer, guess.

Preview Test


Track 70

Directions

You will listen to two lectures and one conversation. You will hear each lecture and conversation one time.

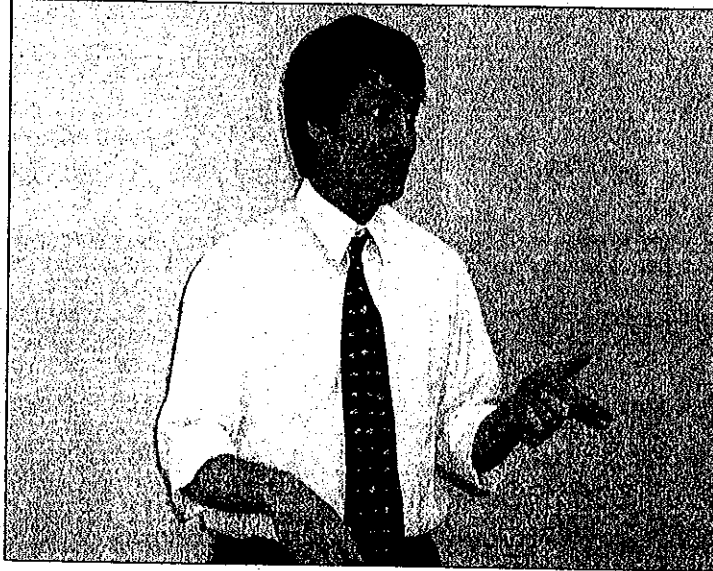
After each listening passage, you will answer some questions about it. You will have 20 minutes to both listen and answer the questions. The questions ask about the main idea and supporting details. Some questions ask about a speaker's purpose or attitude.

You may take notes while you listen. You may use your notes to help you answer the questions. Your notes will not be scored.

In some questions, you will see this icon: . This means you will hear part of the lecture or conversation again.

When you are ready, press **Continue**.

Listen to a lecture in a psychology class.





1. What is the main topic of the lecture?

- (A) The main points of a psychological disorder
- (B) The steps for creating the Barnum Effect
- (C) Why people sometimes believe in pseudopsychology
- (D) The ways that people can interpret their horoscopes


2. Why does the professor mention palm-reading?

- (A) To give an example of a pseudopsychology
- (B) To explain part of Forer's experiment
- (C) To refute that palmistry is a legitimate science
- (D) To demonstrate how the Barnum Effect works

3. Listen again to part of the lecture. Then answer the question. 

What does the professor mean when he says this: 

- (A) Pseudopsychology is similar to personality readings in many ways.
- (B) Readings are like Barnum's circus because they provide something for everyone.
- (C) Learning about oneself through pseudopsychology is like going to the circus.
- (D) Barnum contributed to the study of pseudopsychology as much as psychologists did.

4. Listen again to part of the lecture. Then answer the question. 

What is the professor's opinion of people who believe inaccurate readings?

- (A) They have not studied the Barnum Effect.
- (B) They are somewhat gullible.
- (C) They should learn more about the effect.
- (D) They have been fooled by the Barnum Effect.

5. According to the professor, why didn't the group of skeptics in Glick's experiment believe the negative readings?



- (A) They did not consider themselves gullible.
- (B) They were only receptive to positive readings.
- (C) They did not believe either set of readings was accurate.
- (D) They were offended by the negative content.

6. What can be inferred about the implications of the Barnum Effect?

- (A) It makes people see themselves differently.
- (B) Little harm can come from the Barnum Effect.
- (C) It does not just affect gullible people.
- (D) It hurts businesses based on pseudopsychology.

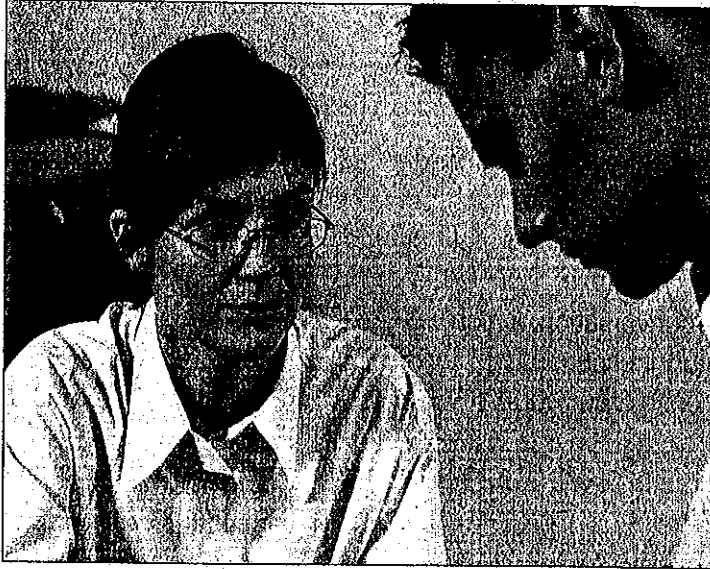
Listen to a discussion in an art history class. **Track 71**





7. What aspect of Chinese art does the class mainly discuss?
- (A) Why the Chinese did not make realistic portrayals
 - (B) How the conception of art made use of themes and symbols
 - (C) The ways that Chinese art looked different from Western art
 - (D) The reasons why some themes were important
8. How could early Chinese art be described?
- (A) It displayed an advanced understanding of perspective.
 - (B) It focused on symbolic representation of various themes.
 - (C) It was heavily influenced by the art of Rome and Greece.
 - (D) It usually featured realistic portrayals of people and scenes.
9. Listen again to part of the discussion. Then answer the question. 
What can be inferred from the student's response?
- (A) He wants the professor to clarify the question.
 - (B) He wants to bring up a different aspect of the question.
 - (C) He does not think the question is relevant to the course.
 - (D) He misunderstands the question.
10. Listen again to part of the discussion. Then answer the question. 
What is the student's opinion of Chinese art?
- (A) He cannot appreciate its complexity.
 - (B) He is conflicted about whether or not he likes it.
 - (C) He finds it meaningful but sometimes complex.
 - (D) He is not interested in learning more about it.
11. What can be inferred about theme selection in Chinese art?
- (A) It makes people aware of the life in everyday objects.
 - (B) It is influenced by the need to show viewers how to live their lives.
 - (C) It does not have any bearing on the symbols used.
 - (D) It depends on what the individual artist wants to portray.
12. Why does the student mention bamboo?
- (A) To describe how nature was portrayed
 - (B) To criticize the use of symbols
 - (C) To give an example of a common symbol
 - (D) To explain why nature was important

Listen to a conversation between a student and a university employee.

Track 72



13. What are the speakers mainly discussing?
- (A) Why the student should major in art history
 - (B) The field of study the student should major in
 - (C) How a degree in psychology will go well with health
 - (D) The reasons why the student picked biology as a major
14. According to the conversation, which fields does the student seem most interested in? Choose 2 answers.
- (A) Psychology
 - (B) Astronomy
 - (C) Health
 - (D) Biology
15. Listen again to part of the conversation. Then answer the question. 
What does the man imply when he says this: 
- (A) He wants the student to be more active about picking a major.
 - (B) He does not think the student is doing enough to narrow her choices.
 - (C) He thinks that the combination of the two would be helpful.
 - (D) He does not understand why she wants to do a double major.
16. What can be inferred about the man's attitude toward the student's interest in art history?
- (A) He does not think it is a genuine interest.
 - (B) He does not think it will hold her interest for long.
 - (C) He thinks it is a better fit for the student.
 - (D) He thinks she has found her true passion.
17. What will the student probably do next?
- (A) Do a double major in psychology and health
 - (B) Stay with her current major
 - (C) Change her major to art history
 - (D) Consider her options longer

Chapter 1 Main Idea Questions

Necessary Skills

- Understanding the overall topic or basic idea of a lecture or conversation
- Understanding the speaker's general purpose in giving a lecture or having a conversation
- Inferring the speaker's purpose or main idea when it is not directly stated

Example Questions

- What is the main topic of the lecture?
- What is the main topic of the conversation?
- What are the speakers mainly discussing?
- What aspect of _____ does the professor mainly discuss?
- What aspect of the problem does the _____ help with?
- What features of each type of _____ does the professor focus on?
- What is the woman's main concern about _____?
- What concerns does the student have about _____?
- Why did the professor mention _____?
- What is the student's motivation for _____?

Strategies

- Pay attention to expressions that indicate the topic:
 - Today's talk is on . . .
 - Today we're going to talk about . . .
 - Now we are going to discuss . . .
- In a conversation, listen for cues that will indicate a speaker's main purpose.
 - How can I help?
 - What do you need?
 - Can you help me with . . .
- Listen for key words that are emphasized or repeated.
- Keep in mind that two or more major ideas together may define the overall topic.

Listen to a lecture in an astronomy class. Fill in the diagram with the information that you hear. **Track 73**

Key Vocabulary

body: a large object in space, such as a planet or a star

perceivable: easily seen

routine: normal; usual

collide: to hit another person or object forcefully

analogous: similar

Mercury vs. The moon

Mercury	Both	The moon
•	•	•

- What is the main topic of the lecture?
 - A comparison of the atmospheric content of two planets
 - A comparison of how two celestial bodies formed
 - A comparison of the surfaces of a planet and the moon
 - A comparison of the causes of craters on two planets
- What aspect of the moon's surface does the professor mainly discuss?
 - How it affects the moon's atmosphere
 - Two of the most visible physical features
 - The raised cliffs and how they were formed
 - The flat areas caused by meteorite impacts

Fill in the blanks to complete the summary.

The professor compares the _____ of the moon and the planet Mercury. The professor first mentions that the moon contains *maria*, which are _____ areas caused by _____ in the moon's early history. The professor then says the surfaces are similar because of the _____ that each has. Last, the professor mentions the unique scarps on Mercury, which are _____ areas that look like wrinkles.

Listen to a lecture in a history class. Fill in the diagram with the information that you hear.

Track 74

Key Vocabulary

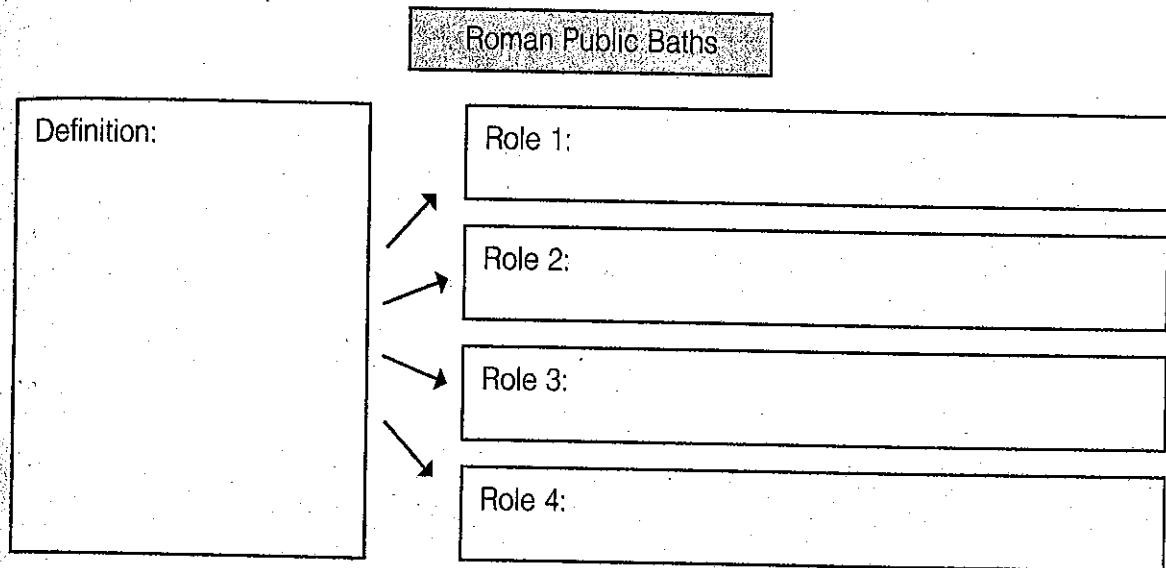
advent: beginning

hygiene: the practice of keeping clean in order to preserve health

fit: in good physical health

frequent: to visit a place often

admission: a fee paid to enter a place



1. What is the main topic of the lecture?
 - (A) Comparing private baths to state-owned baths
 - (B) How Roman politics inspired public baths
 - (C) Negative effects of public baths on hygiene
 - (D) The role of ancient Roman bathhouses
2. What aspect of public baths does the professor mainly discuss?
 - (A) Their role in increasing health and socialization
 - (B) Their effects on the elite citizens within Rome
 - (C) Changes made to baths as they became state-owned
 - (D) The reasons why public baths were inexpensive

Fill in the blanks to complete the summary.

The professor discusses the role that public baths played in Roman culture. First, the professor briefly mentions the increase in _____ before moving on to the way the baths became a part of _____. The professor then mentions how the baths included areas to _____, giving the culture a source of _____. Finally, the professor says that the baths were important centers for _____.

03 Office Hours

Listen to a conversation between a student and a professor. Fill in the diagram with the information that you hear. **Track 75**

Key Vocabulary

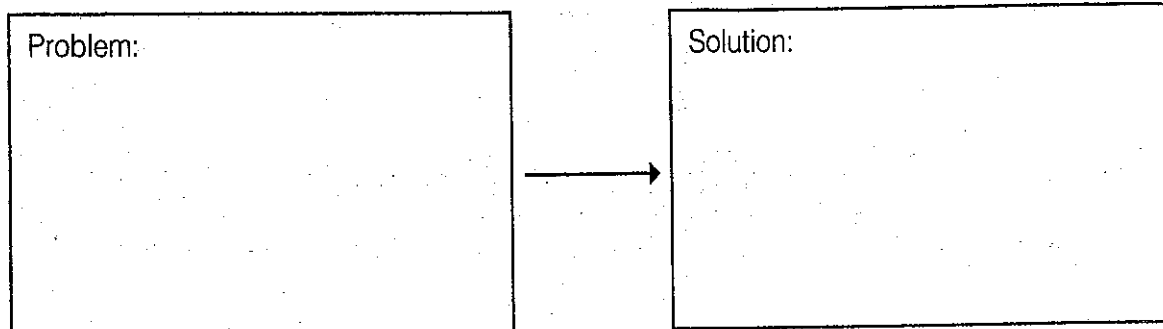
artifact: an object made by a human being that has archaeological or cultural interest

keep track of: to remain aware of something

fall behind: to slow in progress

Independent study: a school project that is done outside of the classroom for credit

feasible: able to be accomplished



1. What is the main topic of the conversation?
 - (A) How to get credit for creating a computer program
 - (B) Why the student needs the professor to sponsor her project
 - (C) Going on a trip for the professor's archaeology class
 - (D) Changing the student's major to computer science
2. Why does the student visit the professor?
 - (A) To get advice concerning her archaeology class
 - (B) To ask if she can get credit for a computer project
 - (C) To express her concern over the professor's lecture
 - (D) To ask him to explain the independent study program

Fill in the blanks to complete the summary.

The student visits the professor because she wants to get _____ for creating a program for an _____ during the summer. The professor describes what is necessary for the project to be approved and offers to _____ the project for the student. The student will view the _____ and gather the correct materials.

04

Service Encounter

READING

LISTENING

SPEAKING

WRITING

PRACTICE TEST

Listen to a conversation between a student and a university employee. Fill in the diagram with the information that you hear. **Track 76**

Key Vocabulary

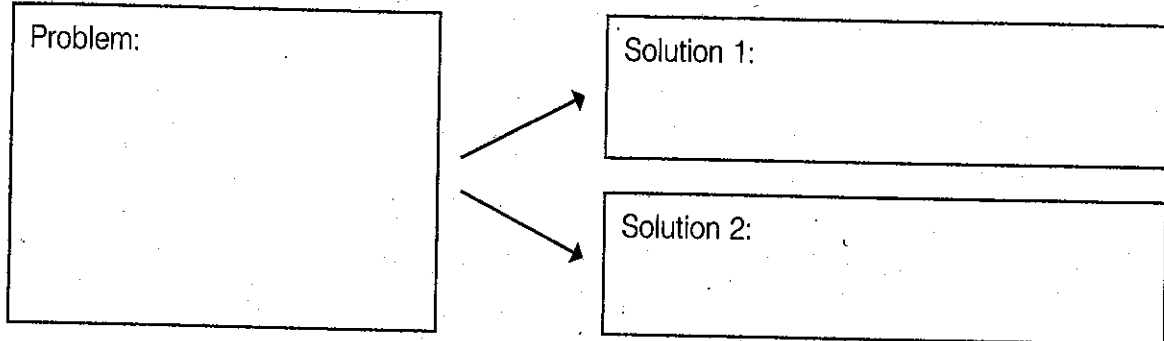
RA: (*resident advisor*) a trained student in charge of supervising a dormitory

run off: to leave quickly

midterm: an examination usually given in the middle of a semester

track down: to find

custodial: pertaining to cleaning and maintenance



1. What is the main topic of the conversation?

- (A) Finding a desk worker with a key
- (B) Getting into a locked dorm room
- (C) Arriving at a midterm on-time
- (D) Retrieving ID out of a locked room

2. What aspect of the student's problem does the desk employee help with?

- (A) Opening the dorm room with a key
- (B) Calling an RA to help the student
- (C) Helping the student retrieve his ID card
- (D) Suggesting whom the student should look for

Fill in the blanks to complete the summary.

The student has _____ his room and asks the desk employee how he can _____ his room. The desk employee discovers that the key is _____ and says _____ has it. She then suggests that the student find _____ or find a custodian that might have a key.

Listen to a lecture in a business class. Fill in the diagram with the information that you hear.

Track 77

Key Vocabulary

vast: very large

exposure: public attention

target: being the goal of something

strict: keeping within specific limits without exception

take note: to pay attention

Outdoor Advertising

Example 1:
Advantage 1:
Advantage 2:

Example 2:
Disadvantage 1:
Disadvantage 2:

- What is the main topic of the lecture?
 - How to successfully advertise outdoors
 - The pros and cons of outdoor advertising
 - The disadvantages of creative advertising
 - Comparing indoor and outdoor advertising
- What aspect of outdoor advertising does the professor mainly discuss?
 - How it can increase interest and cost
 - Whether it is appropriate outdoors
 - Why advertisers choose to use it
 - How it is not possible on television

Fill in the blanks to complete the summary.

The professor discusses the advantages and disadvantages of _____ advertising. He says that this kind of advertising is _____ a lot of people. However, it is also harder to control _____ the ad. The professor then says that these advertisements can be very _____. However, he adds that creativity can be very _____ to accomplish.

06

Film Studies

Listen to a discussion in a film studies class. Fill in the diagram with the information that you hear. **Track 78**

Key Vocabulary

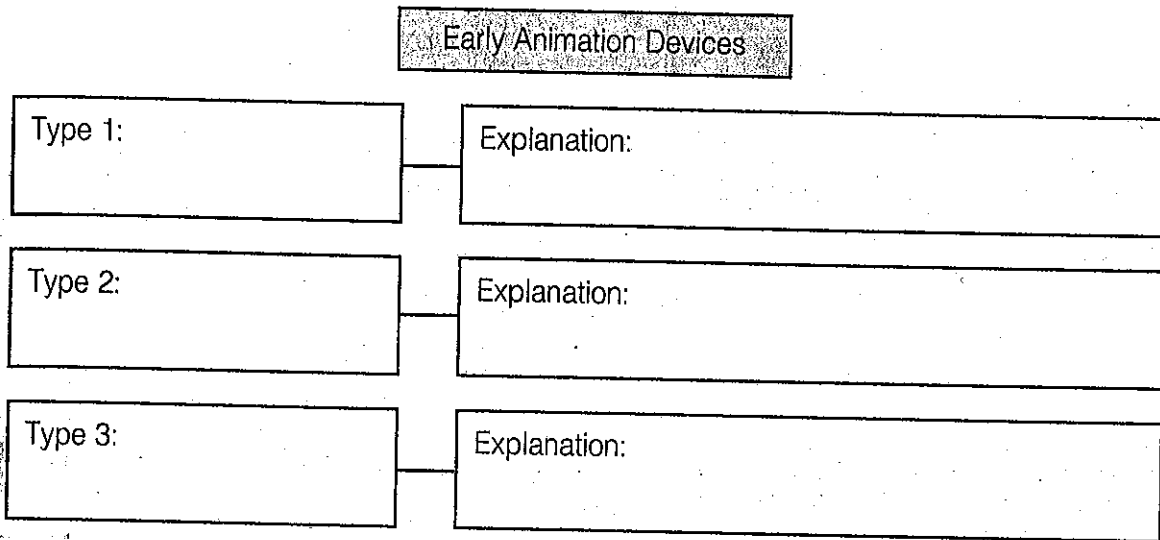
fluid: smooth

static: unchanging; unmoving

housing: a frame or structure that protects part of a machine

jerky: lacking steadiness

sophisticated: complex; advanced



1. What is the main topic of the lecture?

- (A) The process of creating a moving picture
- (B) Information for an animation project
- (C) A description of early animation devices
- (D) The history of film animation techniques

2. What aspect of animation does the professor mainly discuss?

- (A) How each design was based on a wheel
- (B) How mirrors were used in each design
- (C) How many frames each device could display
- (D) How each design improved upon the last

Fill in the blanks to complete the summary.

The professor describes three devices used in early _____. The first was the Phenakistoscope and consisted of pictures _____ on a disc and viewed through slits. The next was called the Kinematoscope and improved upon the Phenakistoscope by adding a _____. Last, the Praxinoscope used a _____ instead of a wheel and used _____ to keep the image steady.

07 Office Hours

Listen to a conversation between a student and a professor. Fill in the diagram with the information that you hear. **Track 79**

Key Vocabulary

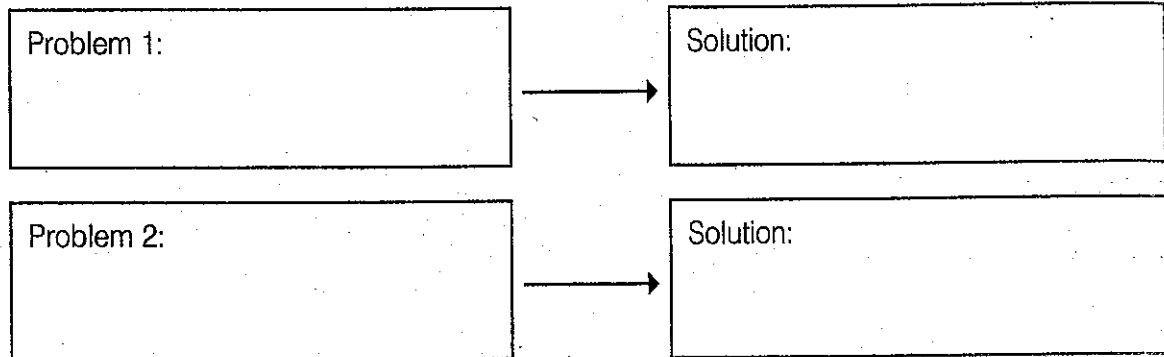
proposal: a written statement describing a plan

engaged: attentive; interested

allude: to refer to indirectly

do (something) justice: to represent accurately and fairly

pull off: to do something successfully



- What is the conversation mainly about?
 - The student's concern over his class performance
 - Whether or not his last test has been graded yet
 - How to research for an upcoming class presentation
 - Whether or not two sources can be used in a paper
- What is the student's main concern about the video?
 - It is too difficult to describe in writing.
 - It does not show the dance's cultural importance.
 - It will not enhance his presentation.
 - It is not appropriate to discuss in a paper.

Fill in the blanks to complete the summary.

The student goes to see the professor to ask about using a _____ and a _____ in a paper. After clearing up some confusion, the professor says that the student can reference the music on the _____ in the paper. However, with the _____, the professor suggests that the student do a presentation to show _____.

08

Service Encounter

Listen to a conversation between a student and a university employee. Fill in the diagram with the information that you hear. **Track 80**

Key Vocabulary

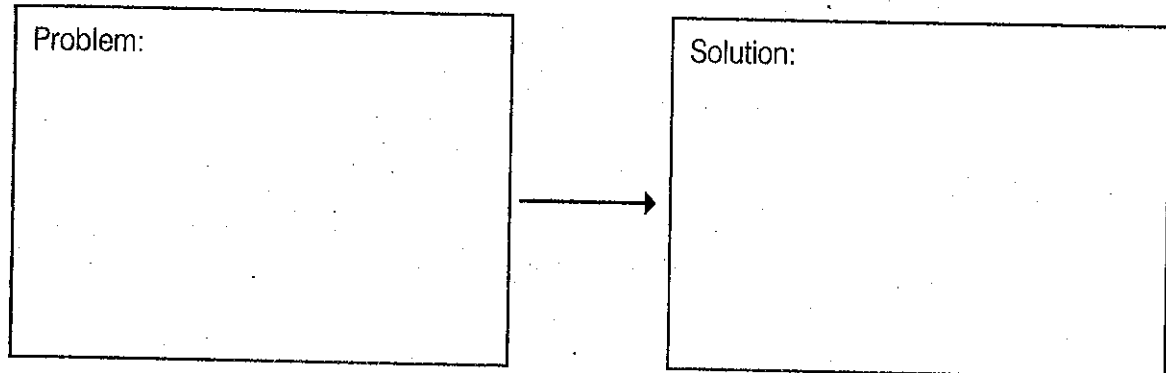
after hours: after the usual closing time

meticulous: complete; with attention to detail

lost and found: a place for the storage of lost items

rounds: a series of visits to specific places in order to perform duties

radio: to contact using a transmitter



1. What is the main topic of the conversation?

- (A) The student needs to study in the library.
- (B) The student has been locked in the library.
- (C) The student's backpack is locked in the library.
- (D) The student has lost his backpack on campus.

2. Why does the student initially go to the campus security office?

- (A) To ask if he can study in the library
- (B) To see if his backpack was found
- (C) To gain access to a campus building
- (D) To check if the library is still open

Fill in the blanks to complete the summary.

The student visits the _____ office late at night because he has left his backpack in the _____, which is now closed for the night. The officer checks the _____ and contacts the other officers to try to find it. They finally contact an _____ who is still in the _____, and the backpack is found.

Listen to a discussion in a sociology class. Fill in the diagram with the information that you hear. **Track 81**

Key Vocabulary

derail: to change the subject; to change from a course

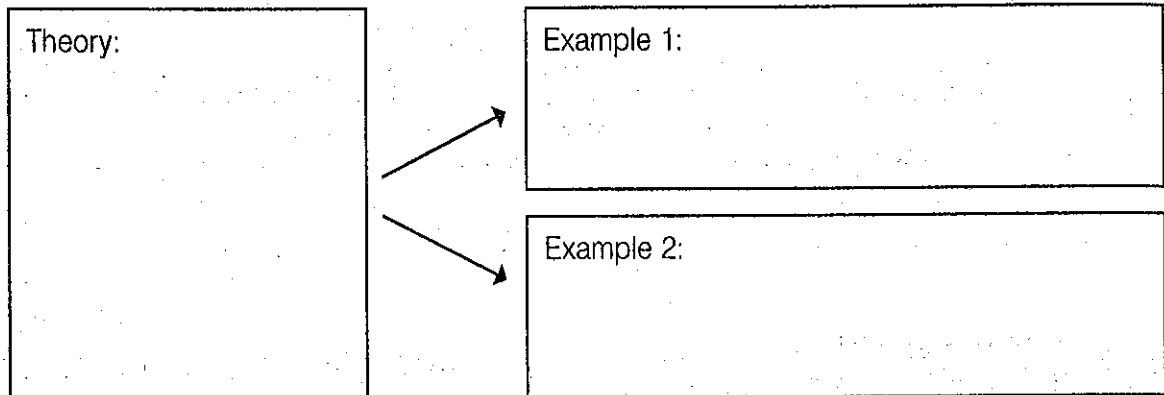
pertinent: appropriate; relevant

prestige: distinction; reputation

viable: practical

pressingly: urgently

Davis and Moore's Principles of Stratification



- What is the main topic of the lecture?
 - Two theories of stratification and their applications
 - A theory and two examples of how it works
 - A theory and the professor's personal experience
 - Theories that explain why some career choices are popular
- What aspect of the theory does the professor mainly discuss?
 - Why it does not apply to low-paying jobs
 - How it encourages a reward system
 - Its applications to the teaching field
 - How it explains the salaries of two jobs

Fill in the blanks to complete the summary.

The professor discusses a theory of _____ by Davis and Moore. The theory says that some jobs have more _____ to encourage people to do them. The professor first discusses a _____ as an example of a difficult job that has a high _____. The professor then discusses a teacher, which is also a difficult and necessary _____, but does not pay well. The professor explains that this happens because the act of _____ is a reward in itself, and does not require a higher pay.

Listen to a lecture in a biology class. Fill in the diagram with the information that you hear.

Track 82

Key Vocabulary

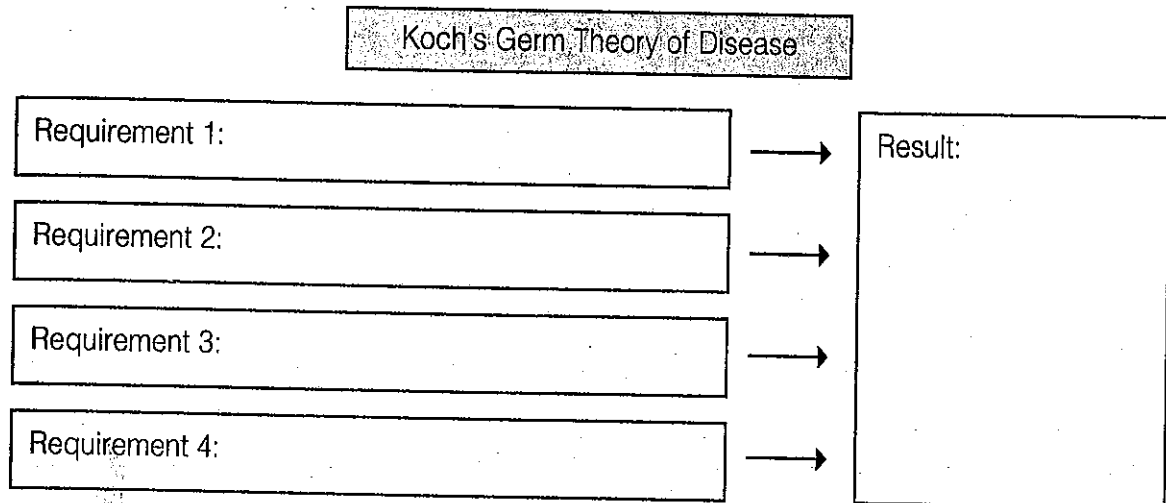
postulate: a required part or condition; a basic principle

oversight: a mistake due to inattention

isolation: the state of being separated from other things

staining: the process by which something is colored in order to make it visible

check out: to be proven correct



- What is the main topic of the lecture?
 - A theory and an example of its use
 - A theory and how it was later disproved
 - How a theory was changed by a disease
 - The steps to find and cure a disease
- What aspect of Koch's postulates does the professor mainly discuss?
 - How they were changed by the discovery of tuberculosis
 - What they are and how they identified tuberculosis
 - How tuberculosis helped Koch prove them
 - Why they were important in curing tuberculosis

Fill in the blanks to complete the summary.

The professor describes Koch's Germ Theory of Disease and his postulates. The postulates require the following: the organism to be _____ in all cases of the disease, a pure _____ to be grown, disease in a _____ animal to be caused by the culture, and similarity in _____ samples to exist between the original culture and a sample from the infected animal. The professor describes how Koch's postulates aided him in discovering the specific organism that causes _____.

Chapter 2

Detail Questions

Necessary Skills

- Taking note of major points and important details of a lecture or conversation
- Listening for signal expressions that identify details, such as the following: *for example, the reason is, on the other hand, I would say*
- Eliminating incorrect answer choices
- Identifying a statement that is not mentioned

Example Questions

- According to the lecture, what is _____?
- Which of the following is true, according to the lecture?
- What does the speaker say about _____?
- What connection does the speaker make between _____ and _____?
- What does the professor suggest the student do?
- Which of the following is true of _____?
- What advice does the professor give to the student about _____?
- According to the discussion, how did _____?
- According to the speaker, why do _____?
- According to the conversation, why must the student _____?
- According to the speaker, who were _____?
- According to the lecture, what kinds of _____? Choose 2 answers.

Strategies

- Since answers to questions are generally found in order in the passage, it is helpful to take notes in the order of what you hear.
- Detail questions do not require inference. Choose what speakers actually say.
- In a lecture, detail questions are about information related to the following: new facts, descriptions, definitions of terms/concepts/ideas, reasons, results, and examples.
- Incorrect choices may repeat some of the speakers' words but do not reflect correct information from the lecture or conversation.

01 Art History

Listen to a lecture in an art history class. Fill in the diagram with the information that you hear. **Track 83**

Key Vocabulary

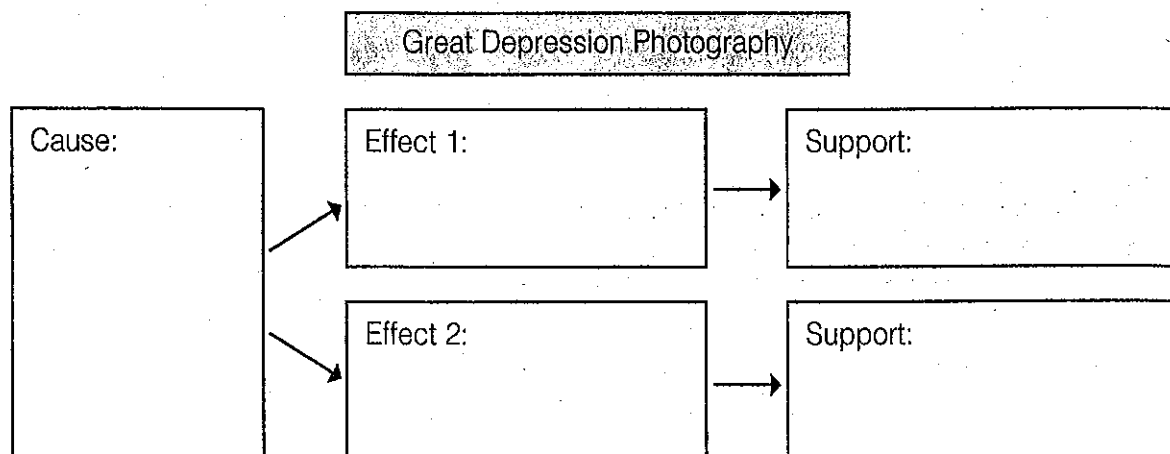
rural: relating to parts of a country that are not near cities or populated areas

migrate: to travel to another place

arduous: very difficult and involving lots of work

representation: a sign; a symbol

documentary: a movie, program, or photography dealing with real people and events



1. According to the professor, how were photographs taken during the Great Depression different from earlier photographs?
 - (A) They focused more on people as subjects.
 - (B) They portrayed the real struggles and emotions of their subjects.
 - (C) They were taken with people facing the camera.
 - (D) They were the first photographs documenting American history.
2. Why did the government program hire photographers?
 - (A) To take photos specifically of farmers
 - (B) To record a historical event
 - (C) To introduce a new type of photography
 - (D) To document conditions around the country
3. According to the professor, who is Dorothea Lange?
 - (A) A photographer
 - (B) A farmer's wife
 - (C) The mother of a migrant worker
 - (D) The subject of a photograph

Fill in the blanks to complete the summary.

.....

The professor explains that during the Great Depression, photographers began to take photos of _____ in difficult _____. A government program hired photographers to take pictures, and many photographers focused on _____ who _____ to California because their farms had been destroyed by dust storms. These photos went on to influence later _____.

.....

Listen to a lecture in a business class. Fill in the diagram with the information that you hear.

Track 84

Key Vocabulary

conflict: a state of disagreement between people or groups
suppress: to hold back or stifle a situation
component: a part or feature of something

hinder: to obstruct or delay the process of something
alternative: another possibility

Traditional Theory vs. Interactionist Theory

Traditional	Both	Interactionist
• • •	•	• • •

- According to Taylor, how does the proper use of scientific management affect conflict?

(A) It removes conflict from the workplace.
 (B) It helps managers to measure conflict.
 (C) It contributes to more conflict in the workplace.
 (D) It solves organizational disputes between workers.
- What did interactionists like Robbins think about organizational conflict?

(A) Organizational conflict is always beneficial to employees.
 (B) Employers should manage conflict to achieve maximum productivity.
 (C) Conflict is necessary in order to maximize productivity.
 (D) Managers should eliminate conflict to increase workplace productivity.
- According to Robbins's theory, what can be a positive result of conflict? Choose 2 answers.

(A) Business expansion
 (B) Employee satisfaction
 (C) Project Analysis
 (D) Idea generation

Fill in the blanks to complete the summary.

The professor describes two views of _____ in organizations. Frederick Taylor thought conflict was harmful at work and _____ productivity. He believed that managers could avoid conflict through proper use of scientific _____. Conversely, Robbins's _____ view proposed that _____ can also have enormous _____ to an organization. He says that conflict is unavoidable and can be managed in ways to raise _____.

03 Office Hours

Listen to a conversation between a student and a professor. Fill in the diagram with the information that you hear. **Track 85**

Key Vocabulary

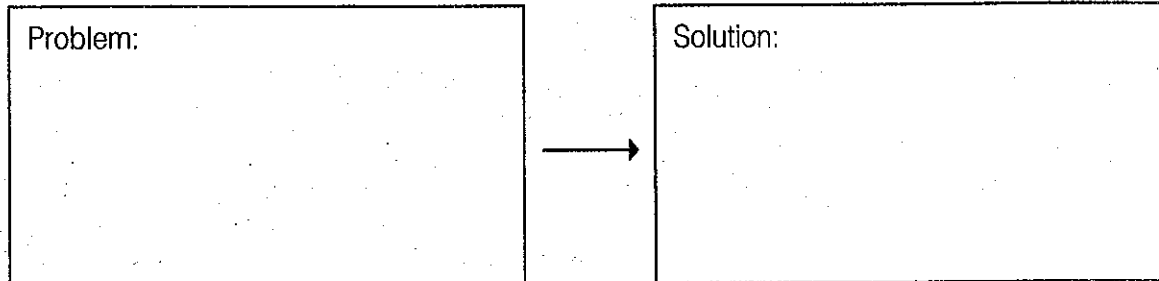
genre: a class or style in film, writing, or art, which can be identified by certain characteristics

stress: to emphasize

imagery: mental pictures or the products of imagination

description: a statement about what someone or something is like

flattered: feeling pleased at someone's attentions



- What is a problem that creative writers have, according to the student?
 - They have difficulty putting the description of the world into words.
 - They cannot use the five senses in their writing.
 - They use too much description in their works.
 - They have difficulty getting approval for the course.
- Why hasn't the professor been able to teach a nature-writing class?
 - There has not been enough demand for it.
 - Most people do not consider nature-writing a genre.
 - The head of the department would not approve it.
 - There are not enough people to sign up for one.
- What does the professor suggest the student do to have the class offered?
 - Encourage students to develop a course
 - Provide the department head with the names of thirty students
 - Persuade thirty students to send letters to the department head
 - Complain to the department head about the creative writing classes

Fill in the blanks to complete the summary.

The student thinks that _____ would make a good class. The _____ said she had tried to get it approved in the past, but that the _____ did not think the course would be popular enough. The professor says that if the student can get _____ students to send letters to the _____, then he would probably approve the class.

04

Service Encounter

Listen to a conversation between a student and a university employee. Fill in the diagram with the information that you hear. **Track 86**

Key Vocabulary

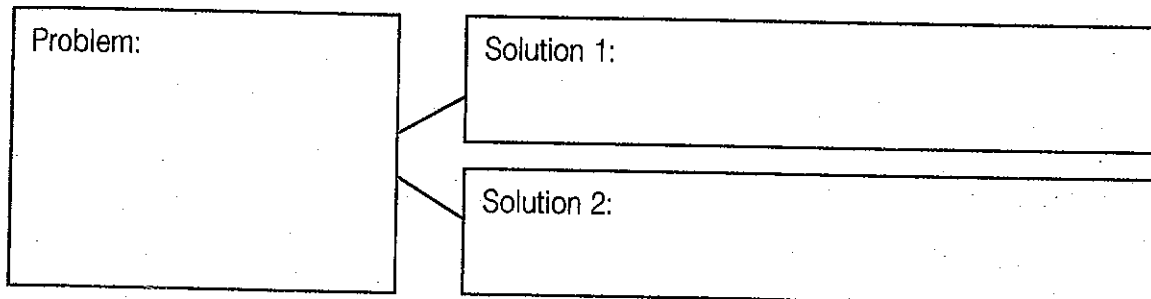
hectic: very busy

downgrade: to bring to a lower status

arrange: to make preparations for

manage: to do or accomplish

dilemma: a problem



- Which of the following is true of the student's initial meal plan?
 - It is a seven-meal plan.
 - It is a ten-meal plan.
 - It is a fourteen-meal plan.
 - It is a twenty-meal plan.
- Why does the student want to change his meal plan?
 - He has been wasting a lot of potential meals.
 - He does not understand his meal plan.
 - He wants to have more meals each week.
 - He does not want to have a meal plan.
- According to the discussion, what are "Meal Points?"
 - Discounts at off-campus restaurants
 - Points to win free meals and snacks
 - A way to purchase meals and snacks
 - A method of buying supermarket items

Fill in the blanks to complete the summary.

The student wants to change his _____ because he has a _____ schedule and is not using his current _____ to its full potential. He first settles for a plan with fewer _____. However, he still thinks that he will be _____ meal credits. The employee suggests "_____ " that will allow him to buy meals when he needs to.

05 Astronomy

Listen to a discussion in an astronomy class. Fill in the diagram with the information that you hear. **Track 87**

Key Vocabulary

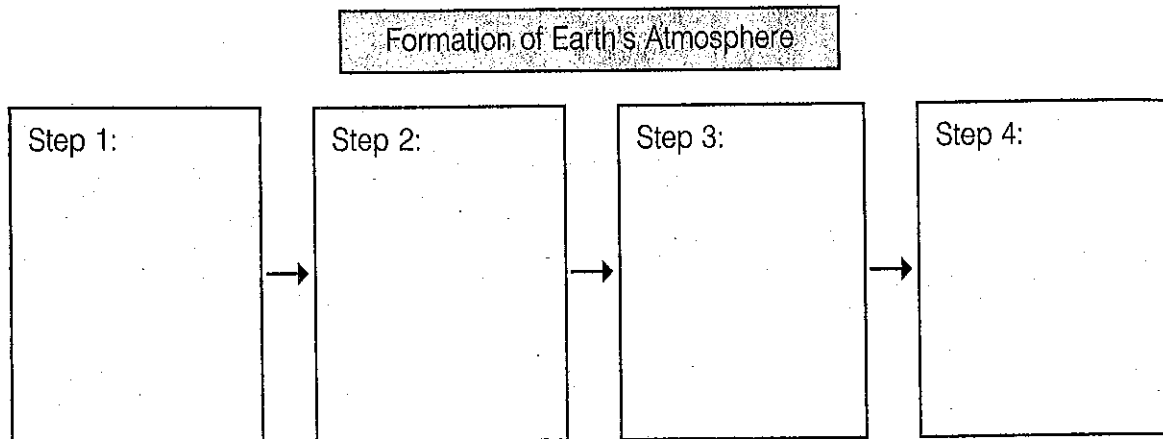
interior: the inside part of something

dense: thick; closely packed together

dissolve: to mix or dissipate into a liquid

catalyst: a thing or a person that causes something to happen

photosynthesis: the process in which plants use energy from the sun to make their own food



- According to the professor, what caused hydrogen and helium to escape from Earth's atmosphere?
 - Evolution of plants
 - Wind from the sun
 - Heat from the planet
 - Outgassing
- After the process of outgassing, which gases made up most of Earth's atmosphere? Choose 2 answers.
 - Oxygen
 - Carbon dioxide
 - Water vapor
 - Hydrogen
- What does the professor say caused life to form?
 - The introduction of oxygen to the atmosphere
 - The formation of liquid water on the planet
 - The cooling of the Earth
 - The process of photosynthesis

Fill in the blanks to complete the summary.

The professor explains how the _____ was formed. First, solar wind blew the _____ and helium gases into space. Next, activity from the Earth's interior released _____, carbon dioxide, and nitrogen into the air (outgassing), creating a hot, dense _____. Once the Earth cooled, water vapor condensed into precipitation. Once algae and plants evolved, they absorbed carbon dioxide and released _____ into the atmosphere.

Listen to a lecture in a zoology class. Fill in the diagram with the information that you hear.

Track 88

Key Vocabulary

dominant: more important or powerful than others

solitary: spending a lot of time alone

overthrow: to force a leader out of the position of power

exception: a person or thing that is different from others

hierarchy: a system for organizing individuals in a vertical group or organization

Gorillas vs. Chimpanzees

Gorillas	Both	Chimpanzees
•	•	•
•		•
•		•

- According to the professor, in which aspect do chimps and gorillas differ most?
 - Physical traits of the dominant male
 - Group organization
 - Intelligence
 - DNA patterns
- What is a similarity that chimps and gorillas share?
 - Large group sizes
 - Subgroups
 - Brute strength
 - Male dominance
- What does the professor say that Mike used to gain dominance of the group?
 - His intelligence
 - His fists
 - His large size
 - Kerosene lamps

Fill in the blanks to complete the summary.

The professor discusses the similarities and differences between _____ and _____. These animals share similar _____ and live in male-dominated societies. However, _____ groups are smaller, consist of only one male per group, and rely on _____ to determine the leader. _____ groups are larger, can consist of several males per group, and have been known to rely on _____ to determine the leader.

07 Office Hours

Listen to a conversation between a student and a professor. Fill in the diagram with the information that you hear. **Track 89**

Key Vocabulary

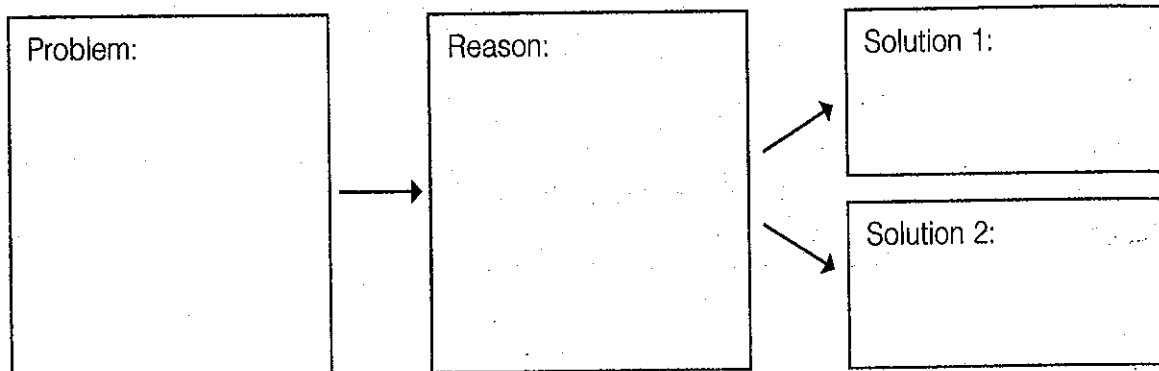
barely: scarcely or almost not

specify: to explain something in a detailed way

key: very important

conciseness: using only a few words in a way that is easy to understand

rely: to be dependent on someone or something



- What is the student's problem?
 - She has been doing poorly on tests.
 - She thinks the tests are too hard.
 - She did not use her notes to study.
 - She did not read the proper material.
- What advice does the professor give to the student about studying for tests?
 - Rely mostly on her study guides
 - Rely mostly on her notes
 - Rely mostly on the reading
 - Rely mostly on the lectures
- What does the professor say about study guides?
 - The student should fill them out more thoroughly.
 - They do not reflect test material.
 - The student's study guide is properly filled out.
 - Study guides are only outlines.

Fill in the blanks to complete the summary.

The student goes to the _____ to discuss questions on the test that were not in _____. The study guide only briefly listed the _____ topics. The professor informs the student that she should also use her _____ to study for tests rather than _____ on the study guide, as it is not an in-depth list of everything that will be on the test.

08

Service Encounter

Listen to a conversation between a student and a university employee. Fill in the diagram with the information that you hear. **Track 90**

Key Vocabulary

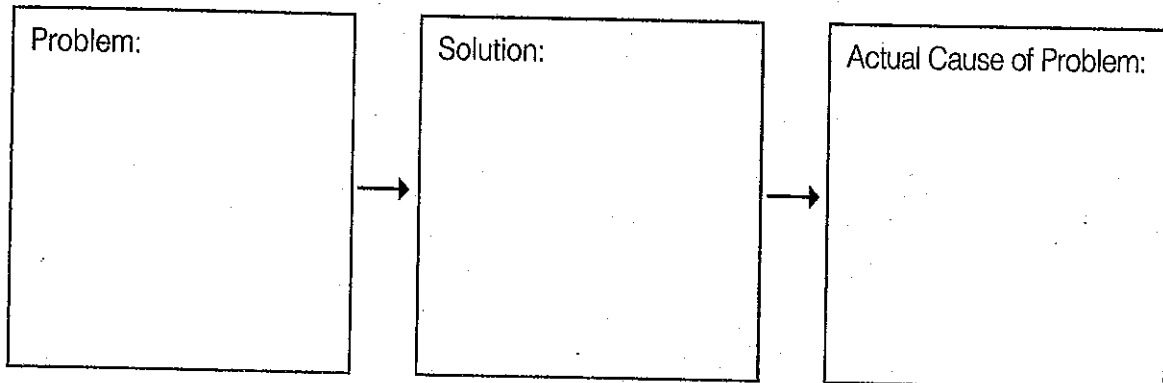
yank: to pull someone or something suddenly and sharply

equipment: the tools or machines needed for a specific activity

resistance: a force that slows a moving object

insert: to put something into something else

valuable: worth a lot of money



- What is the student's problem initially?
 - She suspects a pin fell out of a machine.
 - She believes the cost to repair the machine is too high.
 - She thinks she broke a cable in the machine.
 - She feels the machine needs routine maintenance.
- What is required of students who break gym equipment? Choose 2 answers.
 - Pay for repairs
 - Buy a new machine
 - Pay a fee.
 - Fill out a form
- What is the cause of the problem with the machine?
 - The steel cord on the machine snapped.
 - The pin holding the weights together fell out.
 - The machine will not lift the weights.
 - The student yanked the bar too hard.

Fill in the blanks to complete the summary.

A student approaches a _____ and says she may have broken the _____ machine. She thinks she will have to pay for it completely, but the employee tells her the school's _____ will cover it. She has to fill out a form and pay a _____. The employee walks over to the machine and realizes that it is not broken. A part that holds the _____ together has fallen out, and just needs to be re-_____.

Listen to a lecture in a psychology class. Fill in the diagram with the information that you hear. **Track 91**

Key Vocabulary

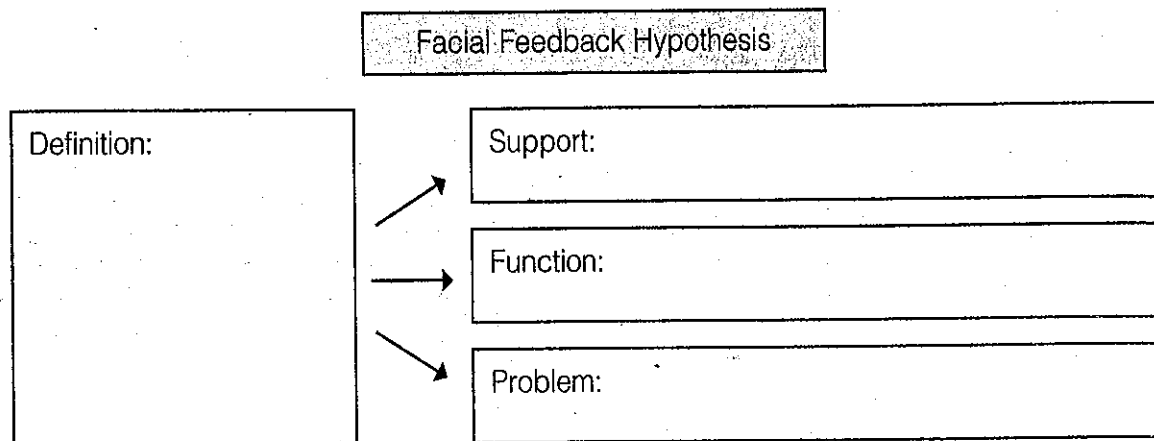
hypothesis: an educated guess to explain something that has not been proved correct

emotion: a feeling; state of mind

register: to notice or understand something

activate: to make something start working

exaggerate: to overstate something



- What does the facial feedback hypothesis suggest?
 - Our brain sends signals to stimulate emotions.
 - Emotions depend solely on our facial expressions.
 - Our facial expressions rely on emotional feedback.
 - All cultures make similar emotional facial expressions.
- Which of the following happens after the brain registers a sad situation, according to the theory?
 - Our face provides feedback to our emotions.
 - We react emotionally to the situation.
 - Our facial muscles form the appropriate expression.
 - The brain sends out a signal.
- What can a smile do for someone in a sad situation, according to the professor?
 - Nothing
 - Diminish the person's sadness
 - Make the person feel happier
 - Eliminate the sad emotion

Fill in the blanks to complete the summary.

The professor explains that the _____ hypothesis states that our _____ are activated by the expressions we make during an _____ situation. Tests of this hypothesis showed that _____ do not cause emotions to happen, but that they can _____ or _____ an emotion that a person is already experiencing.

Listen to a discussion in a geography class. Fill in the diagram with the information that you hear. **Track 92**

Key Vocabulary

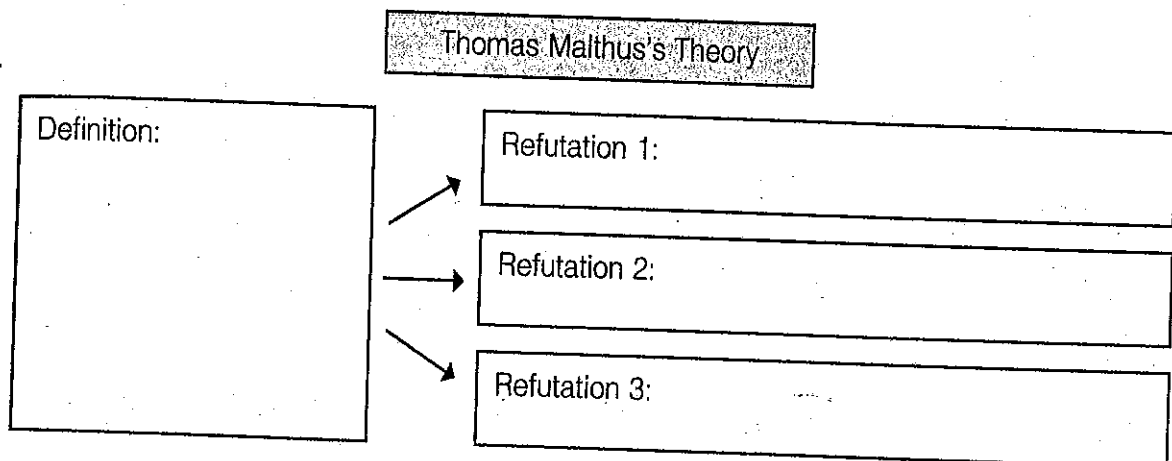
sustain: to provide the conditions for life; to provide strength

surpass: to be greater than something else

famine: a lack of food that continues for a long time

inevitable: impossible to prevent

catastrophe: an event that causes a lot of damage and suffering



- According to Malthus, what has to happen in order to put the population back into balance?
 - Increased death rate
 - More use of technology
 - Lower birth-rate
 - Decrease in food production
- What did Malthus believe would happen with wealthier populations?
 - They would use up resources quicker.
 - They would experience considerable food shortages.
 - They would desire more children.
 - They would be thrown into poverty.
- According to the passage, which of the following is correct about the world's population?
 - Technology has significantly reduced the population rate.
 - The world has enough food to sustain the population.
 - Places like Europe have an increasing population rate.
 - It is being kept under control.

Fill in the blanks to complete the summary.

Thomas Malthus predicted that the _____ would increase until there would not be enough _____ for everyone. He predicted _____ such as worldwide _____, and believed the only way to reduce _____ growth was through massive _____. He also thought that the wealth of economically developed countries would encourage their inhabitants to have more children. Both of his predictions were _____.

Vocabulary Review 1

Instructions: Choose the best word or phrase to complete each sentence.

- The clown's makeup _____ her happy smile.
(A) activated
(B) exaggerated
(C) migrated
(D) postulated
- Because my sister played basketball really well in high school, she was able to get a full _____ for college.
(A) admission
(B) fee
(C) scholarship
(D) tuition
- Translating even a very short poem can be quite an _____ task.
(A) analogous
(B) arduous
(C) inevitable
(D) interior
- The student was _____ by the praise of his classmates for his presentation.
(A) dissolved
(B) engaged
(C) flattered
(D) sophisticated
- If I don't read one chapter of the book every night, I'll _____ the rest of the class.
(A) fall behind
(B) check out
(C) run off
(D) track down
- Because the bus was late, we were _____ able to make it to class on time.
(A) barely
(B) constantly
(C) exclusively
(D) pressingly
- My friend said her semester abroad was a _____ part of her undergraduate studies.
(A) valuable
(B) various
(C) vast
(D) viable
- People abandoned the cities of the valley around 1500 BCE due to a severe _____.
(A) emotion
(B) famine
(C) hygiene
(D) routine

Instructions: Choose the word or phrase closest in meaning to the underlined part.

- The officer asked for a detailed explanation of what happened at the time of the accident.
(A) description
(B) documentary
(C) exception
(D) isolation

10. As you walk along the forest's path, be sure to notice the various bird songs you can hear.
- (A) pull off
 (B) do justice to
 (C) keep track of
 (D) take note of
11. The researcher came up with an interesting experiment to test his idea.
- (A) basis
 (B) hypothesis
 (C) photosynthesis
 (D) tuberculosis
12. Industries today face a difficult question: how to increase production without causing further harm to the environment.
- (A) catalyst
 (B) catastrophe
 (C) conflict
 (D) dilemma
13. The number of visitors to our website this year has already gone beyond last year's total number of visitors.
- (A) specified
 (B) suppressed
 (C) surpassed
 (D) sustained
14. When something in the dorm room breaks, the housing office will send someone to fix it.
- (A) reference
 (B) register
 (C) repair
 (D) review

15. The rules that must be followed during the test are tough, but they have to be because the test results are very important.

- (A) dominant
 (B) frequent
 (C) pertinent
 (D) strict

Instructions: Write the missing words. Use the words below to fill in the blanks.

hectic midterm RAs
 rounds stress

The following information is for all students living in campus housing. During the week of

16. _____ exams, we would like to remind students to be considerate of others. Students' 17. _____ schedules and heavy course loads mean that others living on your floor may be studying late into the night. We would like to 18. _____ the importance of "quiet hours" after nine p.m. The 19. _____ assigned to each floor of the dorms will be making 20. _____ between nine p.m. and 11 p.m. to enforce "quiet hours."

Instructions: Match the words that are similar.

- | | |
|--------------|-----------------|
| 21. derail | (A) alternative |
| 22. arrange | (B) manage |
| 23. alone | (C) sidetrack |
| 24. proposal | (D) solitary |
| 25. choice | (E) suggestion |

Mini Test 1

01 Sociology

Listen to a lecture in a sociology class. **Track 93**

Key Vocabulary

reveal: to show

consumption: the amount that someone eats or drinks

disposal: the act of throwing away

coin: to suggest or make up (as in the use of a new word)

legitimate: real; accepted

decipher: to interpret; to make sense of

discard: to throw away

divulge: to tell; to bring to light

decompose: to rot; to decay

boggle: to amaze; to astound

predicament: a difficult situation

1. What is the lecture mainly about?
 - (A) A field of study that examines people's trash
 - (B) How studying trash can teach about ancient cultures
 - (C) Why some people are interested in studying trash
 - (D) The reasons why trash should be properly disposed
2. What aspect of garbology did the professor mainly discuss?
 - (A) Why studying trash is sometimes the only option
 - (B) The types of trash left by different social classes
 - (C) What scientists can learn by studying trash
 - (D) The facts that garbage reveals about a culture
3. According to the professor, how is garbology like an archeological dig?
 - (A) It is based on examining fossilized remains.
 - (B) Archeologists sometimes only have trash to study.
 - (C) It uses the remains from a culture to learn about it.
 - (D) They both search and study the same items.
4. How did garbology originate?
 - (A) It was created at the University of Arizona.
 - (B) A.J. Weberman dug through a celebrity's trash.
 - (C) Archeologists needed a system for deciphering garbage.
 - (D) Fans wanted to learn more about a famous singer.
5. According to the passage, why were few soup cans found in trash cans of the rich?
 - (A) Rich people do not have a great need for prepackaged food.
 - (B) The rich eat less soup than the poor or the middle class.
 - (C) Cooks for the rich prefer to make other types of food than soup.
 - (D) Rich people typically eat in restaurants and not at home.
6. According to the passage, which of the following is true of newspapers?
 - (A) They decay more quickly than plastics.
 - (B) They first appeared in landfills in the 1950s.
 - (C) They comprise fifteen percent of landfill items.
 - (D) They are now prohibited in some landfills.

02 Psychology

Listen to a discussion in a psychology class.

Track 94

Key Vocabulary

perceive: to see; to understand

foundation: a basis

interpretation: a logical understanding

notion: an idea; a way of thinking

clarify: to make clear

distinction: a difference

embody: to represent; to be a symbol or expression of an idea or quality

Innate: existing from birth

7. What are the speakers mainly discussing?
- A theory of interpersonal communication
 - The formation of personal theories
 - Harré's theory of language acquisition
 - The role of the community in the sense of person
8. What aspect of understanding human experiences does the class discuss?
- How people can change their opinions of the world
 - Why people create incorrect opinions of the world
 - The factors involved in the creation of the self
 - The various roles that people have to play in organizations
9. What are personal theories?
- Ways of understanding the public self
 - Systems that help people classify their experiences
 - Theories about the origin of society
 - Models for classifying different people
10. Which of the following statements is true according to Harré's theory?
- People help form the way others view them.
 - The self can never be aware of the person.
 - People can understand themselves by studying others.
 - The notion of the person develops before the idea of the self.
11. Which of the following has to do with a person's private sense of self?
- Notion of community
 - Notion of person
 - Notion of self
 - Notion of individual
12. Where does the idea of self originate?
- It is something that is innate in everyone.
 - It is constructed through experiences.
 - It is inherited from family members.
 - It is taught through roles in the community.

03 Office Hours

Listen to a conversation between a student and a professor. **Track 95**

Key Vocabulary

circumstance: a situation

recuperate: to recover

priority: a first choice; an option of highest importance

extension: an added amount of time to a deadline

steadfastly: without changing or wavering

redeem: to bring up to some past better level; to improve

first and foremost: before anything else

chunk: a big piece

13. What problem does the student have?
- (A) She had to go back to her hometown.
 - (B) She cannot honor the extension.
 - (C) She thinks she cannot complete her paper on time.
 - (D) She has not met the professor's expectations.
14. What are the speakers mainly discussing?
- (A) How the student can improve her next essay
 - (B) Why the professor cannot offer extra credit
 - (C) The reasons why the student has not studied for the exam
 - (D) Why the professor cannot give the student more time
15. Which of the following is true according to the student?
- (A) She has been busy with other classes.
 - (B) She has been visiting her sick aunt.
 - (C) She did not understand the concepts.
 - (D) She feels the report topics are too similar.
16. Why does the professor refuse the student's request?
- (A) The semester will end soon.
 - (B) It is against his policy.
 - (C) He feels she needs a tutor instead.
 - (D) He wants her to retake the class later.
17. What advice does the professor give the student?
- (A) To work hard to complete the paper on time
 - (B) To hand in the paper later than the due date
 - (C) To try to make her group happy with her
 - (D) To focus all her attention on the final exam

Chapter 3

Function Questions

Necessary Skills

- Understanding what a speaker is trying to achieve through what is said
- Inferring a speaker's reason for saying a certain sentence or phrase
- Using the context to figure out the real meaning of a sentence or phrase
- Recognizing the tone of voice, intonation, and sentence stress that a speaker uses to show his or her intended meaning

Example Questions

Function questions will not appear during the test. You will only hear them.

- Listen again to a part of the conversation. Then answer the question.

You will hear a few lines of the lecture or conversation again.

- Why does the _____ say this:

You will hear part or one line of the previous excerpt again.

- The following types of function questions may appear during the test:

- What is the purpose of the _____ response?
- What does the _____ imply when he/she says this:
- What can be inferred from the _____ response to the _____?

Strategies

- Listen for the overall organization of the lecture or conversation and think about whether the purpose is to describe, explain, compare, or give an opinion.
- Consider the relationship between the speakers and the context in which the speakers meet.
- Use clues like intonation to help you understand the meaning behind the words.

Listen to a lecture in a psychology class. Fill in the diagram with the information that you hear. **Track 96**

Key Vocabulary

conventional: pertaining to accepted standards

attain: to achieve; to accomplish; to get







impact: an effect

conform: to act according to something

quail: a worry

Kohlberg's Theory of Moral Development

Stage 1:	Stage 2:	Stage 3:
Description:	Description:	Description:

- Listen again to part of the lecture. Then answer the question. 
Why does the professor say this: 
 - To give herself time to think
 - To tell the student to take notes
 - To transition to her next point
 - To rephrase her use of a term
- Listen again to part of the lecture. Then answer the question. 
Why does the professor say this: 
 - She does not think the students understand.
 - She is correcting her own error.
 - She is emphasizing the point that follows.
 - She is returning from a digression.
- Listen again to part of the lecture. Then answer the question. 
What does the professor mean when she says this: 
 - She believes subjective actions are common.
 - She is asking the students to respond to a question.
 - She is summarizing the information in her lecture.
 - She is giving an example of the post-conventional stage.

Fill in the blanks to complete the summary.

The professor discusses Lawrence Kohlberg's Theory of Moral Development, which is separated into _____ stages that fall into _____ categories. In the pre-conventional stages, people only consider _____. In the _____ stages, people develop _____ reasoning. In the post-conventional stages, people begin to do something because they know it benefits _____.

Listen to a lecture in a philosophy class. Fill in the diagram with the information that you hear. **Track 97**

Key Vocabulary

Influential: able to have a powerful effect on people or events

causality: the relation of cause and effect in an event


advocate: to promote; to be in favor of something


substantiate: to verify; to confirm

Intuition: an insight; an instinct


Objectivism vs. Solipsism


Objectivism	Both	Solipsism
• •	•	• •

1. Listen again to part of the lecture. Then answer the question. 

Why does the professor say this: 


- (A) To suggest that most philosophical ideas involve causality
 (B) To examine the finer points of the ideas being compared
 (C) To define a major characteristic of the two theories
 (D) To argue that the theories involve physical things


2. Listen again to part of the lecture. Then answer the question. 

Why does the professor say this: 

- (A) To clarify her previous point

- (B) To correct a mistake she made
 (C) To offer an example of the information
 (D) To show how the theories are similar

3. Listen again to part of the lecture. Then answer the question. 

What does the professor mean when she says this: 

- (A) She is asking the students to respond.
 (B) She is trying to convince the students of her point.
 (C) She is struggling to express her meaning.
 (D) She is changing the topic of the discussion.

Fill in the blanks to complete the summary.

The professor compares objectivism and solipsism. She says that objectivists believe that a world exists _____ the mind, while solipsists believe that _____ exists outside of how we _____ it. In addition, objectivism says that our _____ prove the existence of things outside of the mind, while solipsism argues that our mind _____ those senses.

03 Office Hours

Listen to a conversation between a student and a professor. Fill in the diagram with the information that you hear. **Track 98**

Key Vocabulary

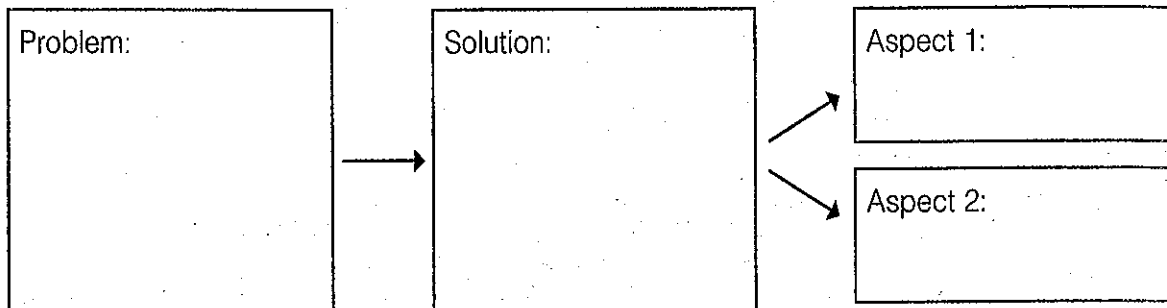
suggestion: an idea; a piece of advice

opportunity: a chance to do something

assist: to help

permit: to allow

Invaluable: priceless; very useful



- Listen again to part of the conversation. Then answer the question. What does the professor mean when he says this:
 - He is confident in his own abilities as a college professor.
 - He was not trying to cause the student concern about her grade.
 - He is unsure of how well most of the other students did on their tests.
 - He was about to grade the student's test when she came to his office.
- Listen again to part of the conversation. Then answer the question. What does the professor mean when he says this:
 - He is trying to convince the student to change her mind.
 - He is emphasizing that he was not well prepared for his first job.
 - He wants to motivate the student by referencing his experiences.
 - He feels that all students should take an independent study course.
- Listen again to part of the conversation. Then answer the question. What does the student mean when she says this:
 - She does not want to take the independent study course.
 - She is unsure of the professor's suggestion.
 - She does not want to add anything more to her schedule.
 - She is doubtful that she is qualified for the course.

Fill in the blanks to complete the summary.

The student visits the _____ office to discuss her concerns about her future in _____. The professor responds by giving two different suggestions. The first is that she just simply not _____. However, when the student continues to ask for advice, the professor suggests that she consider doing an _____ course.

04

Service Encounter

Listen to a conversation between a student and a university employee. Fill in the diagram with the information that you hear. **Track 99**

Key Vocabulary

association: an organization; a group

coverage: the benefits given through insurance

policy: a legal document describing a particular service or its rules

extensive: widespread; complete

brochure: a piece of promotional material containing information

Alumni Health Insurance

Advantage 1:

Disadvantage 1:

Advantage 2:

Disadvantage 2:

Advantage 3:

Disadvantage 3:

1. Listen again to part of the conversation. Then answer the question.

What does the woman mean when she says this:

- (A) The student should not get coverage.
- (B) The student cannot receive coverage after graduation.
- (C) The student is healthy enough to be approved.
- (D) The student's health is a problem.

(C) To suggest that the policy does not meet his needs

(D) To state that he does not need health insurance

2. Listen again to part of the conversation. Then answer the question.

Why does the student say this:

- (A) To express disappointment in the price of the insurance
- (B) To ask the nurse to explain the price of the insurance policy

3. Listen again to part of the conversation. Then answer the question.

What does the woman mean when she says this:

- (A) The student should consider the policy.
- (B) All students should have insurance.
- (C) The student should research another policy.
- (D) The university should continue to offer insurance.

Fill in the blanks to complete the summary.

The student visits the university health office to find out about _____. The woman explains that it is available for any student who has _____, and then mentions a policy that costs _____ dollars a month and requires a _____ deductible and _____ co-pay on prescriptions. The student feels that this policy would not be beneficial due to its _____.

05 Business

Listen to a discussion in a business class. Fill in the diagram with the information that you hear. **Track 100**

Key Vocabulary

devise: to make; to plan; to scheme
appeal: an interest; an attraction
interactive: participatory

establish: to build or begin; to found
sporadically: occasionally; infrequently

Magazine Advertisements

Advantage 1:
Advantage 2:
Advantage 3:

Disadvantage 1:
Disadvantage 2:
Disadvantage 3:

- Listen again to part of the discussion. Then answer the question. What does the professor mean when he says this:
 - The test given in the last class was a difficult one.
 - The test caused many absences during the last class.
 - The students seem unenthusiastic about the test.
 - The students received poor grades on the last test.

- Most magazine reach their target markets.
- Magazine publicity is very effective.
- Choosing the right magazine is valuable.
- Customer loyalty is an important benefit.

- Listen again to part of the discussion. Then answer the question. What does the professor mean when he says this:

- Listen again to part of the discussion. Then answer the question. Why does the student say this:
 - To clarify her question about magazine advertising
 - To illustrate her point about specific advertisements
 - To give an example of a creative way of advertising
 - To differentiate between types of magazine advertising

Fill in the blanks to complete the summary.

The professor discusses three advantages of _____ advertising: the ability for advertising _____, an established readership base, and _____ markets. However, he also mentions three disadvantages. He cites _____ production, limited customer bases, and advertising _____ as a few reasons why these types of ads may not always be the most beneficial.

06 History

Listen to a lecture in a history class. Fill in the diagram with the information that you hear.

Track 101

Key Vocabulary

commercial: relating to business or sales

predict: to foretell


nuisance: an inconvenience; a hassle


stability: the state of constancy or normalcy; the permanence of something

culminate: to finally end (in some event or result)


Positive vs. Negative Effects of the Transcontinental Railroad


Positive	Both	Negative
•	•	• •

1. Listen again to part of the lecture. Then answer the question. 

What does the professor mean when he says this: 

- (A) His statement regarding the economy is obvious.
- (B) The students have already studied the economy.
- (C) His next point is a minor one.
- (D) The overall economic impact of railroads is not important.

2. Listen again to part of the lecture. Then answer the question. 


Why does the professor say this: 


- (A) To ask the students to ask a question

(B) To attempt to regain his train of thought

(C) To wait for students to answer him

(D) To transition to his next point

3. Listen again to part of the lecture. Then answer the question. 

What does the professor mean when he says this: 

- (A) He believes that the negative effects of the livestock were massive.
- (B) He feels that the livestock should not have been introduced to the West.
- (C) He hopes that the effects of livestock on the environment will improve.
- (D) He wants livestock to be contained with fences so that bison do not die off.

Fill in the blanks to complete the summary.

The professor discusses ways in which the railroad affected the American West. He first says that it made new _____ possible. He then discusses the large-scale deaths of _____ across the region. He goes on to explain the effects of the railroad on the _____, and finally discusses the changes that occurred by bringing _____ into the area. While the railroad had some negative effects, it also shaped the West's _____.

READING

LISTENING

SPEAKING

WRITING

PRACTICE TEST

07 Office Hours

Listen to a conversation between a student and a professor. Fill in the diagram with the information that you hear. **Track 102**

Key Vocabulary

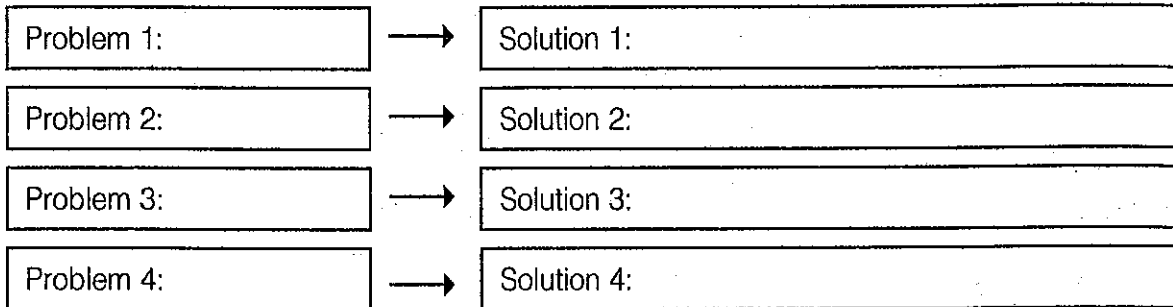
overwhelmed: feeling worried or incapable because of too much work or too many choices






structure: a form or outline; the construction of something

exceed: to be greater than something in quantity or scope

transition: to move gradually; to change from one state to another

portion: a part



- Listen again to part of the conversation. Then answer the question. 
Why does the student say this: 
 - To explain her difficulties with the project
 - To argue that she should not have to do the paper
 - To make the professor feel sorry for assigning the project
 - To illustrate why she has not started researching yet
- Listen again to part of the conversation. Then answer the question. 
What is the purpose of the student's response?
 - To reject the professor's advice
 - To motivate the professor to explain further
 - To ask the professor to help her make a timeline
 - To get an extension on the deadline
- Listen again to part of the conversation. Then answer the question. 
Why does the professor say this: 
 - He feels that the student will get a poor grade on the project.
 - He thinks the student should put more effort into the class.
 - He thinks the student should place great value on the assignment.
 - He feels that the student does not want to put effort into the class.

Fill in the blanks to complete the summary.

The student goes to see the professor in order to discuss an upcoming _____.

The professor suggests narrowing down the _____ by using a _____ to figure out the most important _____. He then suggests using academic sources, such as _____. He also proposes working in an order that builds on what the readers know, slowly introducing them to more _____.

08

Service Encounter

Listen to a conversation between a student and a university employee. Fill in the diagram with the information that you hear. **Track 103**

Key Vocabulary

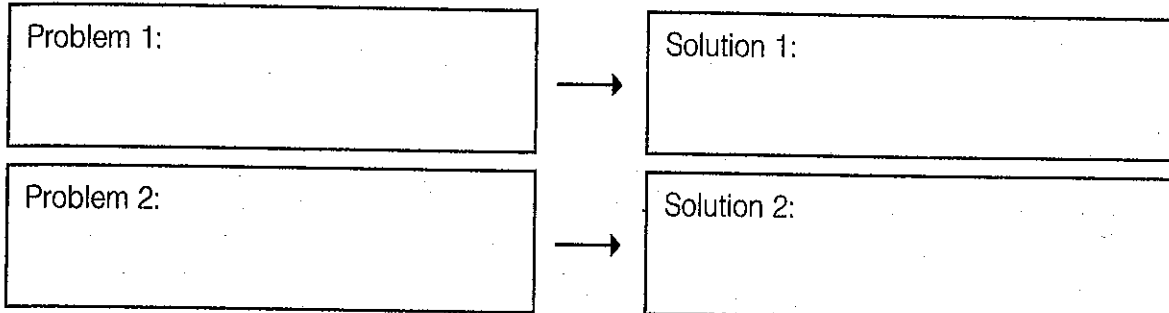
recent: new; latest

issue: to release or distribute

frequently: often; repeatedly

option: a choice; a possibility

browse: to look through



- Listen again to part of the conversation. Then answer the question.
Why does the student say this:
 - To explain why the employee should take his book
 - To prove that he bought the latest edition of the book
 - To ask the employee to assess the book's condition
 - To ask the employee to give him an approximate value of the book
- Listen again to part of the conversation. Then answer the question.
Why does the woman say this:
 - To show that the website does not always work
 - To demonstrate how complicated the website is
 - To convince the student that the system will help him
 - To tell the student that the system has a weakness
- Listen again to part of the conversation. Then answer the question.
What does the woman imply when she says this:
 - She does not think the student knows how to use the website properly.
 - She wants to make it easier for the student to get to the site.
 - She wants the student to visit the website very soon.
 - She hopes that the student will make a lot of money on the site.

Fill in the blanks to complete the summary.

The student goes to the university bookstore for the textbook _____, but the bookstore employee informs him that not all of his books can be _____. He asks the employee if there is anything else that can be done. The employee responds by telling him about an online textbook _____ website. She explains how it works, what is required, and what some of its _____ are. She also tells him how to _____ the website.

Listen to a lecture in an environmental science class. Fill in the diagram with the information that you hear. **Track 104**

Key Vocabulary

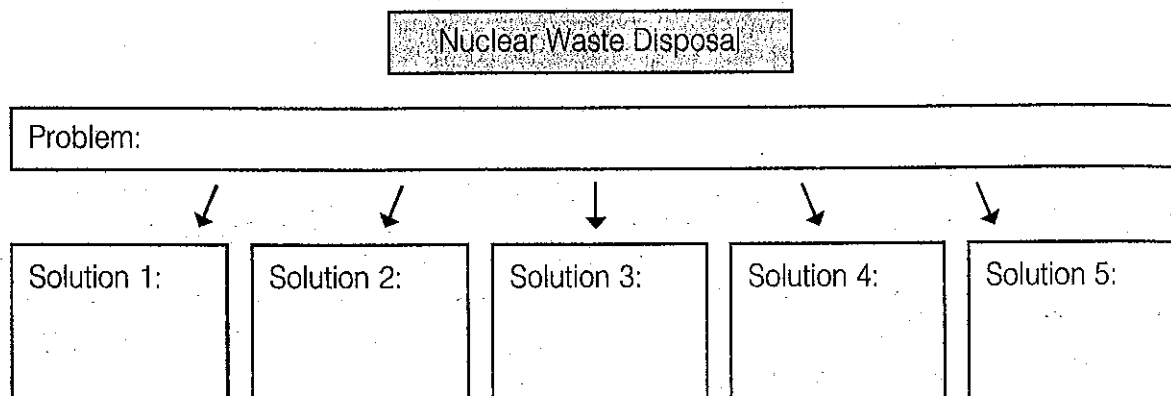
application: a use or purpose

condense: to concentrate into a smaller area; to make compact

contaminate: to infect or make dirty; to pollute

secluded: alone; distant

unfeasible: unlikely or impossible; impractical



1. Listen again to part of the lecture. Then answer the question. 🎧

Why does the professor say this: 🎧

- (A) To relate the discussion to the rest of the chapter
- (B) To imply that the last chapter was not very long
- (C) To illustrate the ways nuclear problems are dealt with
- (D) To make the students pay closer attention to the lecture

2. Listen again to part of the lecture. Then answer the question. 🎧

Why does the professor say this: 🎧

- (A) She wants to simplify the explanation for the students.

- (B) She thinks the process has become more refined in recent years.
- (C) She feels that the process is not very efficient.
- (D) She knows the process requires very little time to complete.

3. Listen again to part of the lecture. Then answer the question. 🎧

What is the purpose of the professor's statement when she says this: 🎧

- (A) To point out the controversy surrounding this method
- (B) To discuss the political viewpoints of the students on the problem
- (C) To disagree with people who do not want nuclear waste put into space
- (D) To suggest that this is the best option for dealing with nuclear waste

Fill in the blanks to complete the summary.

The professor discusses the problem of _____ nuclear waste with the class. He begins by discussing processes of making the waste more _____. He then discusses storing waste _____. Last, he discusses submerging the waste in _____, burying it in remote areas, and sending it _____.

Listen to a discussion in an art history class. Fill in the diagram with the information that you hear. **Track 105**

Key Vocabulary

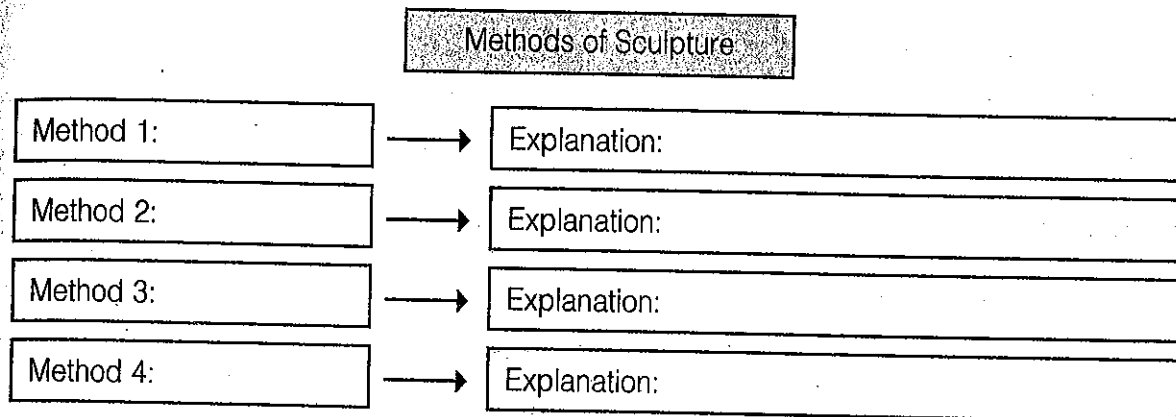
distinguish: to identify; to be able to tell the difference







structural: relating to the way parts are put together

characterize: to describe; to typify

junkyard: a large area in which used material is stored and sometimes sold

welding: the process of joining metals through heat



- Listen again to part of the discussion. Then answer the question. 
Why does the professor say this: 
 (A) To tell students an unusual fact
 (B) To remind students of a previous topic
 (C) To ask students to consider sculpture's construction
 (D) To encourage focus on how sculptures look
- Listen again to part of the discussion. Then answer the question. 
Why does the professor say this: 
 (A) To describe the similarities between modeled and additive sculptures
 (B) To explain how to make an artistic additive sculpture
 (C) To use additive sculpture as an example of the modeling method
 (D) To connect modeling with additive methods
- Listen again to part of the discussion. Then answer the question. 
What does the professor mean when he says this: 
 (A) *David* was difficult to make.
 (B) *David* was made using outdated methods.
 (C) Carving was popular throughout history.
 (D) Sculptures are historically the most important pieces of art.

Fill in the blanks to complete the summary.

The professor discusses four different methods used to create sculptures. _____ is an additive process that adds a material to a _____. Casting, also additive, involves adding material to a _____. _____ puts materials together to create a sculpture. _____, the only subtractive method mentioned, takes pieces away from a large piece of material.

Chapter 4

Stance Questions

Necessary Skills

- Understanding the speaker's general feeling about what is discussed
- Recognizing words or phrases that indicate the speaker's feeling or opinion
- Recognizing tone of voice, intonation, and sentence stress that the speaker uses to show his or her feeling or opinion

Example Questions

- Which of the following best describes the professor's opinion?
- What is the professor's opinion of _____?
- What is the student's attitude toward _____?
- What is the woman's initial attitude toward the student's request?
- What is the student's attitude toward the suggestion of _____?
- How sure is the man that the woman can _____?
- How certain is the professor that the student can _____?
- What can be inferred about the student?
- Listen again to part of the _____, then answer the question.

You will hear a sentence or a few lines again.

What does the professor mean when he/she says this:

- What does the student mean when he/she says this:

Strategies

- Pay attention to adjectives and verbs related to feelings. These may help you recognize words or phrases that indicate the speaker's feeling or opinion.
→ Example: A: *The course Chemistry 204 was very helpful.*
B: *Yeah. I really enjoyed the classes with Professor Jones.*
- Guess the speaker's attitude by the tone of voice, intonation, and the sentence stress that the speaker uses to show his or her feeling or opinion.
→ Example: (With surprise) *You liked it?* (The speaker does not agree.)
(Happily) *You liked it!* (The speaker is pleased.)
- Consider the degree of certainty in what a speaker says.
→ Example: *You want to know when it was discovered? Hmm. let me think.*
Probably around 1600. (The speaker is not sure of the information.)

Listen to a lecture in an economics class. Fill in the diagram with the information that you hear. **Track 106**

Key Vocabulary

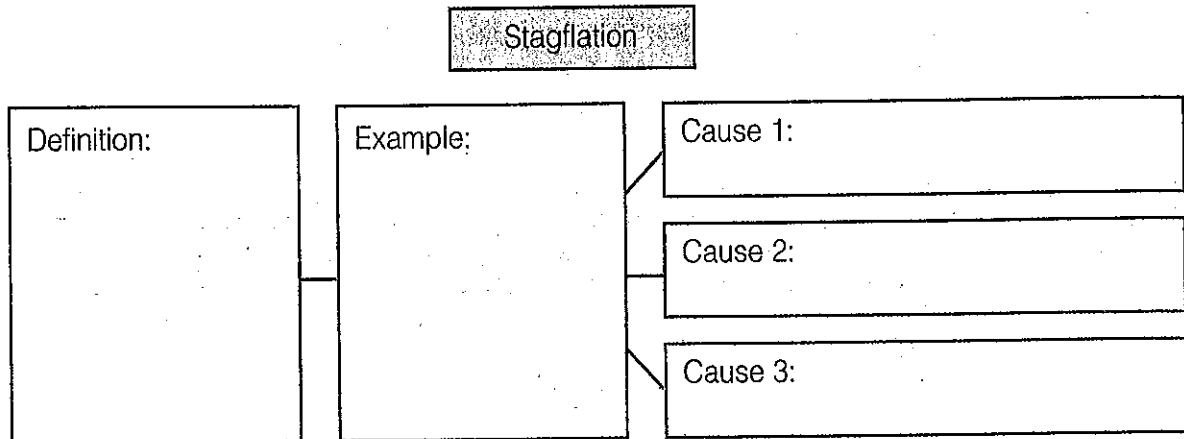
stagnant: unmoving; not growing

distinctive: special; unusual; recognizable

collectively: cooperatively, as a group

compensate: to adjust one's actions in response to something

scarce: rare



Definition:


Example:


Cause 1:

Cause 2:

Cause 3:

1. What is the professor's attitude toward using graphs and mathematical formulas in today's class?
 - (A) He feels they will confuse the students.
 - (B) He wants to use them later in the class.
 - (C) He is uncertain that they will be accurate.
 - (D) He does not find them important.

2. Listen again to part of the lecture. Then answer the question. 

What can be inferred about the professor when he says this: 

 - (A) He believes the oil companies to be greedy.
 - (B) He thinks that the companies acted too quickly.
 - (C) He feels that the problem could have been avoided.
 - (D) He understands why the oil companies raised prices.

3. What is the professor's general attitude about stagflation?
 - (A) He feels that it can destroy some companies.
 - (B) He finds it a very bad situation for an economy.
 - (C) He thinks it takes ingenuity to overcome.
 - (D) He feels its effects on individual consumers are significant.

Fill in the blanks to complete the summary.

The professor discusses the effects of stagflation with the class. He uses the _____ oil crisis, when OPEC raised prices by _____ times their original amount. He describes how _____ availability results in _____, and how in stagflation, production _____. He also demonstrates how this caused prices to _____.

Listen to a lecture in a business class. Fill in the diagram with the information that you hear.

Track 107

Key Vocabulary

model: an example

consumer: a customer; a buyer


phrase: to say; to express

sales pitch: a presentation or statement that is used to sell something

formal: official; proper

The Direct Sales Model

Definition:		
Method 1:	Method 2:	Method 3:
Definition:	Definition:	Definition:

- What is the professor's opinion of direct sales phone calls?
 - She thinks that they are irritating.
 - She finds them to be very effective.
 - She will not listen unless there is a free gift.
 - She cannot understand why they are done.
- What is the professor's attitude when he says this: 
 - She thinks that the sales approach should be stopped.
 - She considers letters the best way to advertise.
 - She thinks that free gifts are fun to receive.
 - She feels that sales letters are not always honest.
- Which of the following best reflects the professor's attitude toward product demonstrations?
 - She doubts their usefulness.
 - She thinks they are expensive.
 - She enjoys watching them.
 - She likes presenting them.

Fill in the blanks to complete the summary.

The professor defines direct selling as the selling of a product to the customer, without the help of _____, for example. He also relates the different sales methods that comprise direct selling, including using _____, seminars, and _____. The first method involves the seller _____ consumers to offer a product. Seminars are presentations that discuss the _____ of a product. With the final method, sellers _____ how a product works.

Listen to a conversation between a student and a professor. Fill in the diagram with the information that you hear. **Track 108**

Key Vocabulary

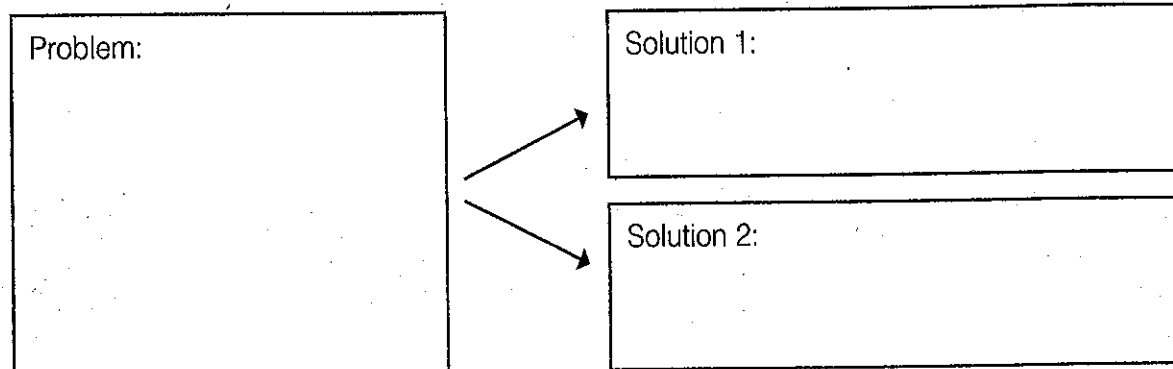
strain: a species; a variety


due date: a deadline

studio: the room where an artist works

ordeal: a difficult event or problem

occupy: to fill; to be present somewhere



1. What does the professor mean when he says this: 

(A) He wishes the student would do the project.

(B) He understands the woman's situation.


(C) He is happy that the woman is back in class.

(D) He is concerned that the woman will not finish the class.
2. What is the student's attitude toward the suggestion of visiting the studio in the morning?

(A) She does not like the idea.

(B) She likes to get up early.

(C) She thinks it is not a good idea.

(D) She is happy for the advice.
3. What does the professor mean when he says this: 

(A) He is growing frustrated with the student.

(B) He is unsure how to help the student.

(C) He is concerned about the student's illness.

(D) He is worried about the student's response.

Fill in the blanks to complete the summary.

The student has been _____ and has missed several days of class. She goes to her professor to discuss her _____, which she is concerned she may not be able to complete by the deadline. The professor gives two recommendations. First, she should go early in the morning when the _____ is not crowded. Second, she can _____ studio times with another student.

04

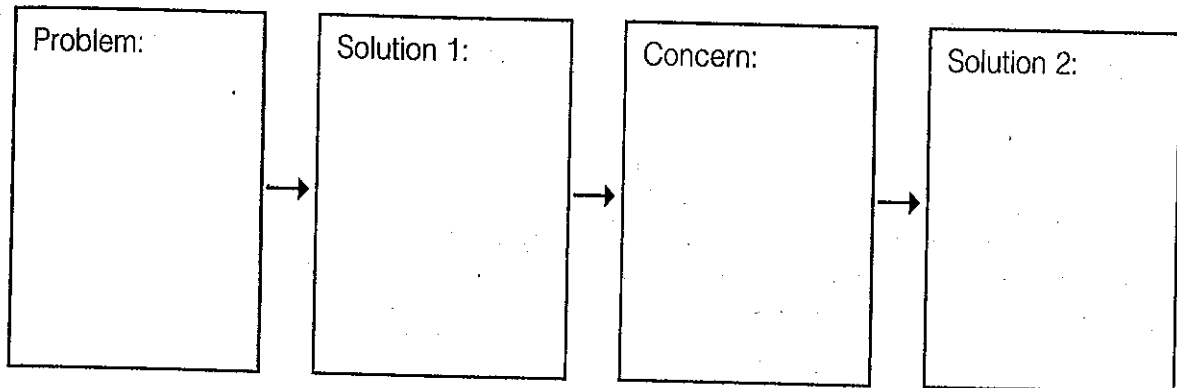
Service Encounter

Listen to a conversation between a student and a university employee. Fill in the diagram with the information that you hear. **Track 109**

Key Vocabulary

certificate: an official legal document
record: a piece of information in writing
verify: to check or confirm

express: by rapid transfer or transportation system
directory: a list of important information useful for contacting others.



- What can be inferred about the student when he says this:
 - He is happy that the woman can help him.
 - He is concerned about the lost item.
 - He is excited to receive a package.
 - He has looked everywhere for the package.
- What is the woman's attitude toward the package when she says this:
 - She thinks she can find it.
 - She thinks someone lost it.
 - She feels it is very important.
 - She feels it is too much trouble.
- How sure is the woman that the man will find the package?
 - She is positive he will not.
 - She is somewhat doubtful.
 - She will not know until later.
 - She is confident he will find it.

Fill in the blanks to complete the summary.

The student goes to the campus _____ to see if it has a _____ that he has been expecting. He is expecting to receive his _____. The employee there says that she does not have the _____, and recommends that he check with the other _____ on campus to see if it was delivered to one of them by mistake.

READING
LISTENING
SPEAKING
WRITING
PRACTICE TEST

Listen to a discussion in an environmental science class. Fill in the diagram with the information that you hear. **Track 110**

Key Vocabulary

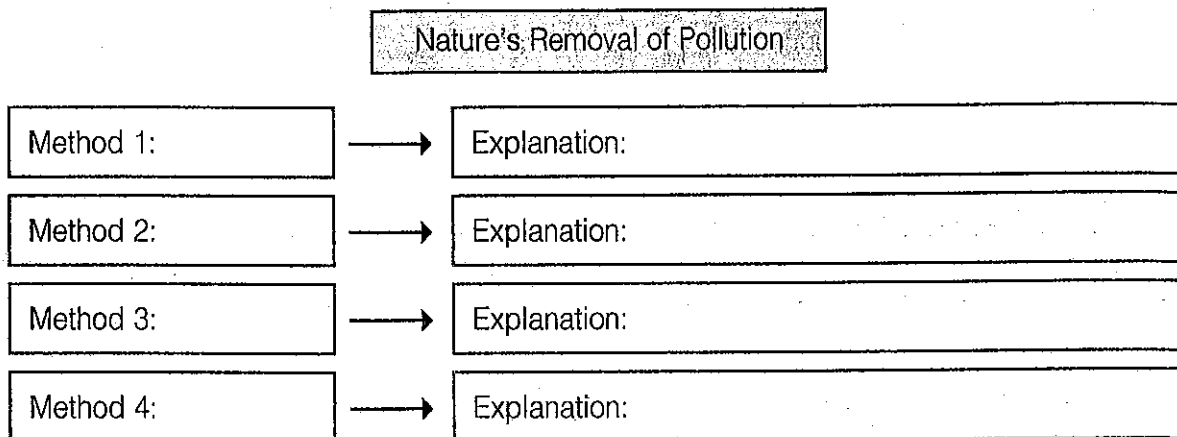
particle: a small piece

absorb: to take in

plume: a cloud; a column

linger: to stay

deplete: to decrease; to use up



1. Listen again to part of the discussion. Then answer the question.
 - (C) Comedic
 - (D) Worried

How confident is the professor that nature can eliminate air pollution?

 - (A) Very unsure
 - (B) Somewhat unsure
 - (C) Somewhat sure
 - (D) Very sure

2. What is the professor's attitude when she says this:
 - (A) Stern
 - (B) Unconcerned

3. Which natural pollution-reduction method does the professor think is the easiest to understand?
 - (A) Rain out
 - (B) Sedimentation
 - (C) Photodissociation
 - (D) Oxidation

Fill in the blanks to complete the summary.

The professor talks about ways that nature removes pollution from the air. One way is called _____, which is moisture pulling _____ to the ground. She also talks about sedimentation, or the settling of _____ due to gravity. In photodissociation, the sun breaks the particles' chemical _____, making them harmless. Oxidation occurs when oxygen _____ something else and it is then caught and taken to the ground.

Listen to a lecture in a business class. Fill in the diagram with the information that you hear.

Track 111

Key Vocabulary

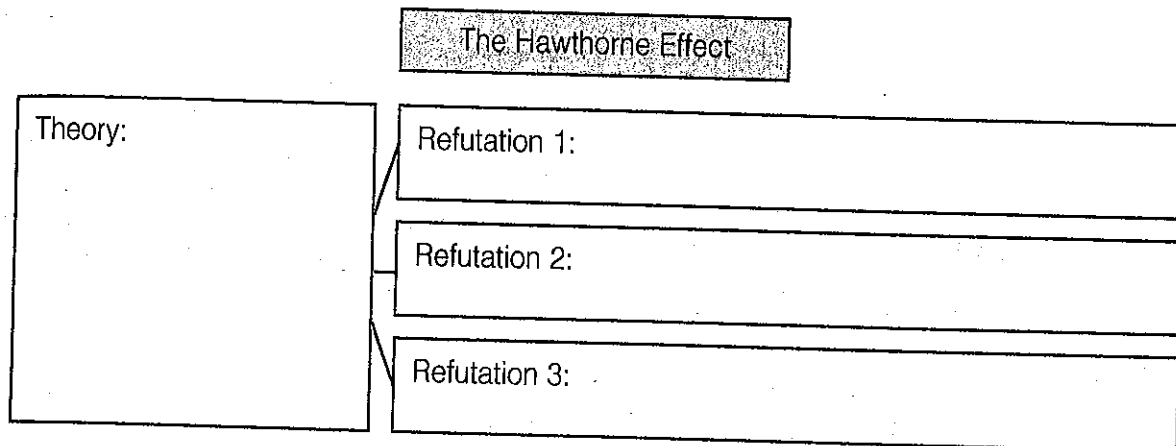
conduct: to perform; to carry out

devote: to dedicate; to give

accommodate: to conform to; to adapt

contradict: to disagree with; to oppose

subsequent: after; following



- What is the professor's general attitude toward the Hawthorne Effect?
 - He believes it applies in most situations.
 - He has doubts that it is real.
 - He thinks it is plausible but flawed.
 - He feels neutral about the theory.
- What is the professor's attitude when he says this:
 - Unconvinced
 - Confused
 - Discouraged
 - Upset
- What is the professor's attitude when he says this:
 - Impatient
 - Frustrated
 - Excited
 - Relaxed

Fill in the blanks to complete the summary.

The professor's lecture reviews the _____ that explored the Hawthorne Effect theory. He discusses the initial experiment, in which _____ was changed to see if this affected worker _____. It did not seem to matter, so researchers thought _____ given to workers affected productivity. Researchers then did other experiments, such as changing the rooms workers were in and giving them _____. These experiments seemed to _____ the Hawthorne Effect.

Office Hours

Listen to a conversation between a student and a professor. Fill in the diagram with the information that you hear. **Track 112**

Key Vocabulary

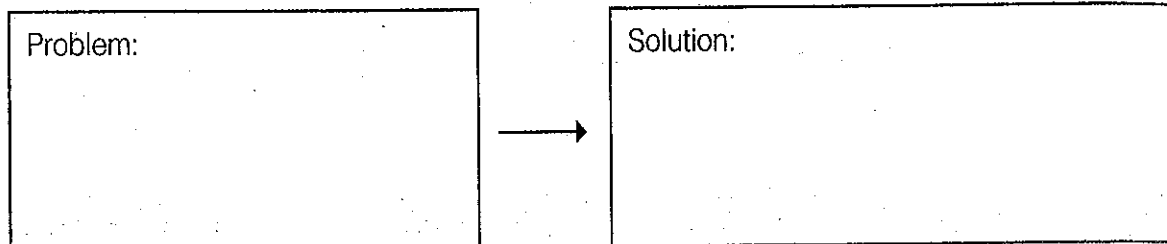
accompany: to join; to go with


compromise: to negotiate; to give in

relevant: related; important

correlation: a link; a connection


probationary: trial; test



1. Listen again to part of the conversation. Then answer the question. 

What is the student's attitude toward the time commitment required?


- (A) He is worried he does not have enough time.
- (B) He would prefer working an additional month.
- (C) He is neutral about the length of time required.
- (D) He did not know the position required so much time.

2. What is the professor's attitude when she says this: 

- (A) She is glad that the student knows the rules.
- (B) She feels the student's offer is a good idea.

- (C) She does not think that the student should submit the transcripts.

- (D) She does not feel that the transcripts give the needed information.

3. Listen again to part of the conversation. Then answer the question. 

What is the professor's attitude toward the student's qualifications?

- (A) Completely doubtful
- (B) Slightly unsure
- (C) Very confident
- (D) Somewhat unconcerned

Fill in the blanks to complete the summary.

The student comes to the professor to ask about an ad for a _____ she had posted in the campus newspaper. The professor describes the conditions, expectations, and what kinds of _____ she requires for the position. The student describes his prior experience working in a _____, as well as his education in _____. The professor also describes what the study will _____.

Listen to a conversation between a student and a university employee. Fill in the diagram with the information that you hear. **Track 113**

Key Vocabulary

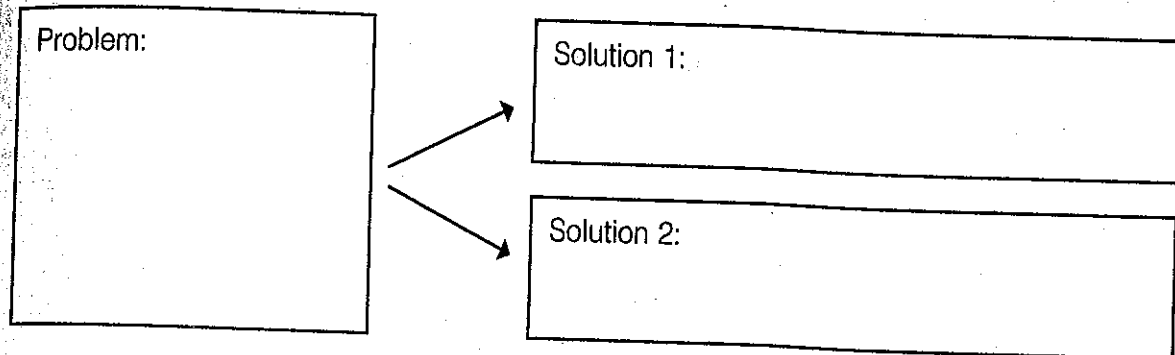
eligible: qualified

work study: a program that provides students with jobs

petition: a formal request

grant: to agree to; to allow

composite: a mixture; a combination



- What is the employee's attitude when he says this:
 - Firm
 - Irritated
 - Confused
 - Worried
- Which of the following best describes the student's attitude when the employee suggests that she change jobs?
 - She is confused by the suggestion.
 - She likes the employee's suggestion.
 - She does not care either way.
 - She does not want to change jobs.
- Listen again to part of the conversation. Then answer the question.

What can be inferred about the student?

 - She doubts that her old job is still available.
 - She hopes that the petition process will be successful.
 - She is still somewhat unsure of the petition process.
 - She thinks that there is a lot of paperwork to fill out.

Fill in the blanks to complete the summary.

The student accidentally missed the deadline to apply for _____. The student has a job in _____ that she enjoys, but she is concerned about losing it after the employee mentions that most of those positions are _____ for work study students. The employee suggests that she fill out a _____, which would allow her to keep her job if _____. The employee then describes what the form requires.

Listen to a lecture in an anthropology class. Fill in the diagram with the information that you hear. **Track 114**

Key Vocabulary

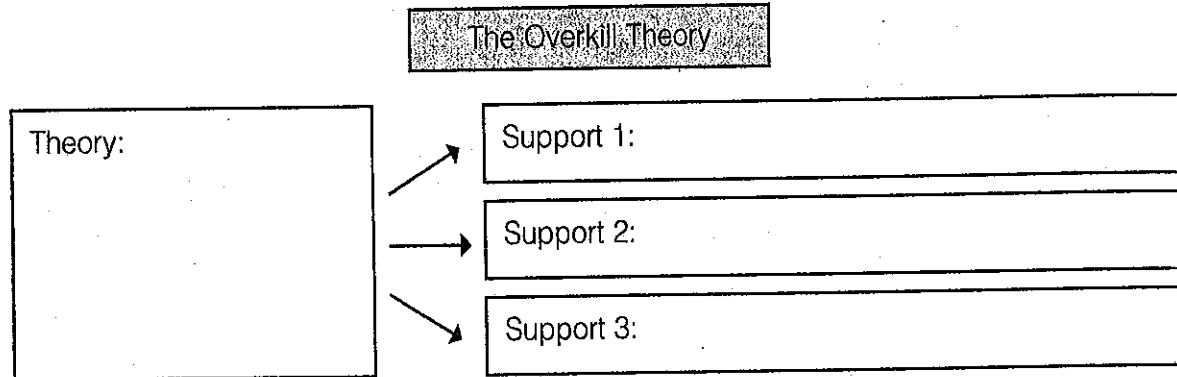
diverse: different; varied

acknowledge: to recognize; to admit

consistent: constant; regular

intensive: thorough; demanding

plausible: possible



1. What is the professor's opinion of broad-spectrum collecting?
 - (A) He feels it is the most valid of the theories.
 - (B) He is anxious for more research to be done.
 - (C) He finds aspects of it hard to believe.
 - (D) He suggests it was caused by climate changes.

- (C) They occurred on a global basis.
- (D) They did not result in new techniques.

2. Listen again to part of the lecture. Then answer the question. 🎧
 What is the professor's attitude toward climate changes?
 - (A) They resulted in animal extinction.
 - (B) The die-offs were more localized.

3. What is the professor's opinion of people's diets after they adopted broad-spectrum gathering?
 - (A) They were similar to ours today.
 - (B) They became better than before.
 - (C) They likely did not cause population growth.
 - (D) They were not very healthy.

Fill in the blanks to complete the summary.

The professor discusses what factors caused the development of _____ collecting. He focuses on the _____ theory, which he supports. He talks about the progress of _____ and the corresponding extinction of different species of animals, and how it impacted what _____ were available to people, as well as other possible indications of the theory's _____.

10 Biology

READING
LISTENING
SPEAKING
WRITING
PRACTICE TEST

Listen to a discussion in a biology class. Fill in the diagram with the information that you hear. **Track 115**

Key Vocabulary

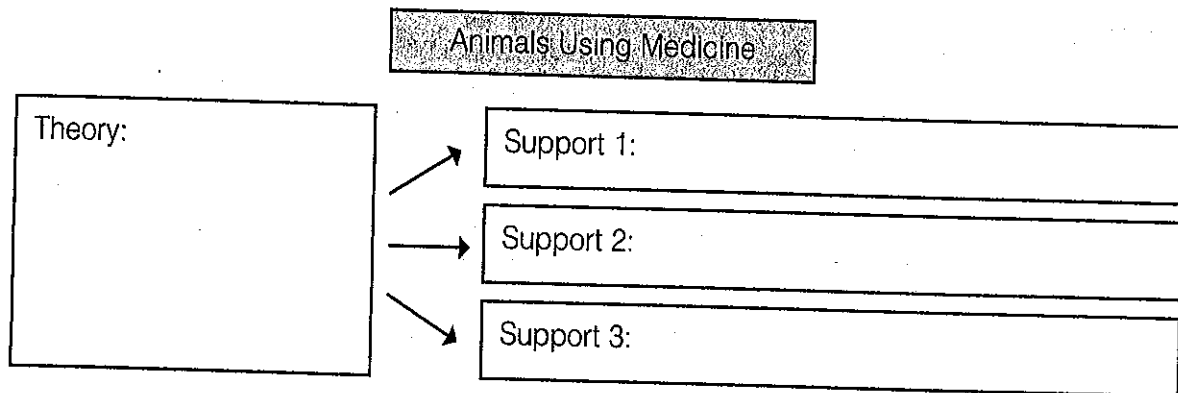
Instinctual: born with; not learned




Inhabit: to live inside

external: outside

coincidence: by chance

phenomenon: an unusual occurrence or event



- Listen again to part of the discussion. Then answer the question. 
Why does the professor say this: 
 - She knows the students were not aware of the topic.
 - She thinks that the students will find the subject humorous.
 - She realizes that her introduction was somewhat unclear.
 - She hopes that the students will be interested in the topic.
- Listen again to part of the discussion. Then answer the question. 
What can be inferred about the student?
 - She does not believe the professor is correct.
 - She thinks the professor's point is obvious.
 - She knows some animals are smarter than others.
 - She doubts whether she understood the professor correctly.
- What is the professor's opinion of the lemur example she gives?
 - She thinks it is the most interesting example she has given.
 - She feels that it casts doubt upon some other examples.
 - She realizes that the students might be familiar with it.
 - She considers lemurs to be highly evolved animals.

Fill in the blanks to complete the summary.

The professor discusses animal _____, particularly in the area of animals using _____. Some of the students are _____, but she gives them a number of examples to _____ her claims, including the habits of monkeys and bears that eat _____ leaves.

Vocabulary Review 2

Instructions: Choose the best word or phrase to complete each sentence.

- The photographer set up several cameras in an area of the park that bears are known to _____.
(A) browse
(B) grant
(C) inhabit
(D) linger
- Acne, although most commonly found on the face, neck, and chest, may _____ appear on other parts of the body.
(A) collectively
(B) frequently
(C) recently
(D) sporadically
- The civil unrest that had been spreading across Europe for decades finally _____ the French Revolution of 1848.
(A) accommodated by
(B) advocated for
(C) contaminated with
(D) culminated in
- Everyone who completes the training course will receive a _____ signed by both trainers.
(A) causality
(B) certificate
(C) composite
(D) coverage
- Freshmen are not _____ to apply for parking permits.
(A) eligible
(B) invaluable
(C) plausible
(D) unfeasible
- If you have any _____ about the topics you would like to study this semester, please write them on the back of your information card.
(A) options
(B) petitions
(C) qualifications
(D) suggestions
- The actor has a very _____ voice that is easy to recognize when you hear it.
(A) distinctive
(B) extensive
(C) intensive
(D) interactive
- Whereas some cameras have built-in flashes and microphones, the slot on top of my camera allows me to attach such _____ devices.
(A) commercial
(B) conventional
(C) external
(D) formal

Instructions: Choose the word or phrase closest in meaning to the underlined part.

- At the lake, we chose a remote camping place, not-easy to reach by a car.
(A) scarce
(B) secluded
(C) stagnant
(D) subsequent

10. Be sure to switch the device off when it is not in use so that you do not run out the battery.
- (A) compensate
(B) deplete
(C) overwhelm
(D) strain
11. I told the manager that I would take the position, and he sent me a letter to formally accept my employment.
- (A) acknowledge
(B) characterize
(C) distinguish
(D) perceive
12. The researcher's husband went with her on last year's expedition to the Arctic.
- (A) absorbed
(B) accompanied
(C) assisted
(D) attained
13. It was a lucky chance that I ran into Professor Clemens in front of the bookstore.
- (A) coincidence
(B) opportunity
(C) ordeal
(D) phenomenon
14. The research results show a strong relationship between personality traits and group work performance.
- (A) application
(B) correlation
(C) intuition
(D) transition

15. You can find most professors' office numbers in the campus phone book.
- (A) association
(B) brochure
(C) directory
(D) policy

Instructions: Write the missing words. Use the words below to fill in the blanks.

devise diverse particle
predict verified

A good theory should be able to

16. _____ facts that can be
17. _____ by experiments. Creative
researchers must then 18. _____
experiments to put the theory to test. For
example, when the 19. " _____
theory" of light was suggested, physicists
came up with 20. _____ ways to
test the nature of photons. In the end, they
found that photons acted as both waves
and particles!

Instructions: Write S (similar) or O (opposite).

21. _____ conform oppose
22. _____ consistent stable
23. _____ due date deadline
24. _____ surplus excess
25. _____ verify contradict

Mini Test 2

01 Biology

Listen to a lecture in a biology class. **Track 116**

Key Vocabulary

naturalist: a person who studies natural history, especially a zoologist or botanist

theology: the study of religion

deviation: a change away from something









itinerary: a schedule; a plan listing times

array: a collection; a group of various kinds

attribute: a trait; a characteristic

groundbreaking: new and unique; revolutionary

heredity: the process of passing genetic factors from one generation to the next

1. What is the professor's attitude toward the way that evolution is studied?
 - (A) He prefers to approach the subject by examining important events.
 - (B) He feels that learning about key figures explains a lot about it.
 - (C) He thinks that history should not be emphasized in the study of evolution.
 - (D) He is uncertain about the legitimacy of evolution as a scientific theory.
2. Listen again to part of the lecture. Then answer the question. 
Why does the professor say this: 
 - (A) To test the students' historical knowledge
 - (B) To link mining to evolution
 - (C) To draw attention to the importance of fossils
 - (D) To highlight a little-known fact
3. What is the professor's opinion of the captain of the ship Darwin sailed on?
 - (A) He caused Darwin some problems.
 - (B) He should be thanked for his mistakes.
 - (C) He should have planned the trip better.
 - (D) He offered academic insight into evolution.
4. Listen again to part of the lecture. Then answer the question. 
Why does the professor say this: 
 - (A) To inform the students that it is a minor point
 - (B) To imply that the students have already covered this topic
 - (C) To show that he wants to spend more time on other subjects
 - (D) To alert the class that he does not know much about natural selection
5. Listen again to part of the lecture. Then answer the question. 
What does the professor imply when he says this: 
 - (A) The evolutionary theory could not have been formulated without Darwin.
 - (B) Darwin and Mendel would have become good friends.
 - (C) It is strange that Darwin did not read Mendel's work during his lifetime.
 - (D) It is a shame that Darwin did not discover Mendel's work sooner.
6. Listen again to part of the lecture. Then answer the question. 
What does the professor imply when he says this: 
 - (A) The students have not learned about Mendel.
 - (B) He wants the students to recall Mendel's work.
 - (C) He wants to involve the students in the discussion.
 - (D) The students are not responding to the lecture.

02 Communications

Listen to a discussion in a communications class. **Track 117**

Key Vocabulary

recap: to review

prevalent: widely accepted

apparent: obvious; easily seen








narcissism: excessive self-admiration

argumentative: desiring or tending to argue or debate

hostile: unfriendly; like an enemy

engage in: to take part in

assertive: bold and aggressively confident

7. Listen again to part of the discussion. Then answer the question. 
Why does the professor say this: 
(A) To suggest that more explanation is needed
(B) To make sure everyone understands the student's explanation
(C) To confirm that the sociopsychological theory is important
(D) To reintroduce a topic that the students studied in an earlier class
8. Listen again to part of the discussion. Then answer the question. 
Why does the professor say this: 
(A) To show how communication theorists apply the study of traits
(B) To explain why traits cannot always predict one's communication style
(C) To give an example of what types of predictors are studied
(D) To refute that traits are not useful in communication theory
9. What is the student's opinion of the argumentative trait?
(A) He does not understand how it is positive.
(B) He feels other traits are more important.
(C) He understands that it is a common trait.
(D) He feels that he exhibits the trait.
10. Listen again to part of the discussion. Then answer the question. 
What can be inferred from the professor's response?
(A) She thinks the student has combined two concepts.
(B) She is confused by the question.
(C) She feels she must clarify the difference.
(D) She wants to refute the student's point.
11. Listen again to part of the discussion. Then answer the question. 
What can be inferred about the professor when she says this: 
(A) She recognizes that the argumentative trait is easy to misunderstand.
(B) She thinks that communication theory fails to explain argumentativeness.
(C) She is surprised at the trait argumentativeness presents.
(D) She does not have a grasp on the concept of argumentativeness.
12. What is the student's opinion of the results of the study?
(A) They do not prove anything about the argumentative trait.
(B) The researcher's findings are unconvincing.
(C) There is no connection between argumentativeness and aggression.
(D) They support the theories about certain traits.

03 Service Encounter

Listen to a conversation between a student and a university employee. **Track 118**

Key Vocabulary






offering: an option; a choice

formality: a necessary but insignificant procedure

pre-register: to apply or sign up before the official starting date

prerequisite: a requirement that must be completed before something else is possible or available

shopping period: a time to look at or try different things before making a decision

13. Listen again to part of the conversation. Then answer the question. 
Why does the student say this: 
(A) To suggest she is unaware of the form
(B) To inquire about the course requirements
(C) To confirm that she has not handed in the form
(D) To imply that it is not possible to fill out the form
14. What is the student's attitude about retrieving her add course form?
(A) She would rather do it later.
(B) She is annoyed that she forgot it.
(C) It is an inconvenience to her.
(D) It is too important to wait.
15. Listen again to part of the conversation. Then answer the question. 
Why does the man say this: 
(A) To point out the student's mistakes
(B) To explain how to fill the form correctly
(C) To inform the student of the documents she needs
(D) To show the student why she needs to pre-register
16. Listen again to part of the conversation. Then answer the question. 
What is the purpose of the student's response?
(A) To question the registrar's knowledge of the registration process
(B) To criticize the university's pre-registration policy
(C) To find out if a professor can keep her from taking a class
(D) To make sure she is completing the process correctly
17. What is the student's attitude toward the university's two-week shopping period?
(A) She finds it unnecessary.
(B) She is interested in learning more.
(C) She does not think it applies to her.
(D) She thinks it is helpful.

Chapter 5 Organization Questions

Necessary Skills

- Recognizing the organization of information in a lecture or a conversation
- Recognizing the sequence of information
- Identifying the main steps of a process
- Summarizing a process with its main steps

Example Questions

- Why does the professor mention _____?
- Why does the professor tell the students about _____?
- Why does the professor discuss _____?
- Why does the professor make a distinction between _____ and _____?
- How is the discussion organized?
- How does the professor organize the information about _____?
- How does the professor support the idea that _____?
- How does the professor clarify her point about _____?

Strategies

- Use diagrams, arrows, and outline format while taking notes to indicate the organization and relative importance of information.
- Listen for transitions that indicate sequencing of information:
 - *first, now the first step is*
 - *next, (and) then*
 - *so now*
 - *the last step is, finally*

Listen to a lecture in a business class. Fill in the diagram with the information that you hear.

Track 119

Key Vocabulary

prototype: the first sample product

concept: an idea

aggressive: forceful

intensify: to strengthen; to increase

reputation: the way someone or something is known or remembered

The Product Life Cycle

Stage 1:	Stage 2:	Stage 3:	Stage 4:
Description:	Description:	Description:	Description:

- How does the professor introduce the topic?
 - By defining the stages of product development
 - By describing an interesting story from her own life
 - By suggesting that some products outlive their usefulness
 - By comparing the human life cycle to that of a product
- How does the professor organize the information she presents to the class?
 - By comparing a product's development in each stage
 - According to how a product progresses through the stages
 - According to the amount of money spent for each stage in the life cycle
 - By using examples of the stages as they come to mind
- Why does the professor mention competition?
 - To explain how the market begins to adapt to products in decline
 - To compare an inferior product to a better one on the market
 - To identify one of the main factors in the mature stage
 - To show that there are problems with this phase of the growth stage

Fill in the blanks to complete the summary.

The professor discusses the product life cycle, a series of stages every product goes through. She talks about each stage in order: the product _____ and introduction stage, the _____ stage, the _____ stage, and the _____ stage. She describes the characteristics of each phase and compares each phase of the product life cycle with corresponding phases of a _____ cycle.

Listen to a lecture in a history class. Fill in the diagram with the information that you hear.

Track 120

Key Vocabulary

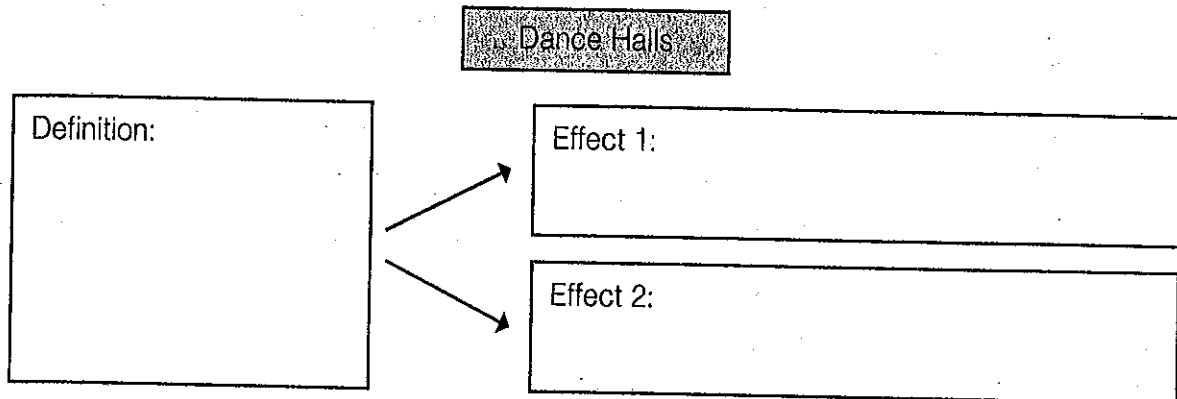
draw: to attract

venue: a location; a place

congregate: to gather; to meet

perspective: a point of view

progressive: characterized by change



- How does the professor organize the information he presents to the class?
 - By describing the process of events that led to the first dance hall
 - By describing dance halls and their effects on American life
 - By comparing dance halls to other forms of entertainment
 - By discussing how dance halls affected today's entertainment
- Why does the professor mention World War I?
 - To suggest that dance halls had existed before the war
 - To provide a factor that led to the creation of dance halls
 - To explain where the first dance halls in the world were found
 - To compare forms of entertainment before and after the war
- Why does the professor mention rock and roll?
 - To show how the dance halls eventually led to future cultural events
 - To identify music as one of the primary ways that dance changed America
 - To compare its popularity to dance halls in the 1920s and 1930s
 - To give an example of other entertainment that affected culture

Fill in the blanks to complete the summary.

The professor discusses dance halls. They were large _____ where people could gather and dance. Dance halls grew in popularity with the latest _____ of the times. He then moves on to discuss some _____ of the dance halls. He says that they changed people's view of _____ and helped change some _____.

Listen to a discussion in a psychology class. Fill in the diagram with the information that you hear. **Track 121**

Key Vocabulary

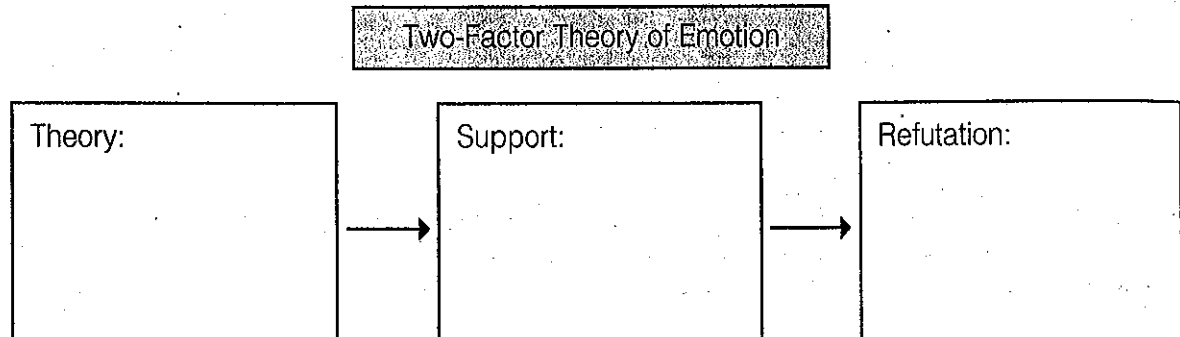
blank: lacking interest, awareness, or understanding

intricate: involved; elaborate

arousal: a state in which you feel excited or alert

cognitive: relating to the conscious mind

initiate: to begin



- How is the discussion organized?
 - The professor explains a theory, then supports and refutes it.
 - The professor lectures about a theory's discovery and its effects.
 - The professor describes how a theory originated and refutes it.
 - The professor describes two experiments that support a theory.
- How does the professor support the idea that physical conditions affect emotions?
 - By suggesting that the student's explanation was incorrect
 - By introducing the idea of arousal
 - By stating that the theory has been refuted
 - By giving an example of the effects of a dessert
- Why does the professor mention a surprise?
 - To introduce another supporting example
 - To compare one theory with another
 - To transition into a refutation of the theory
 - To add another step to the process

Fill in the blanks to complete the summary.

The professor's lecture is about the Two-Factor Theory of Emotion. He discusses the two factors separately and gives an example for each. He first describes how _____ can create _____. He then describes how the _____ can create emotions by _____ in different ways.

04 Literature

READING

LISTENING

SPEAKING

WRITING

PRACTICE TEST

Listen to a discussion in a literature class. Fill in the diagram with the information that you hear. **Track 122**

Key Vocabulary

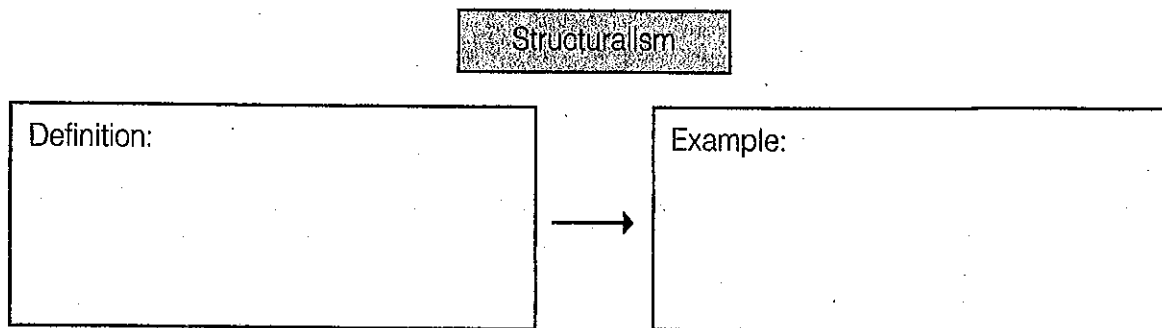
predominant: major; primary

dynamic: vibrant; lively; changing

resemble: to look similar to

animosity: a strong feeling of dislike or hostility; hatred

component: a part



- How is the professor's lecture organized?
 - She classifies the past, present, and future of structuralism.
 - She discusses a piece of literature that structuralists find unique.
 - She defines a literary school and gives its opinion of a play.
 - She contrasts structuralism with other literary schools.
- How does the professor begin her lecture?
 - By asking the students to consider aspects of literature
 - By posing questions about the effects of literature on people
 - By suggesting that there is a tremendous variety of literature
 - By questioning an author's use of plot structures
- Why does the student mention *Romeo and Juliet*?
 - To prove the professor's point
 - To give an example of structured story-telling.
 - To offer a counterexample
 - To show the origin of a literary school

Fill in the blanks to complete the summary.

The professor begins the lecture by asking the students to consider any unique _____ literature, and then she uses this to explain structuralism. Structuralism, she says, is the idea that if a _____ is not unique in its basic _____, it is not important. The professor shows how structuralists view *Romeo and Juliet*, stating that they _____ like it, since it is _____. Structuralists see _____ value in works that follow established patterns.

Listen to a discussion in an astronomy class. Fill in the diagram with the information that you hear. **Track 123**

Key Vocabulary

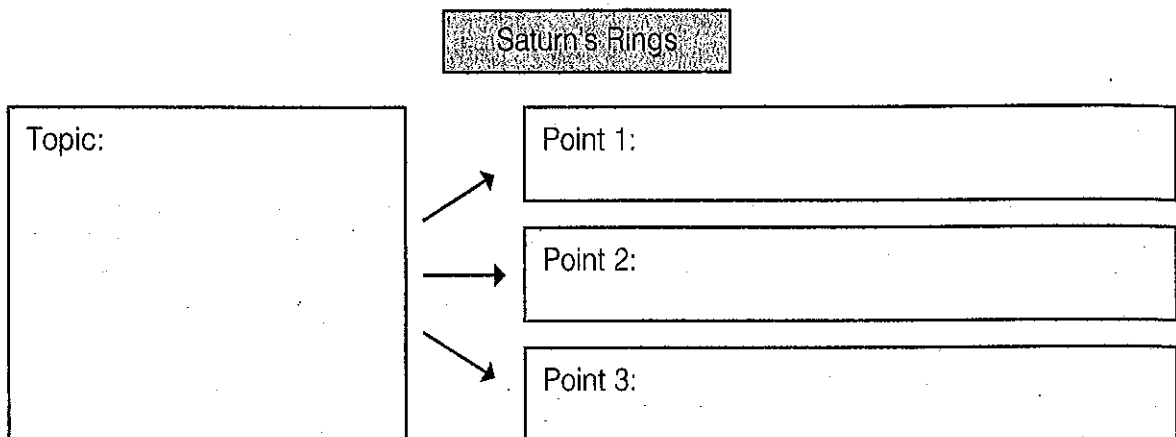
sleuth: a person who solves mysteries

crack: to solve

surmise: to infer

stray: to leave a previous place

adjacent: nearby; adjoining



- How does the professor organize the information he presents to the class?
 - By describing the process of the rings' formation
 - By focusing on three aspects of the rings' composition
 - By comparing previous theories to recent theories
 - By describing a historical theory and refuting it
- How does the professor introduce the topic to the class?
 - By asking students to imagine an unreal situation
 - By supporting the theory of a recent astronomer
 - By asking students to list the various theories
 - By telling students the story of the rings' discovery
- Why does the professor mention a snowball fight?
 - To show the students how Saturn's rings formed
 - To illustrate the actual size of the ice particles
 - To support his theory of the rings' thickness
 - To demonstrate how ice forms in space

Fill in the blanks to complete the summary.

The professor discusses the rings on _____. He begins by asking the students to guess what the rings are made of. He reveals that they are made of _____. After a student asks why the _____ form rings, he discusses that _____ with other particles keep the rings _____.

06

Environmental Science

READING

LISTENING

SPEAKING

WRITING

PRACTICE TEST

Listen to a lecture in an environmental science class. Fill in the diagram with the information that you hear. **Track 124**

Key Vocabulary

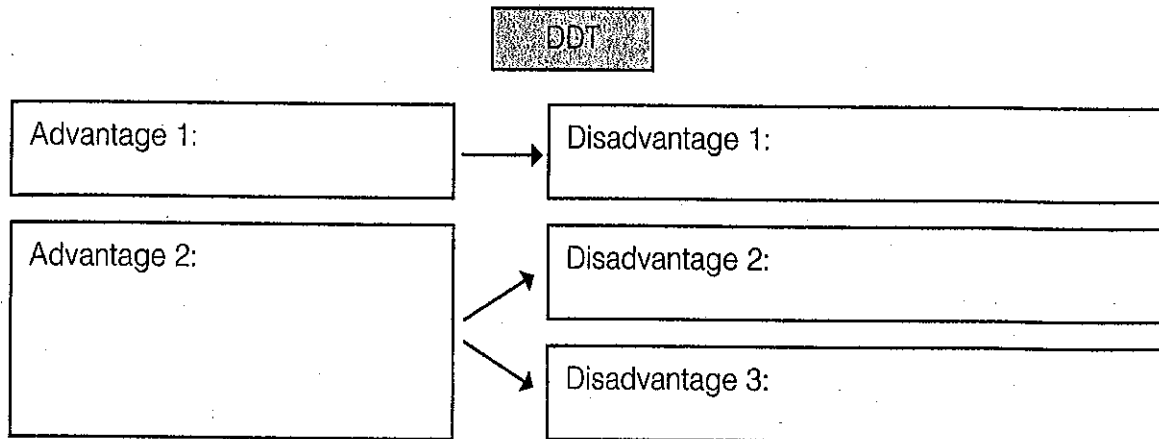
pesticide: a chemical used to kill unwanted insects

detrimental: harmful; damaging

resistant: able to endure or withstand

ramification: an outcome; a consequence

drastically: considerably



- How does the professor organize the lecture?
 - By comparing DDT to safer pest control method
 - By listing the changes in how DDT effects were understood
 - By introducing DDT and giving examples of its many uses
 - By describing DDT's negative points followed by positive points
- Why does the professor mention WWII?
 - To show that DDT was very effective
 - To give an example of the ecological consequences of DDT
 - To point out that it could have harmed soldiers
 - To explain why DDT was used so much
- Why does the professor talk about biomagnification?
 - To explain a negative consequence of using DDT
 - To suggest that DDT should be outlawed around the world
 - To contrast DDT's effects on malaria and the environment
 - To illustrate how DDT works against specific pests

Fill in the blanks to complete the summary.

The lecture begins with the professor discussing the invention of _____ in the 1940s and its subsequent uses. She then talks about all the _____ results of using the pesticide, including its long-term effects on _____ and gradual ineffectiveness. She also explains the _____ points of DDT usage, such as reducing the threat of malaria and _____.

Listen to a discussion in a sociology class. Fill in the diagram with the information that you hear. **Track 125**

Key Vocabulary

strategy: a plan to achieve a specific goal or result

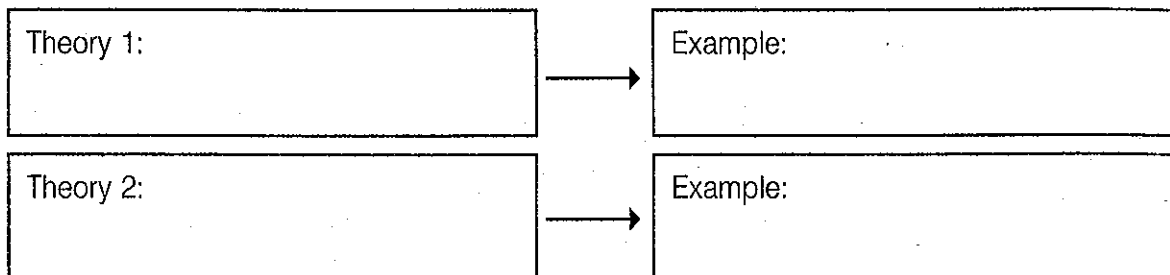
tailor: to adapt something

equilibrium: a balance

dilemma: a problem

ensue: to follow

Game Theory and the Nash Equilibrium



- How does the professor organize the information in the lecture?
 - He compares the theory to other similar theories.
 - He uses personal examples to show how the theory applies.
 - He uses experiments to refute the theory.
 - He introduces two theories and provides examples.
- How does the professor explain game theory?
 - By explaining the most common example
 - By using a children's game as an example
 - By refuting the theory using examples
 - By describing the different ways to play games
- How does the professor introduce the Nash equilibrium?
 - By defining the concept and giving a brief history
 - By comparing its ideas to similar aspects of game theory
 - By describing how it differs from game theory
 - By providing an example of a common equilibrium

Fill in the blanks to complete the summary.

The discussion begins with a definition of _____, which is a series of games that have been analyzed to study human _____ under certain conditions. It is primarily used to understand all possible _____ choices under those conditions. The professor also discusses the _____ equilibrium. This occurs when no _____ has an advantage. The professor uses the _____ dilemma as an example.

Listen to a discussion in an education class. Fill in the diagram with the information that you hear. **Track 126**

Key Vocabulary

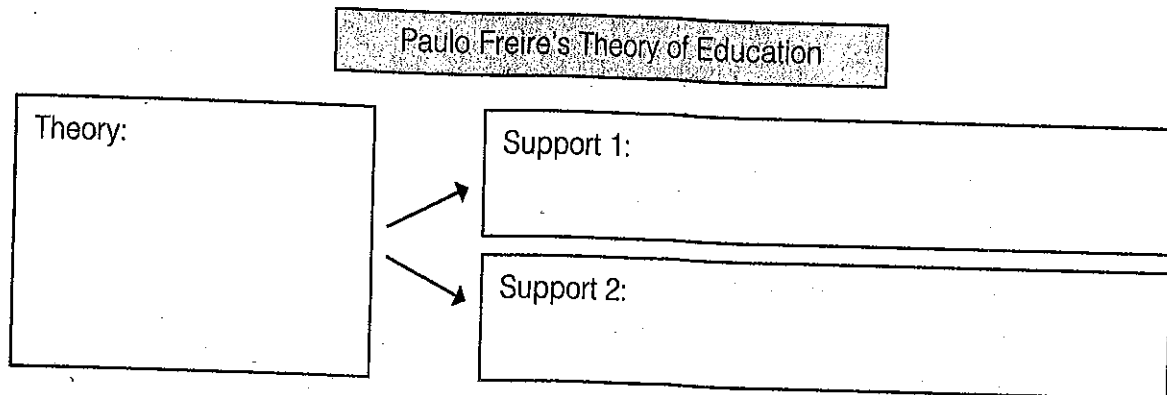
combat: to fight

relinquish: to give up; to surrender

facilitate: to assist in; to make happen

hamper: to get in the way; to slow down

compatible: able to work together



- How does the professor introduce the idea that students are partially responsible for their own educations?
 - By countering the theories of Freire
 - By highlighting the *Pedagogy of the Oppressed*
 - By telling the students a personal story
 - By asking students what their opinions of education are
- How does the professor organize the information in her lecture?
 - By countering an older theory with a newer theory
 - By the order of importance of the theory's characteristics
 - By giving real-world examples of the success of banking
 - By describing a theory's history and its effects on global education
- Why does the professor mention the presentation of semester projects?
 - To add a real-world example of students teaching themselves
 - To suggest that the students should be ready for the projects soon
 - To give an example of banking that the students will understand
 - To make a point concerning Freire's lack of originality

Fill in the blanks to complete the summary.

The lecture focuses on Freire's ideas about education. The professor begins by talking about her own experience _____: she realized one day that she had to take an _____ role in her own education. Freire's theory about education says that teachers should be like _____, and students should be like _____. The professor explains that, in order to put this theory into practice in her classes, she asks students to do _____.

Listen to a lecture in a biology class. Fill in the diagram with the information that you hear.

Track 127

Key Vocabulary

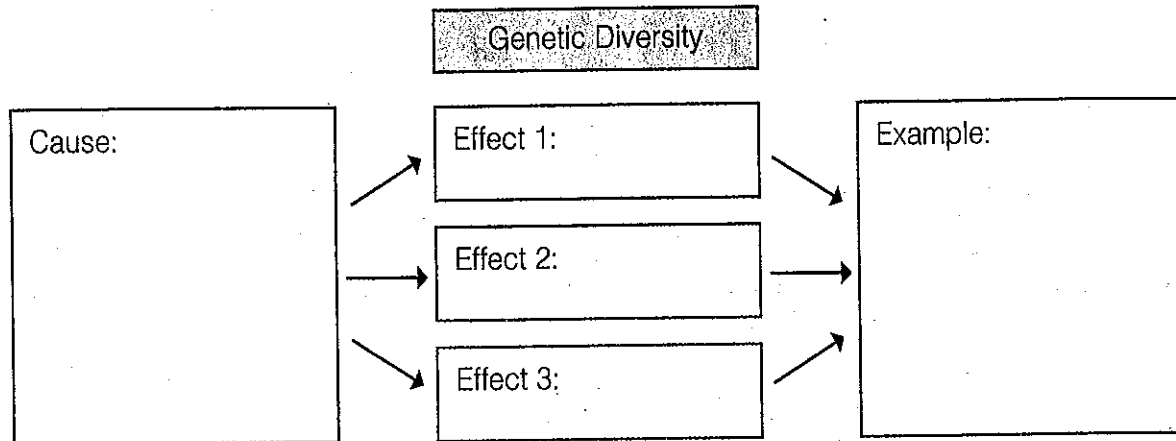
susceptible: vulnerable; at risk

eclectic: assorted; unusual

disposition: an inclination; a weakness toward something

integrity: a strength; a reliability

prone to: having a tendency to



- How does the professor organize the information he presents to the class?
 - By describing one kind of animal
 - By supporting a theory
 - By stating several problems
 - By listing various effects
- How does the professor organize his point about disease?
 - By comparing the effects of normal and reduced gene pools
 - By describing the effect of disease and providing an example
 - By listing the ways that genetic diversity causes disease
 - By describing a theory connecting disease and genes
- How does the professor explain his point about population viability?
 - By comparing the effects of viability and deformities
 - By refuting the theory that genes do not affect viability
 - By describing the problem and using an example
 - By explaining how his previous points affect viability

Fill in the blanks to complete the summary.

The professor introduces the idea of _____ and its effects on animals. He discusses three major results of a _____ of genetic diversity: susceptibility to _____, increased incidence of _____, and an overall decrease in the species' ability to _____. He uses cocker spaniels and _____ to back up his points about the negative effects of a lack of genetic diversity.

Listen to a discussion in an art history class. Fill in the diagram with the information that you hear. **Track 128**

Key Vocabulary

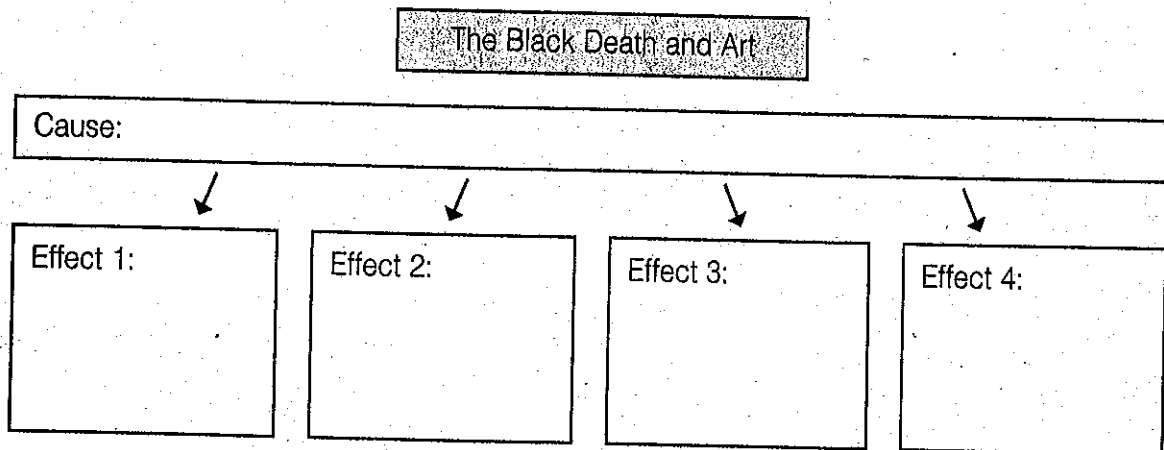
morbid: showing a strong interest in the subject of death

hallmark: a trait; a trademark

overriding: more important than anything else

somber: sad; dark; gloomy

reminiscent: suggestive of



- How is the lecture organized?
 - By comparing two periods
 - By describing artists
 - By supporting a theory
 - By listing changes in art
- Why does the professor discuss the colors in art after the Black Death?
 - To illustrate how color affects the overall mood of an artwork
 - To give an example of artistic methods of the early Renaissance
 - To explain a technique used to convey morbidity
 - To show how the use of color changes with time
- Why does the professor mention the church?
 - To describe structures that appeared in art
 - To provide historical context
 - To suggest that artwork affected church policies
 - To reveal the source of finance for some of the art

Fill in the blanks to complete the summary.

The professor discusses the ways in which the _____ impacted art during the 14th century. She talks about the _____ nature of the work, the _____ colors that characterized it, and the use of _____ as a central theme. Two _____ in particular, Triani and Giotto, created works that were typical of the era. Finally, she discusses "The Art of Dying," a school of art that reflected the _____ outlook on death.

Chapter 6

Content Questions

Necessary Skills

- Understanding relationships between different pieces of information
- Identifying key category words in a lecture or a conversation
- Understanding the characteristics of different categories
- Comparing the characteristics of different categories
- Determining if a certain point is discussed in relation to a category

Example Questions

- What does _____ demonstrate?
- What does the professor demonstrate by discussing _____?
- Based on information from the lecture, indicate whether or not each statement is correct. Place a checkmark in the correct box.

	Yes	No
(statement)	✓	
(statement)		✓
(statement)	✓	

- Based on information from the lecture, to which feature does each example relate? Place a checkmark in the correct box.

	(feature)	(feature)
(example)		✓
(example)		✓
(example)	✓	

Strategies

- Take notes as you listen, as questions with tables only appear after the lecture or conversation.
- Pay special attention to category words, the characteristics of categories, and examples.
- For questions asking if or how each phrase or sentence applies, be sure to click the appropriate box for each answer choice.
- Keep in mind that there are different types of tables to complete: some in which you need to click Yes or No, and others in which you need to click the correct category.

01 Business

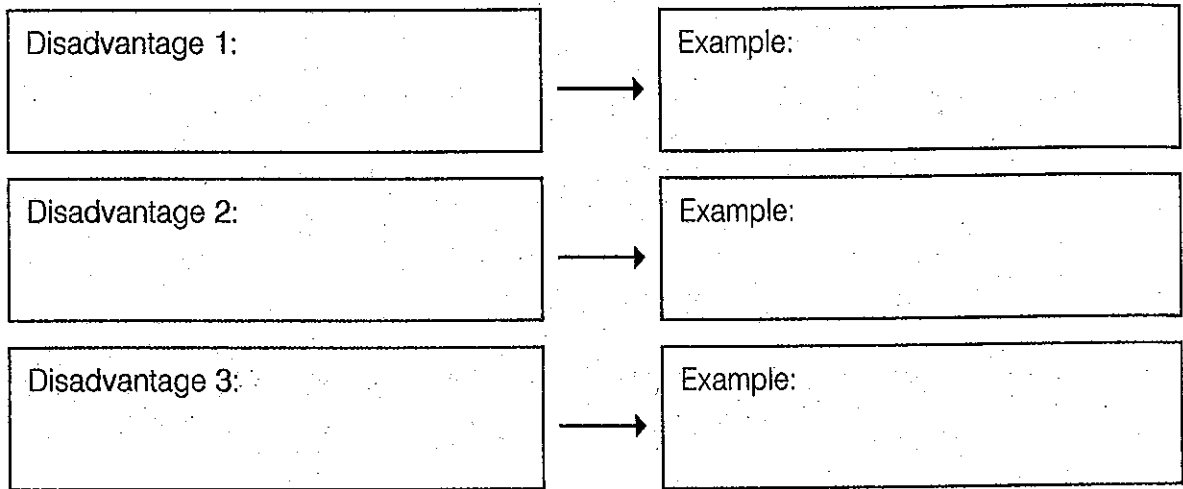
Listen to a discussion in a business class. Fill in the diagram with the information that you hear. **Track 129**

Key Vocabulary

trainee: someone who is being trained for a job
hierarchy: a system of organization made up of levels
distortion: a change in something that makes it unclear

Interpret: to explain the meaning of
downsize: to reduce the number of employees to reduce costs

Tall Management Structure



1. Based on information from the discussion, indicate whether or not each statement is a disadvantage of a "tall" management structure. Place a checkmark in the correct box.

	Yes	No
Managers hide information from other managers.	<input type="checkbox"/>	<input type="checkbox"/>
The extensive hierarchy of managers is very costly.	<input type="checkbox"/>	<input type="checkbox"/>
Managers make different decisions at different levels.	<input type="checkbox"/>	<input type="checkbox"/>

Fill in the blanks to complete the summary.

The professor talks about the "tall" management structure and its main disadvantages for companies. A tall management structure is one in which a company has many _____ of organization, particularly many levels of _____. The three main disadvantages she talks about are the _____ of commands, the long time needed for _____ to pass to all levels, and the _____ of having so many _____.

02

Environmental Science

Listen to a lecture in an environmental science class. Fill in the diagram with the information that you hear. **Track 130**

Key Vocabulary

diversity: a range of different things

preserve: to save something from being destroyed

extinct: when a species no longer exists

institution: a large organization

attempt: the act of trying to do something

Off-Site Management vs. On-Site Management

Off-Site	Both	On-Site
•	•	•
•	•	•
•		•

1. Based on information from the lecture, to which biological resource management type does each example relate? Place a checkmark in the correct box.

	Off-Site	On-Site
Uses aquariums		
Preserves individual species		
Keeps animals in natural habitats		
Uses national parks		

Fill in the blanks to complete the summary.

The professor introduces the problem of how humans can protect the _____ of plant and animal species on Earth. He compares two methods: Off-site management, like _____, takes species out of their natural environment and seeks to _____ them as individuals. On-site management, like _____, seeks to protect the _____ and all the species in it. Each has different advantages.

03 Office Hours

Listen to a conversation between a student and a professor. Fill in the diagram with the information that you hear. **Track 131**

Key Vocabulary

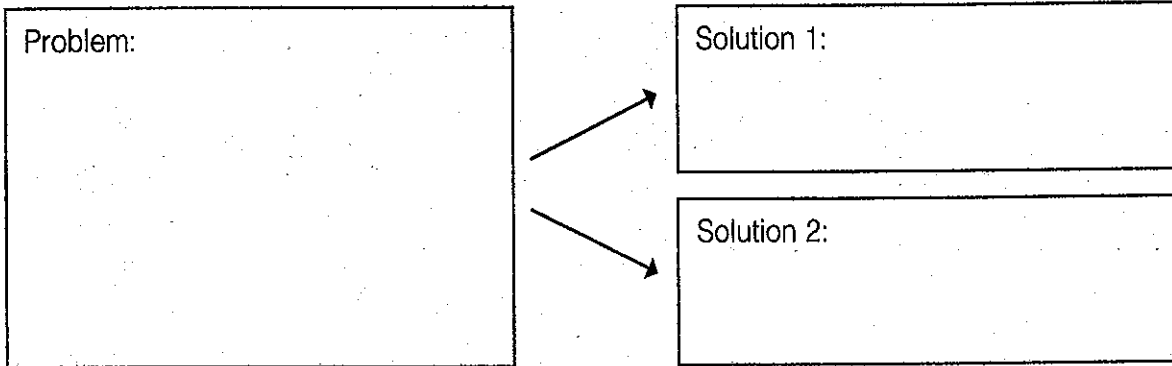
cutting-edge: being the most modern or advanced

adopt: to take on; to start using something new

hands-on: done by direct experience

dedicated: wholeheartedly devoted or committed to a goal, cause, or job

sponsor: a person who helps and is responsible for another person or project



1. Based on information from the conversation, indicate whether or not each statement is correct. Place a checkmark in the correct box.

	Yes	No
The student should find a local environmental group.		
The student needs to find a sponsor for her project.		
The student needs to take a class on designing a project first.		

Fill in the blanks to complete the summary.

The student asks the professor how she can get _____ in the environmental science field. The professor responds by telling her she can _____ with a local _____ group. The student says she is too busy. In response, the professor suggests that the student do an _____ project and get _____ for the experience as a volunteer.

04

Service Encounter

READING
LISTENING
SPEAKING
WRITING
PRACTICE TEST

Listen to a conversation between a student and a university employee. Fill in the diagram with the information that you hear. **Track 132**

Key Vocabulary

minimum: the lowest possible amount or degree of something.

GPA: (Grade Point Average) a combined measurement of a student's grades

focus: to concentrate on a task or goal

financial: relating to or involving money

priority: of the highest importance

Problem:



Solution:

1. Based on information from the conversation, indicate whether or not each statement is part of the student's problem. Place a checkmark in the correct box.

	Yes	No
The student is getting lower grades this term.		
The student might lose his scholarship.		
The student needs to work at least twenty hours each week.		
The student wants to graduate on time.		

Fill in the blanks to complete the summary.

The student visits a counselor to ask for advice on how to _____ for his job and classes. The student explains that he needs to work a _____ of twenty hours per week and that he is taking _____ classes to graduate on time. The counselor suggests he drop _____ classes and _____ on work and on doing well in his remaining classes.

05 Philosophy

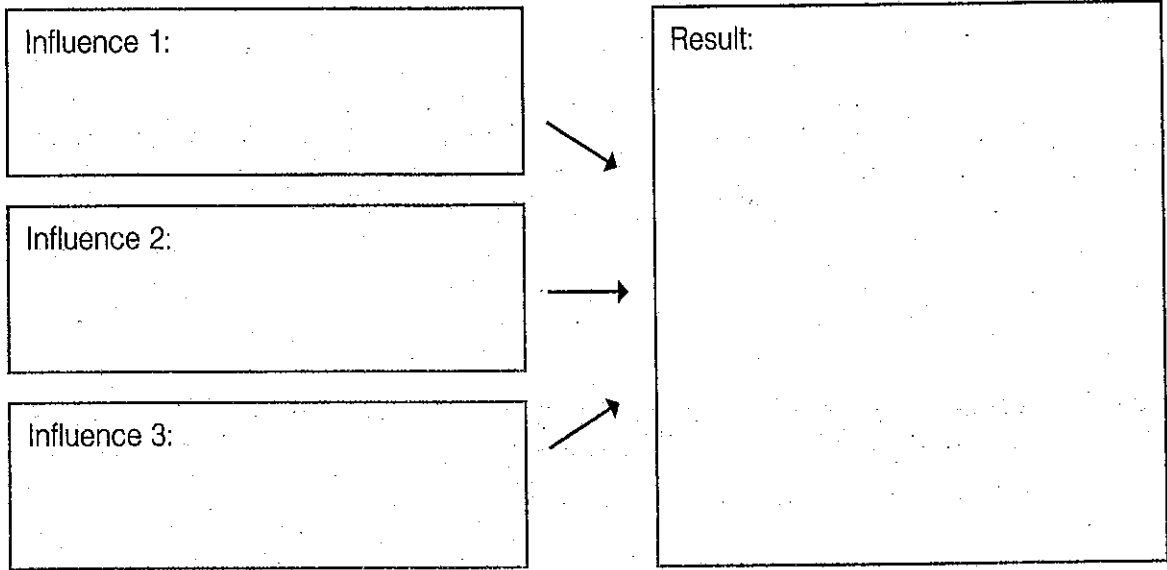
Listen to a discussion in a philosophy class. Fill in the diagram with the information that you hear. **Track 133**

Key Vocabulary

devastated: damaged very badly
dignity: a person's sense of value or importance
extreme: very great in degree

tolerance: a willingness to accept people different from oneself
absolute: definite and not likely to change

Montaigne's Thought



- Based on information from the discussion, indicate whether or not Montaigne accomplished each task before beginning his investigations. Place a checkmark in the correct box.

	Yes	No
Inspired other skeptics		
Left his job as a lawyer		
Moved to a different country		

Fill in the blanks to complete the summary.

The professor explains that Montaigne lived during a time of _____ and retreated to the countryside. She adds that he wanted to know himself in order to ask questions about _____. He did three things that influenced the development of a new form of criticism called "_____ skepticism." She says these were criticism of _____ positions, support of moderation and _____, and rejection of absolute _____ positions.

06

Sociology

Listen to a lecture in a sociology class. Fill in the diagram with the information that you hear.

Track 134

Key Vocabulary

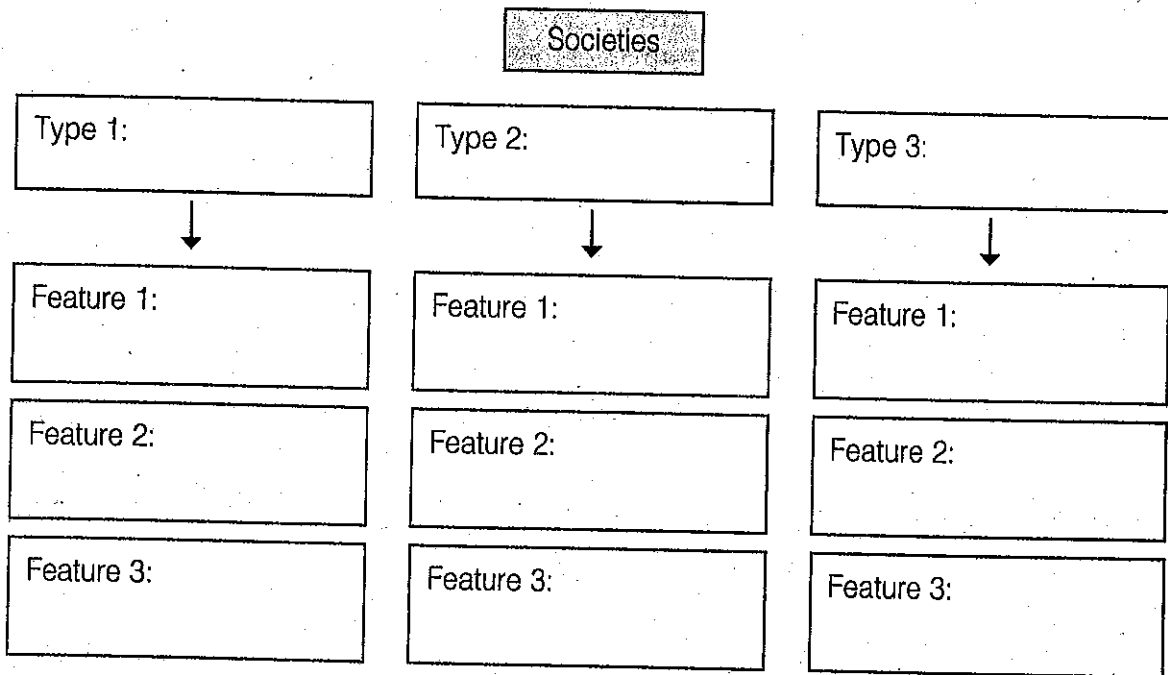
mobility: the ability to move

subsistence: the condition of continuing to exist

edible: can be eaten

specialized: doing a specific thing

egalitarian: of equal status



1. Based on information from the lecture, to which type of society does each feature relate? Place a checkmark in the correct box.

	Hunter/Gatherer	Horticultural	Agrarian
Has professionals			
Prefers to move around			
Most people do same job			
Plants some crops			

Fill in the blanks to complete the summary.

The professor talks about society as the most complex form of _____. He discusses three types of _____: hunter/gatherer, horticultural, and agrarian. He explains how each type differs based on three dimensions. These are _____, subsistence _____, and division of _____.

07 Office Hours

Listen to a conversation between a student and a professor. Fill in the diagram with the information that you hear. Track 135

Key Vocabulary

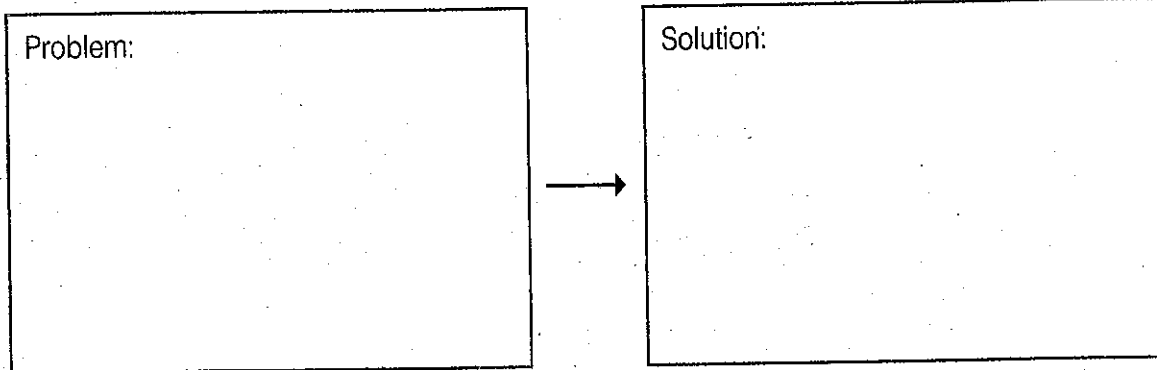
tentatively: not definite or certain

assume: to accept that something is true without checking or confirming it

AP test: a test to get college credit for a high school course

trial: a short period to test something to see if you like it

audit: to take a class without getting credit for it



1. Based on information from the conversation, indicate whether or not the student must perform each action. Place a checkmark in the correct box.

	Yes	No
Audit the 101 class		
Get permission from her advisor		
Talk with the professor regularly		
Take a test		

Fill in the blanks to complete the summary.

The student asks the professor if she can _____ his class. He says that she needs to complete the _____ first. She tells him about her plans and previous _____ to try to convince him to let her into the course. The professor agrees to let her take the class _____.

08

Service Encounter

READING

LISTENING

SPEAKING

WRITING

PRACTICE TEST

Listen to a conversation between a student and a university employee. Fill in the diagram with the information that you hear. **Track 136**

Key Vocabulary

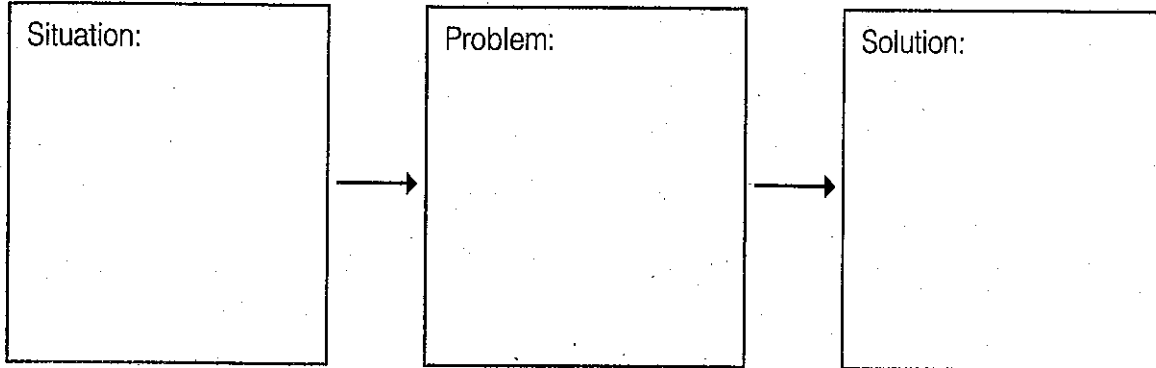
portfolio: a set or example of a writer's or artist's work

freelance: independently

non-staffer: someone who is not paid to work for an organization

budget: money allocated or needed for a particular purpose or period of time

reconsider: to think again about something and possibly change your opinion



1. Based on information from the conversation, indicate whether or not each statement is a reason the student gives for wanting to work for the school newspaper. Place a checkmark in the correct box.

	Yes	No
To earn money		
To get experience		
To write about sports		
To build a portfolio		

Fill in the blanks to complete the summary.

The student is looking for a job at the school _____ as a paid _____ . The employee says that they do not pay such writers, which makes the student _____. The employee tries to convince the student to work for the paper as an unpaid _____ writer while suggesting that he might get hired for a job _____ .

09 History

Listen to a lecture in a history class. Fill in the diagram with the information that you hear.

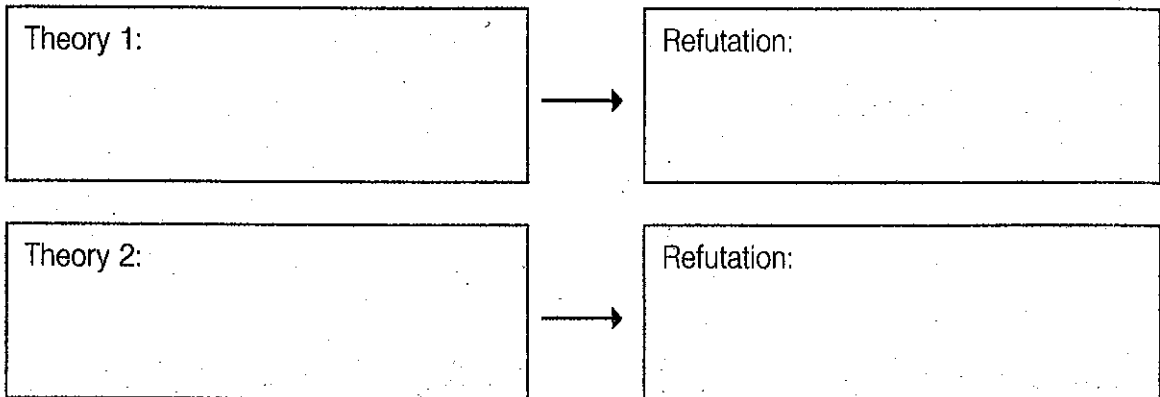
Track 137

Key Vocabulary

humble: modest; having low status or position
promote: to persuade others to support or do something
underlying: providing support for

obscure: to make something unclear or hidden
alleviate: to make less painful

The "Gospel of Wealth"



1. Based on information from the lecture, indicate whether or not each idea is specific to Carnegie's "Gospel of Wealth." Place a checkmark in the correct box.

	Yes	No
Governments should let people get rich by reducing taxes.		
The wealthy are responsible to help others improve themselves.		
Philanthropy can eradicate poverty without the help of the government.		

Fill in the blanks to complete the summary.

The professor talks about what some thought about wealth and poverty at the end of the _____ century. He discusses Carnegie's "Gospel of Wealth," which said that the _____ could improve themselves and that philanthropy was the best solution to _____. Then the professor _____ both points, saying that not everyone has the ability to be _____ and that _____ programs were more successful in alleviating poverty.

Listen to a discussion in an astronomy class. Fill in the diagram with the information that you hear. **Track 138**

Key Vocabulary

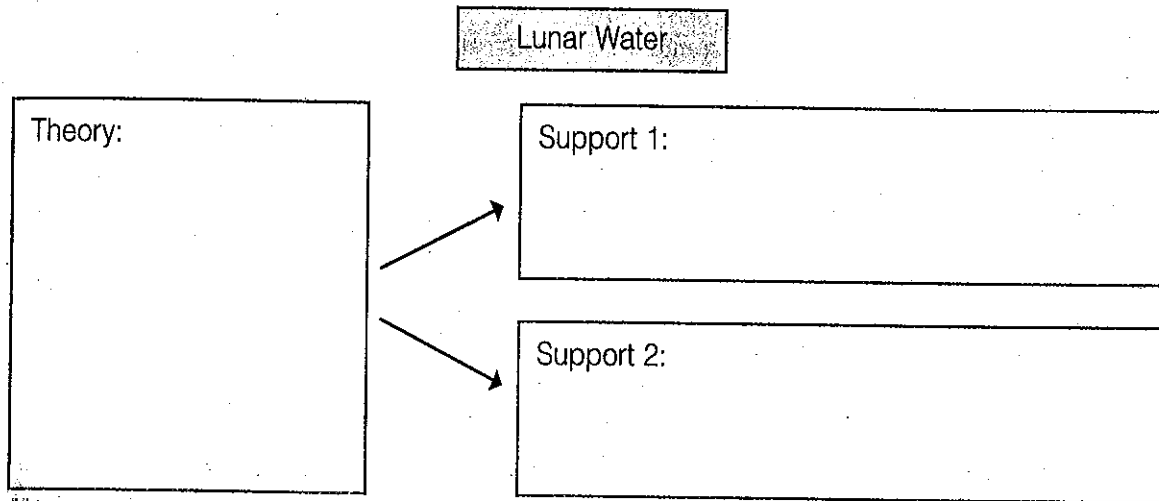
grapple: to struggle with

seek: to look for

deposit: an accumulation of natural materials that has built up through a natural process

slim: unlikely

cook up: to invent or create



1. Based on information from the discussion, to which spacecraft does each statement relate? Place a checkmark in the correct box.

	<i>Clementine</i>	<i>Lunar Prospector</i>
Searched both poles		
First to find evidence of water		
Crashed into crater		
Detected hydrogen		

Fill in the blanks to complete the summary.

The class discusses the possibility that there may be _____ on the moon. They agree that it would have to be _____ and located underground at the _____. The professor points out that two spacecraft looked in those areas and found _____ of water; however, no one has yet been able to _____ that there is _____ on the moon.



Chapter 7 Inference Questions

Necessary Skills

- Guessing the implied meaning of a sentence or phrase
- Making a generalization from what is said
- Drawing a conclusion based on the main points of a lecture or a conversation
- Recognizing how intonation or stress indicates implied information or opinions
- Inferring what is likely to happen from what a speaker says

Example Questions

Some inference questions will not appear during the test. You will only hear them.

- Listen again to part of the conversation. Then answer the question.

You will hear a few lines of the lecture or conversation again.

- What does the professor imply when she says this:

You will hear part or one line of the previous excerpt again.

The following types of inference questions may appear during the test:

- What does the professor imply about _____?
- What can be inferred about _____?
- What will the professor likely discuss next?
- What will the student probably do next?

Strategies

- Try to guess the implied meaning of the given information. The correct answer is not directly stated.
- Pay attention to clues expressed by certain words, word stress, intonation, or pace of what is said. The same sentence can express different meanings when said in different ways.
 - Example: *Oh, you've never heard of that.* (I may need to explain more than I thought.)
Oh, you've never heard of that? (I'm surprised that you've never heard of that.)
- Pay attention to the last part of a conversation. For example, if a speaker agrees with the other speaker's suggestion at the end, we can infer that the speaker will do what is suggested.

Listen to a lecture in a philosophy class. Fill in the diagram with the information that you hear. **Track 139**

Key Vocabulary

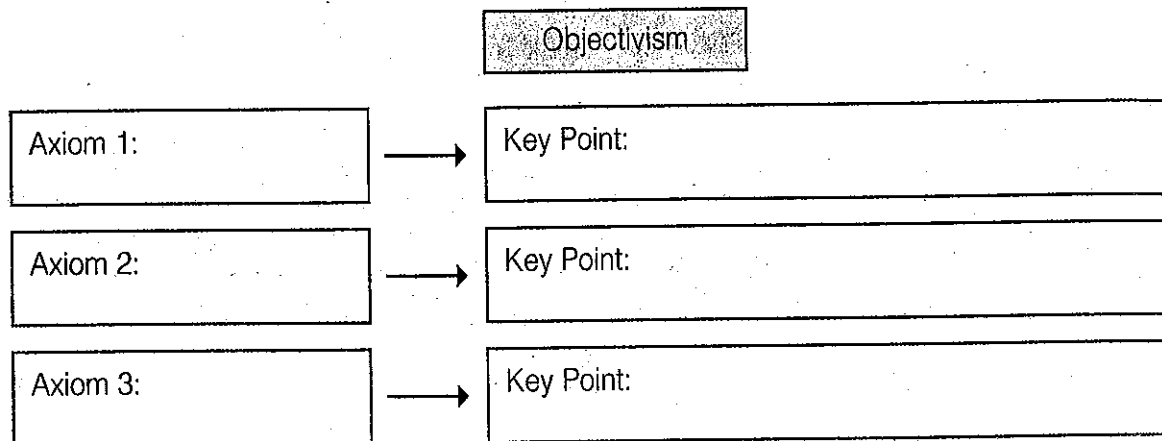
customary: traditional; habitual

axiom: a statement that is accepted as true

opposition: a strong disagreement; a thing, idea, or person that shows the opposite view

attribute: a quality that something has

reside: to live or be in a place



- What can be inferred from the lecture about the previous class?
 - The professor discussed Relativism.
 - It was about finding happiness.
 - The professor refuted objectivism.
 - It was about the physical world.
- What does the professor imply about the Relativist view of reality?
 - It is accurate in some cases.
 - It came prior to Objectivism.
 - It applies in real world cases.
 - It is scientifically incorrect.
- What does the professor imply when he says this:
 - The identity of an object does not change.
 - An object can have different qualities.
 - The Law of Identity is the easiest to grasp.
 - The identities of chairs and desks are confused.

Fill in the blanks to complete the summary.

The lecture is about a philosophy called Objectivism. The professor discusses three _____, which describe the Objectivist belief about reality. The first is the Primacy of _____, which says that there is an objective _____ that exists aside from consciousness. The second axiom is the Law of _____, which says that everything has an identity. The third is the _____ of Consciousness, which says that people are aware of _____ and the identities of objects.

Listen to a lecture in a linguistics class. Fill in the diagram with the information that you hear. **Track 140**

Key Vocabulary

relativity: the idea that significance of one thing is dependent on another

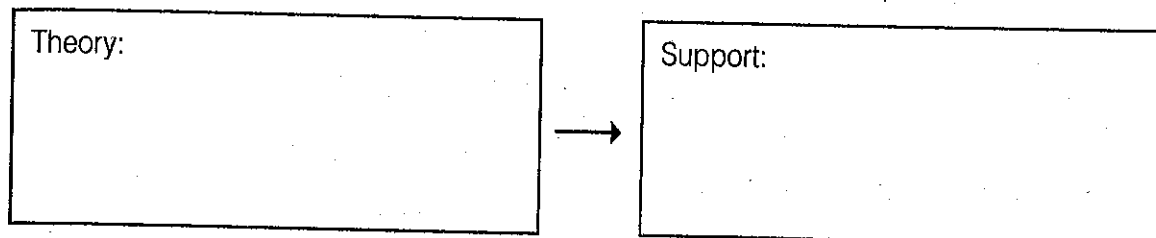
premise: the idea that something is based on


course: a span of time; a duration

dismiss: to decide something is not worth considering

conception: an idea or theory that is developed in the mind

Sapir-Whorf Hypothesis



- What does the professor imply when she says this: 
 - She expected the students to be familiar with the theory.
 - She wanted a student to explain the theory.
 - The students have read about the theory in their textbooks.
 - She thought the students would be interested in the theory.
- What can be inferred about how people from different cultures perceive the world?
 - It is dependant on the shape of their tongues.
 - It may be influenced by grammatical structure.
 - It changes depending on how people feel.
 - It is unaffected by language or culture.
- What does the professor imply about Whorf's discovery?
 - It was a matter of coincidence.
 - It was hard to defend at first.
 - It helped support the theory of linguistic relativity.
 - It came about from studying language alone.

Fill in the blanks to complete the summary.

The lecture is about the Sapir-Whorf theory of linguistic _____. The theory proposes that the way people act and think is determined by their _____. The professor supports the theory by talking about the _____ language and culture. From that, some researchers found that the _____ of the language, which did not include tenses, may have affected how the people who spoke that language conceived of _____.

Listen to a conversation between a student and a professor. Fill in the diagram with the information that you hear. **Track 141**

Key Vocabulary

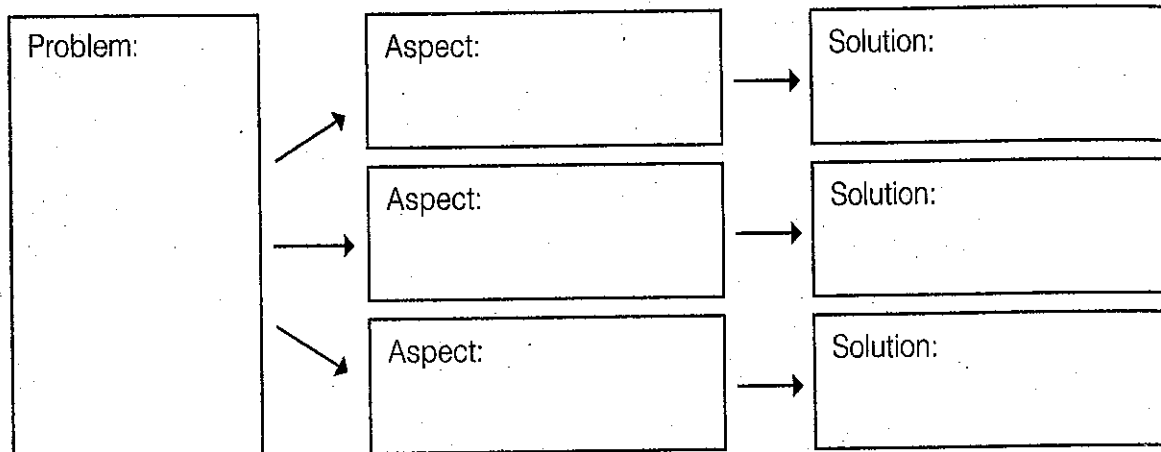
synonymously: having the same meaning


sufficient: as much as is needed

precedent: a past event that can be used at a later time as an example for a similar decision or to justify a similar action

logic: sensible rational thought and argument

vague: unclear



1. What does the professor imply when she says this: 

(A) She can talk for a short while.
 (B) She does not want to talk to the student.
 (C) She is annoyed by the student's visit.
 (D) She is glad the student came to see her.
2. What does the student imply about his support of the precedents?

(A) He thinks the professor unfairly dismissed them.
 (B) He did not have as much time to write that part.
 (C) He thought the other parts were more important.
 (D) He thought he did what the professor had asked.
3. According to the conversation, what can be inferred about the student's paper?

(A) The student thought it was bad.
 (B) The student rushed to finish it.
 (C) It was for a business class.
 (D) It received a failing grade.

Fill in the blanks to complete the summary.

The conversation takes place between a student and a professor. After receiving his graded _____, the student is _____ about the professor's comments. The professor tells the student that he has to be more _____. The professor also says that the student must be careful about his _____. Finally, the professor tells the student how to adequately _____ his ideas.

04

Service Encounter

Listen to a conversation between a student and a university employee. Fill in the diagram with the information that you hear. **Track 142**

Key Vocabulary

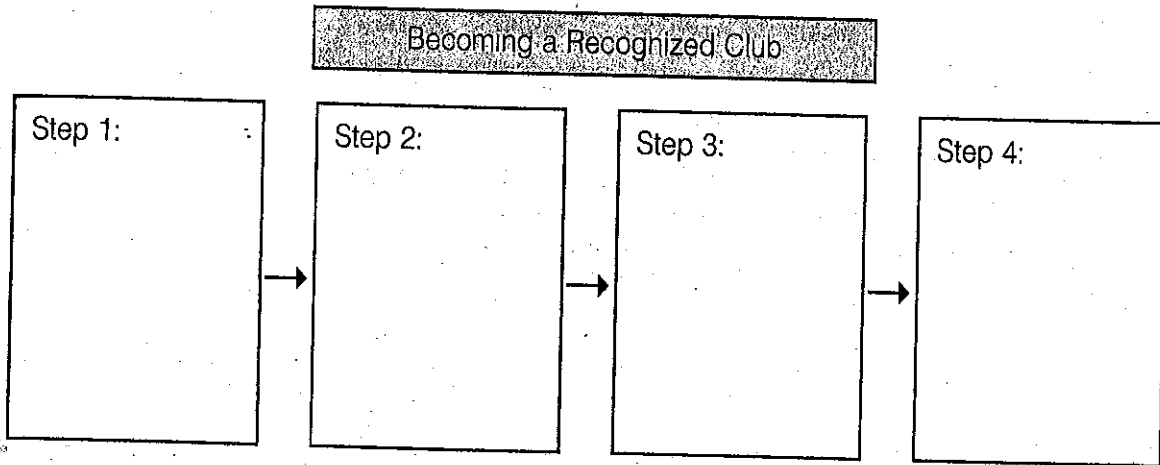
cater: to provide food for an event

register: to put on an official record

review board: a group that considers decisions to be made

student union: a group of students who represent the greater student body

submit: to turn in



- What does the employee imply about the juggling club?
 - He is not interested in it.
 - It only meets every other Thursday.
 - He knows someone in it.
 - It is not well known on campus.
- What can be inferred about the benefits of being a recognized club?
 - The club may receive university funding.
 - The club will be eligible for a mailbox.
 - The club must provide its own room.
 - The club does not require a leader.
- What can be inferred about the constitution?
 - The employee has written one.
 - The review board will not approve it.
 - The juggling club does not have one.
 - It must be written by the president.

Fill in the blanks to complete the summary.

The conversation takes place between a student and an employee of the university. The student wants to reserve a room for her _____ club, but she cannot because the club is not registered with the _____. Then the employee explains the process for becoming a _____ organization. The student must submit a _____ and have it _____.

READING
 LISTENING
 SPEAKING
 WRITING
 PRACTICE TEST

05 Geology

Listen to a discussion in a geology class. Fill in the diagram with the information that you hear. **Track 143**

Key Vocabulary

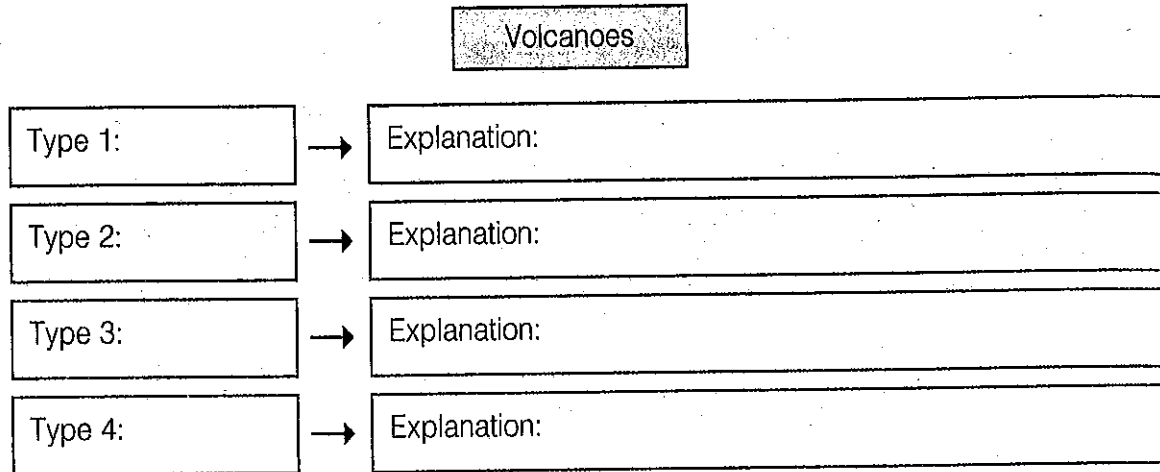
forewarn: to caution beforehand

composite: made up of different parts

flank: the side of something

network: an interconnected system

terminology: the technical terms used in a field



1. What does the professor imply when he says this:
 - (A) Some geologists may not use the same grouping.
 - (B) There are more than four types of volcano.
 - (C) The professor does not like the names.
 - (D) The names of volcanoes are misleading.

2. Which of the following can be inferred about volcanoes?
 - (A) All volcanoes erupt in the same way.
 - (B) Only active volcanoes exist in Hawaii.
 - (C) Lava dome volcanoes are not dangerous.
 - (D) Cinder cones are the shortest type of volcano.

3. What can be inferred about how the types of volcanoes are named?
 - (A) They come from the people who discovered the volcano.
 - (B) It may describe how they are made or their appearance.
 - (C) It is mostly based on what type of lava they are made of.
 - (D) They are named for the place in which they occur.

Fill in the blanks to complete the summary.

The lecture is about four different types of _____. The professor explains that _____ are created when violent eruptions emit lava. The lava hardens into pieces called cinders, build up around the _____. Composite volcanoes are much larger and are strengthened by _____ that hardens in cracks in the side of the cone. _____ volcanoes are formed by _____ eruptions that harden over large distances. _____ are formed from within, and lava rarely escapes the volcano.

Listen to a lecture in an art history class. Fill in the diagram with the information that you hear. **Track 144**

Key Vocabulary

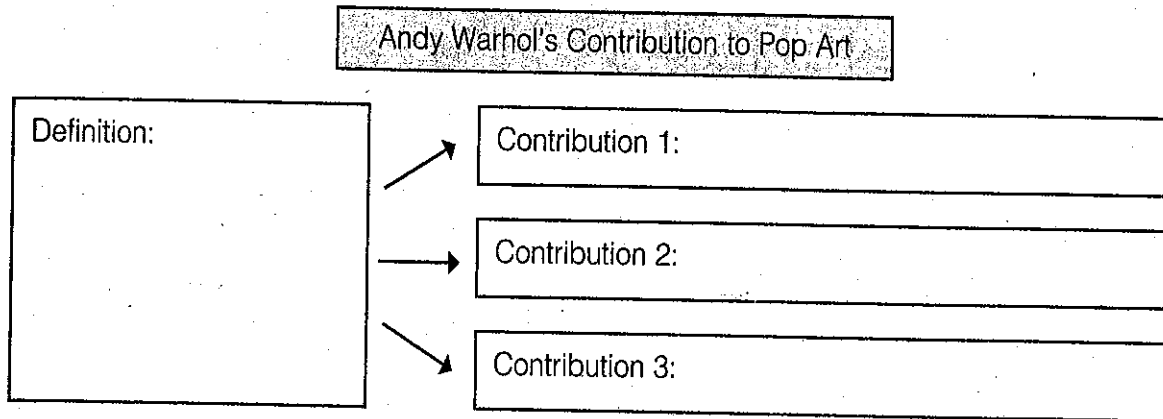
capitalize: to benefit from something

elitism: the belief that people of higher classes are better than others

Inextricably: unavoidably

lowbrow: unsophisticated; trivial

twofold: having two parts



- What does the professor imply when she says this:
 - Pop art should not be dismissed as improper.
 - Pop art specializes in pleasing uncultured people.
 - Pop art usually appeals to educated people.
 - Pop art is not as profound as some believe.
- What does the professor imply about Andy Warhol's artistic background?
 - He began to paint at a very young age.
 - He began painting during the Pop art movement.
 - Most people do not know that he received training.
 - He was less educated in art than most artists.
- What can be inferred about Warhol's art assembly line?
 - It had only been done once before.
 - It discouraged collaboration between artists.
 - It promoted the idea of trash as art.
 - It was an important idea to the movement.

Fill in the blanks to complete the summary.

The professor discusses three ways in which Andy Warhol influenced the _____ movement. First, Warhol's ideas that _____ could be art influenced other artists of the movement. Second, Warhol also promoted the _____ of artists as a way to mass produce art. This was also a key idea of the movement. Finally, Warhol participated in an exhibit that helped _____ pop art and forced people to _____ art.

07 Office Hours

Listen to a conversation between a student and a professor. Fill in the diagram with the information that you hear. **Track 145**

Key Vocabulary

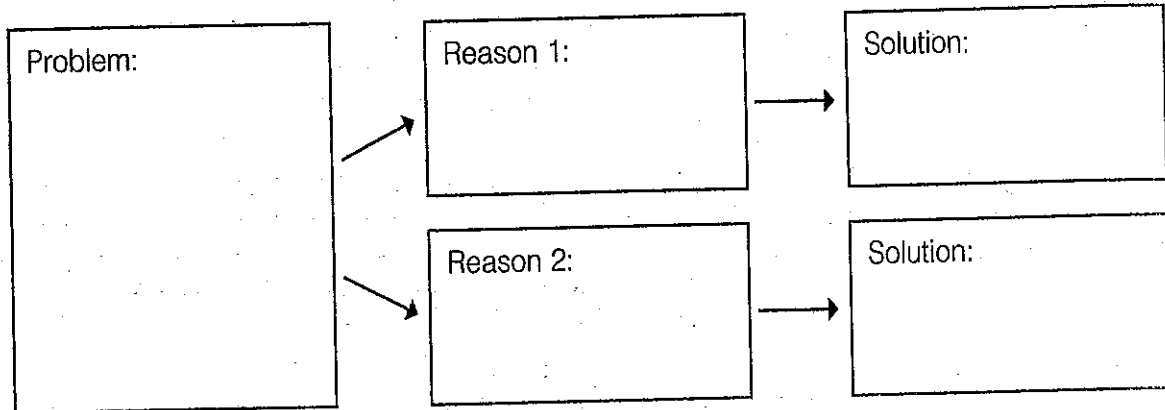
drag: to lower or bring down


evaluation: a performance assessment

quota: a minimum set amount that is required

relevant: related to the topic being discussed

vocal: speaking aloud



- What can be inferred about the student's attendance?
 - It is a part of the student's participation grade.
 - The professor worries about why she misses so many classes.
 - The student has only missed one class in the semester.
 - It is not an important part of the participation grade.
- What does the professor imply when he says this: 
 - He is disappointed with the quantity of the student's participation.
 - He favors comments that include numerical support.
 - He finds the student often makes interesting remarks in class.
 - He does not think the student makes enough quality contributions.
- What does the professor imply about the student's interactions with her peers?
 - She is often rude to her classmates.
 - She does not respond to their comments.
 - She is good at arguing her points.
 - She is intimidating to the others.

Fill in the blanks to complete the summary.

The conversation takes place between a student and her professor. The student approaches the professor because she is unhappy about her low _____ grade. The professor explains to the student that he seeks _____ and gives her some tips for _____ the grade. First, he tells her to add only _____ comments. Also, he asks her to try to _____ with the other students instead of just speaking in order to _____.

08

Service Encounter

Listen to a conversation between a student and a university employee. Fill in the diagram with the information that you hear. **Track 146**

Key Vocabulary

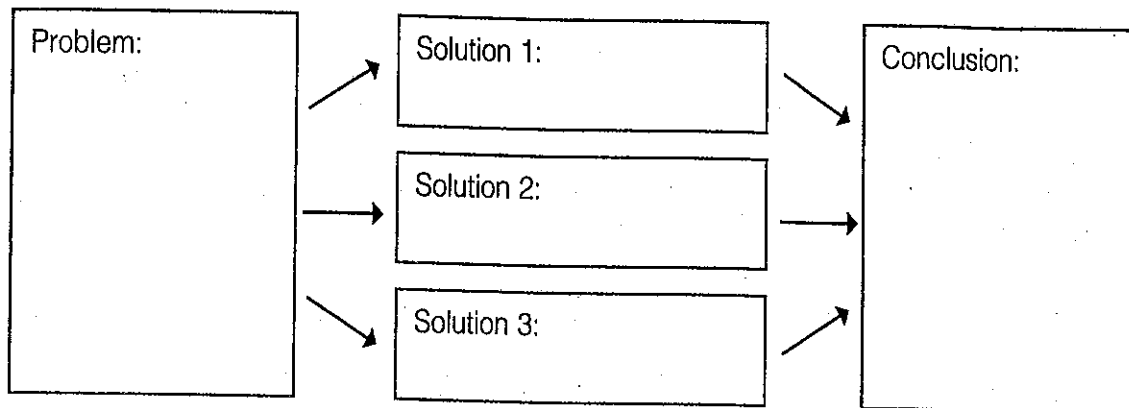
slip: a small piece of paper

practice room: an area reserved for rehearsal, sometimes sound-proof

particulars: details

responsible: accountable

generate: to bring something into existence or effect



- What can be inferred about how often the student plays?
 - He practices every day.
 - He plays when he has the time.
 - He practices in his room each night.
 - This is the first time he ever played.
- What does the student imply about his cosmology midterm?
 - It took a long time to complete.
 - He did not get a chance to study for it.
 - He had to study a lot for it.
 - It was on the same day that he made the reservation.
- What will the student probably do next?
 - Return to his dorm to practice
 - Go to his room for the confirmation sheet
 - Get permission to enter a practice room
 - Make a reservation for another day

Fill in the blanks to complete the summary.

The conversation takes place between a student and the building manager of the _____ department. The student had a _____, but the manager cannot locate the information and is therefore unable to allow the student to use the _____. The student suggests different ways of _____ the information, but ultimately, he has to go back to his room to retrieve the _____ sheet.

READING

LISTENING

SPEAKING

WRITING

PRACTICE TEST

Listen to a lecture in a business class. Fill in the diagram with the information that you hear.

Track 147

Key Vocabulary

allude: to mention or refer to

patent: to have the right to make and sell an invention.

manufacture: to make by using machines

efficiency: the ability to complete work in a short amount of time

semblance: an outward appearance


Mass Production

Advantage 1:

Disadvantage 1:

Advantage 2:

Disadvantage 2:

- What can be inferred about the role of mass production in modern life?
 - It was not used after the invention of the assembly line.
 - Most businesses no longer use mass production.
 - It is used to manufacture many products used daily.
 - It is only used in the automobile industry.
- What does the professor imply when he says this: 
 - Ford should not get credit for inventing mass production.
 - Ford's role in popularizing mass production is not acknowledged.
 - Ford was the first to use assembly lines to make cars.
 - Ford was not able to prove that he invented the assembly line method.
- What does the professor imply about working on an assembly line?
 - It is safe.
 - It is precise.
 - It is boring.
 - It is loud.

Fill in the blanks to complete the summary.

The lecture is about _____. First, the professor gives a brief history of this type of production, debunking the myth that the _____ was invented by _____. Then he talks about some of the advantages and disadvantages of _____. The advantages are that it is faster and eliminates _____. The disadvantages are that it is inflexible and requires a lot of _____.

10 Psychology

Listen to a discussion in a psychology class. Fill in the diagram with the information that you hear. **Track 148**

Key Vocabulary

bizarre: strange; odd

Inhibited: to be restrained or held back

pharmacologist: someone who studies medicine and drugs

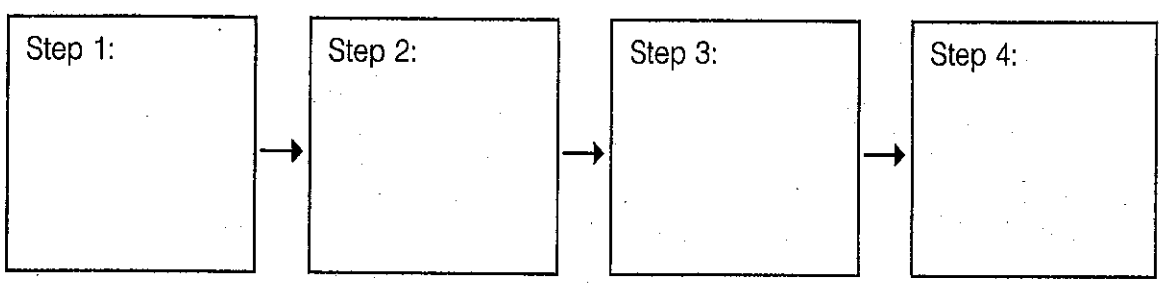
rehearsal: a time of practice

resolution: an action designed to solve a problem.

lucid: rational and mentally clear; easily understood

Lucid Dreaming

Definition:



- What does the professor imply about studying dreams?
 - It can reveal many useful things.
 - It has never been achieved.
 - It usually helps with creativity.
 - Only La Berge has done it.
- What does the professor imply when she says this:
 - She did not want to mention it herself.
 - She did not think anybody knew about them.
 - She enjoys teaching about lucid dreams.
 - She likes to learn about new things.
- What can be inferred about inducing a lucid dream?
 - There are not many ways of doing it.
 - La Berge's method is the most successful.
 - The professor does not recommend it to the students.
 - The professor has never tried it.

Fill in the blanks to complete the summary.

The lecture is about _____. First the professor defines these dreams as ones in which dreamers are _____ of their actions and behaviors. The professor explains how to _____ a dream like this. The process involves _____ a dream and going to sleep again to try to _____ the dream.

Vocabulary Review 3

Instructions: Choose the best word or phrase to complete each sentence.

1. It will cost the company more to _____ its product locally rather than outsourcing production overseas.
(A) cater
(B) facilitate
(C) manufacture
(D) tailor
2. The members of the committee debated the _____ for hours before a vote was finally called for.
(A) ramification
(B) registration
(C) reputation
(D) resolution
3. Missing one or two classes will not _____ affect a student's participation grade in the class.
(A) drastically
(B) inextricably
(C) synonymously
(D) aggressively
4. The leader must remain alert to potential conflicts that may undermine the _____ of the group.
(A) cohesion
(B) coincidence
(C) component
(D) concept
5. Solar and wind power could both _____ be viable sources of alternative energy.
(A) casually
(B) detrimentally
(C) eventually
(D) vocally

6. The flavor and aroma of this special blend of tea is _____ of a tropical garden filled with flowers and ripe fruit.
(A) relevant
(B) reminiscent
(C) sufficient
(D) tolerant
7. What some people are calling _____, or even radical, changes to the system are really changes back to the way it worked decades earlier.
(A) probable
(B) probationary
(C) progressive
(D) prone
8. You may think his _____ attitude makes him easy-going, but I think it makes him indecisive.
(A) commercial
(B) compatible
(C) composite
(D) compromising

Instructions: Choose the word or phrase closest in meaning to the underlined part.

9. All of the actors gathered in the theater's main studio for the first reading of the script.
(A) practice room
(B) rehearsal hall
(C) review board
(D) student union

10. Beyond a person's GPA and resume, employers are interested in indicators of a candidate's honesty and social responsibility.
- (A) animosity
(B) causality
(C) integrity
(D) relativity
11. Many of the museum's patrons were disappointed by the common works displayed at this spring's first exhibition.
- (A) amateur
(B) inhibited
(C) lowbrow
(D) susceptible
12. Both researchers began their studies the same year; however, Dr. Singh was able to publish his results before Dr. Oberman.
- (A) alluded
(B) forewarned
(C) initiated
(D) resided
13. In her latest novel, the writer explores the strange circumstances surrounding a famous actor's disappearance.
- (A) bizarre
(B) eclectic
(C) showy
(D) ague
14. She failed to turn in her application before the deadline.
- (A) attribute
(B) ensue
(C) relinquish
(D) submit

15. While I agree with the basis of your argument, I disagree with your final conclusion.

(A) axiom
(B) premise
(C) quota
(D) strategy

Instructions: Write the missing words. Use the words below to fill in the blanks.

course customary evaluation
institution twofold

Before the last day of the **16.** _____, all instructors will provide students with an **17.** _____ form for the class. It is **18.** _____ for instructors to allow students to record both suggestions and complaints on this form. The purpose of these evaluations is **19.** _____. They allow officials of the **20.** _____ to gauge the satisfaction of students and the performance of individual instructors.

Instructions: Choose the one word that does not belong.

- | | |
|-----------------------|---------------|
| 21. dilemma | opposition |
| plume | stress |
| 22. contradict | facilitate |
| hamper | hinder |
| 23. conception | hypothesis |
| perspective | venue |
| 24. dynamic | gloomy |
| morbid | somber |
| 25. complex | external |
| intricate | sophisticated |

Mini Test 3

01 Biology

Listen to a lecture in a biology class. **Track 149**

Key Vocabulary

predator: an animal that hunts and kills other animals

camouflage: a coloring that allows an animal to blend in with its surroundings


instance: a situation; a time

tasty: good to eat; tastes good

hence: therefore; thus

unappetizing: not appealing; not tempting to eat

inedible: impossible to eat

- How does the professor organize the information about mimicry that she presents to the class?
 - She describes the history of the discovery of each kind.
 - She gives examples of animals that exhibit both Batesian and Müllerian mimicry.
 - She defines two types of mimicry and gives common characteristics.
 - She talks about the function of mimicry as it applies to butterflies.
- Why does the professor mention opossums?
 - To demonstrate how animals use mimicry
 - To exemplify an animal defense mechanism
 - To show how predators are hurt by mimicry
 - To describe types of animals that mimic others
- What does the professor imply when she says this: 
 - The students have already learned about camouflage.
 - The concepts of camouflage and mimicry are easy to confuse.
 - Camouflage is a different type of mimicry.
 - Animals that use camouflage do not mimic others.
- What does the professor imply about how predators choose their prey?
 - They are genetically coded to know which animals are safe to eat.
 - They choose bugs that mimic the coloring of dangerous bugs.
 - They only try a distasteful bug once.
 - They have to sample many animals to learn which are edible.
- Based on information from the lecture, to which type of mimicry does each statement relate? Place a checkmark in the correct box.

	Batesian	Müllerian
Animals undergo signal standardization	<input type="checkbox"/>	<input type="checkbox"/>
A bug with no defense mechanism models itself after an inedible species	<input type="checkbox"/>	<input type="checkbox"/>
Groups of unrelated animals form mimicry rings	<input type="checkbox"/>	<input type="checkbox"/>
First observed in the Pieridae butterfly	<input type="checkbox"/>	<input type="checkbox"/>

02 History

Listen to a discussion in a history class. **Track 150**

Key Vocabulary

terrain: landscape

Irrigation: the system or process of moving water from a source to a remote area

inhospitable: harsh or difficult to live in

reservoir: a place to hold water for future use

terrace: a flat place carved out of a steep incline, like the side of a mountain

fertile: rich; filled with life-sustaining materials

staple: a basic ingredient of a diet

domestication: the process of putting under the control of humans

6. How is the discussion organized?
- He gives the students a list of topics to discuss.
 - He asks the students to give examples of agricultural techniques.
 - He allows the students to ask questions.
 - He invites the students to talk about differences between two agricultural techniques.
7. Why does the professor discuss tomatoes?
- To show how Mesoamerican agriculture influenced modern food production
 - To give an example of crops produced by early Egyptian societies
 - To correct the student's claim that they did not exist in Europe before
 - To describe how Mesoamericans first began to cultivate food
8. What can be inferred about corn in Mesoamerica?
- It was able to thrive before irrigation systems were invented.
 - It was part of religious ceremonies for Mesoamericans.
 - It was not produced as much as the cocoa plant was.
 - It was an important crop to Mesoamerican cultures.
9. What does the professor imply about the influence of domesticated animals on agriculture?
- A culture cannot cultivate crops without domesticated animals.
 - Domesticated animals make cultivation of food easier.
 - The introduction of domesticated animals distracts from food production.
 - People are forced to grow more food in order to feed domesticated animals.
10. Based on information from the discussion, indicate whether the statements below describe Egyptian culture or Mesoamerican culture. Place a checkmark in the correct box.

	Egyptian	Mesoamerican
Built in the middle of lakes		
Took longer to cultivate food		
Manipulated a major river to provide water		
Grew millet, wheat, and barley		

03 Office Hours

Listen to a conversation between a student and a professor. **Track 151**

Key Vocabulary

- put on the spot:** to place someone in an awkward situation
- nerve-racking:** causing extreme nervousness
- mandatory:** required
- drag down:** to pull down; to lower

facilitator: a person who guides or leads a group discussion


rattle off: to speak quickly without much plan or prior thought

11. What does the professor imply about the student's academic ability?

- (A) She is the smartest in the class.
- (B) She is extremely intelligent.
- (C) She is usually unoriginal.
- (D) She is too disorganized.

12. What can be inferred about the student's participation in class?

- (A) She does not participate because she does not feel confident.
- (B) She will participate mainly to get a higher grade in the class.
- (C) She does not participate because she has nothing to say.
- (D) She will participate after the other students speak.

13. What does the student imply when she says this: 

- (A) She does not think the professor can take criticism well.
- (B) She thinks the professor does not facilitate the section properly.
- (C) She is disappointed in the quality of the other student's responses.
- (D) She is afraid the professor will be offended by her suggestion.

14. Based on information from the conversation, indicate which of the suggestions below were given by the professor. Place a checkmark in the correct box.

	Yes	No
Arrive at the section well prepared		
Take time to listen to what the other students are saying		
Create a list of topics or questions to bring up during the section		
Be confident in her academic ability		

15. What will the student probably do next?

- (A) Skip the rest of the discussion sections in the semester
- (B) Provide her own list of questions for the section
- (C) Ask the professor to excuse her from the discussion
- (D) Try to listen and contribute more during the section

Mastering Skills for the

SPEAKING

SPEAKING

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The TOEFL® iBT Speaking Section

The prompts for speaking questions on the TOEFL® iBT can be categorized into six types:

Question	Time			
	Reading	Listening	Preparation	Speaking
Independent Q1			15 seconds	45 seconds
Independent Q2				
Integrated Q3	45 seconds	1-2 minutes	30 seconds	60 seconds
Integrated Q4				
Integrated Q5		1-2 minutes	30 seconds	60 seconds
Integrated Q6				

The purpose of the speaking section is to evaluate your ability to speak coherently both on your opinions and experiences as well as on information that you have read or heard. The speaking questions fall into two categories: independent and integrated. For the two independent speaking questions, you should draw upon your own experience and knowledge. For the remaining four speaking questions, you will speak about what you read and/or hear. Your ideas need to be well organized, and the vocabulary and grammar you use must be accurate enough to be easily understood.

In particular, each question type will require test takers to organize their ideas and speak toward different goals:

Question	Task	Materials	Length	Tasks
1	Independent	none		Describe your experience.
2	Independent	none		Give your opinion and explain why you think this.
3	Integrated	Reading Conversation	100 words 200 words 60-90 seconds	Restate the opinion of the speaker and the examples used.
4	Integrated	Reading Lecture	100 words 200 words 60-90 seconds	Explain how the example from the lecture supports or refutes the passage.
5	Conversation-based	Conversation	300 words 90-120 seconds	Restate suggestions and tell which you think is better.
6	Lecture-based	Lecture	300 words 90-120 seconds	Summarize what you heard.

Study Tips for Speaking

- Master the North American English phonetic system as best as you can. Pay special attention to difficult distinctions such as: b/v, f/p, r/l, s/th, j/z, si/shi, the vowel sounds in bat/bet, it/eat, and shirt/short. Also, practice pronouncing the diphthongs (combined vowels) as one short, continuous sound rather than two separate ones. These include the sounds in the following: all, bye, boy, and house.
- Practice speaking with a North American inflection. This involves moving the lips and opening the mouth wider, and speaking more from the mouth and nose than from the back of the throat.
- Practice using the pauses and intonations you learn when studying for the listening section of the TOEFL® iBT.
- Practice speaking at home. Use one of the independent writing topics as a speaking topic. Give yourself 15 seconds of preparation time. Use this time to think of your main idea and details or examples to support it. Speak for approximately 45 seconds on the topic. Also practice with 30 seconds of preparation time and one minute of speaking time, as this will be the case for the integrated exercises.

Test Management

- You will speak into a microphone attached to a headset.
- Independent Speaking questions come first.
- You can take notes and then use them when preparing your response.
- Check the time with the clock shown in the title bar on the computer screen.

How Speaking Will Be Scored

ETS graders will score test takers' responses according to the following scale:

Score	General Description	Key Points
4	The response answers the question or prompt well. The speaker is easy to understand and there are only minor mistakes with grammar or pronunciation.	Fluent speech that is easy to understand and follow, appropriate use of grammar and vocabulary, ideas are explained clearly
3	The response answers the question or prompt, but not all of the ideas are fully developed. The speaker can be understood, but there are some clearly noticeable mistakes in speaking.	At least two of these problems are present: poor pronunciation, poor pace of speech, wrong word choice, limited use of grammar structures, or incorrect grammar
2	The response gives only a basic or minimal answer to the question or prompt. Most sentences can be understood, but some effort is required by the listener because speech is not fluent and pronunciation is not accurate. Some ideas are not clearly explained.	At least two of these problems are present: poor pronunciation, choppy speech (not fluent), incorrect word choices, basic grammar, poor use of grammar, only basic ideas are presented, explanation is absent or limited
1	The response is very short, does not show full understanding of the question or prompt, and is hard for the listener to understand.	At least two of these problems are present: poor pronunciation, choppy speech (not fluent), long or frequent pauses, poor grammar, use of obviously practiced or formulaic expressions, lots of repetition of expressions in the question or prompt
0	There is no response or the response is not related to the question or prompt.	No response to grade, or response is not related to the question or prompt

Preview

Question 1

The following is a sample Question 1 similar to the one you will see when you take the test. You will first see a prompt on your screen describing the task.

Describe an important accomplishment from your past. Why was this accomplishment important to you? Include specific reasons and examples to support your answer.

You will then have 30 seconds to prepare a response and 60 seconds to speak your response into the microphone. A sample outline of a response can be found below.

Sample Outline

Introduction:

Thesis statement

Body:

Reason 1

Topic sentence

Reasons, examples, and details

Reason 2

Topic sentence

Reasons, examples, and details

Sample Response

Thesis statement

One of my significant childhood accomplishments was learning how to ride a bicycle successfully.

Topic sentence

This was important because I first learned how hard work can pay off. I spent many days learning how to ride a bicycle. Then one day I was able to ride it without falling. I realized that when I practiced hard enough at something, I could achieve it.

Reasons, examples, and details

Topic sentence

Secondly, it helped me to obtain a level of independence. Now that I could ride a bicycle, I could go to different places by myself without having to depend on my parents for a ride. It made me a freer child.

Reasons, examples, and details

Question 2

The following is a sample Question 2 similar to the one you will see when you take the test. You will first see a prompt on your screen describing the task.

Many believe that it is important that children spend time participating in extracurricular activities. Others believe that it is more important that children spend most of their time studying. Which view do you believe? Include specific reasons and examples to support your answer.

You will then have 30 seconds to prepare a response and 60 seconds to speak your response into the microphone. A sample outline of a response can be found below.

Sample Outline

Introduction:

Thesis statement

Body:

Reason 1

Topic sentence

Reasons, examples, and details

Reason 2

Topic sentence

Reasons, examples, and details

Sample Response

Thesis statement

I believe it is important for children to spend some time participating in extracurricular activities.

Topic sentence

First of all, extracurricular activities let children develop their bodies as well as their minds. As a young child, most of the exercise I received was at after-school soccer games. Hence, I think children should participate in these types of activities so they can maintain their physical health.

Topic sentence

Reasons, examples, and details

Secondly, they help students figure out what they are good at and what they like to do. Playing in an after-school band allowed me to realize how much I loved music. Now I want to study music professionally in college. → Reasons, examples, and details

Question 3

The following is a sample Question 3 similar to the one you will see when you take the test. You will first see a short reading passage about a campus-related topic. You will have 45 seconds to read the announcement.

Announcement from the University Library

As of September 1, students who fail to return library books by the due date will not be allowed to register for classes until the books are returned and the late fees are paid in full. This past semester, we received a large number of overdue books, and we hope that the new policy will encourage more students to return books on time. In addition, the library would like to use all late fees collected under this policy to help fund an old books exhibit on the library's main floor.

After 45 seconds, you will be asked to listen to a conversation about the passage you just read. Read the conversation below. Keep in mind that this conversation will only be heard on the real test and will not appear on your screen.

M: Did you see this notice from the library? I'm going to have to be more careful about returning books on time.

W: Well, I think it's a good thing. It seems like every time I want to check out a book, it's not available. It's almost always because someone didn't return it by the due date. Then I have to request the book back, and it takes several days to get it.

M: Sounds like a major pain.

W: So this new policy will get more students to return their books by the due date.

M: I bet it will. No one wants to miss class registration or accumulate fines just because of an overdue library book.

W: Right. Plus, my history professor said that the library is going to try to fund an exhibit of books over a hundred years old. I bet it could raise enough money to fund future exhibits as well.

M: That'd be pretty nice.

W: Yeah, the library staff always comes up with neat exhibits. And I've found that a lot of them can even be helpful for class projects. They've helped me in the past.

After the conversation concludes, you will see a prompt on your screen similar to the one below.

The woman expresses her opinion of the announcement made by the library. State her opinion and explain the reasons she gives for holding that opinion.

You will have 30 seconds to prepare a response and 60 seconds to speak your response into the microphone. A sample outline of a response can be found on the next page.

Sample Outline

Introduction:

Summary and speaker's opinion

Body:

Reason 1

Topic sentence

Reasons, examples, and details

Reason 2

Topic sentence

Reasons, examples, and details

Sample Response

The woman thinks that the new library policy not to allow students to register until they return library books and pay overdue fees is a good idea.

Summary and speaker's opinion

Topic sentence

She complains that she often cannot check out the books she wants because students do not return them on time. Then she has to request the book back, which takes time. She thinks that the new policy will encourage students to return the books by the due date.

Reasons, examples, and details

Topic sentence

She also thinks that collecting fees will help the library fund other exhibits in addition to the one they are planning. She mentions that these exhibits have helped her with past projects.

Reasons, examples, and details

Question 4

The following is a sample Question 4 similar to the one you will see when you take the test. You will first see a short reading passage about an academic topic. You will have 45 seconds to read the passage.

Extroversion Versus Introversion

According to modern personality theory, there are two fundamental types of people: introverts and extroverts. Extroverts are people who are predominantly concerned with the world outside of themselves. They tend to enjoy social interactions and are naturally enthusiastic, talkative, and assertive. Introverts, on the other hand, are largely interested in what goes on in their own minds. They tend to be quiet, reserved, less outgoing, and do not socialize as much.

Recent evidence has shown that these personality differences are the result of physiological differences in the body. Differences exist between the brains of introverts and extroverts. Also, introverts and extroverts use energy differently.

After 45 seconds, you will be asked to listen to a lecture about the passage you just read. Read the lecture below. Keep in mind that this lecture will only be heard on the real test and will not appear on your screen.

M: Personality differences, like introversion and extroversion, are actually consequences of physiological differences.

Recent studies show that, in general, extroverts and introverts have more activity in different areas of the brain. Researchers studied which areas of the brain were activated by looking at how much blood flows to different brain regions. The more that blood flows to a certain area, the more that area is activated. The studies found that introverts have more blood flow to areas that are responsible for internal processing, like remembering and problem solving. Conversely, extroverts have more activity in areas used for sensory processing, like listening or watching. So it's not surprising that introverts are inwardly focused while extroverts seek social activities.

Introverts and extroverts also differ in how their bodies use energy. Extroverts use up energy really quickly and they recharge their energy by engaging in social activities . . . which is why an extrovert can jump from one conversation to another or from party to party and still want to go dancing at two in the morning. Introverts, however, are energy conservers. Lots of social activities make them tired, and they have to spend some time being quiet by themselves to regain their energy. This is why many introverts will decide to leave a dinner party early so that they can go home and read a book or write a letter before going out again.

After the lecture concludes, you will see a prompt on your screen similar to the one below.

The professor describes two differences between introverts and extroverts. Explain how these differences influence personality.

You will then have 30 seconds to prepare a response and 60 seconds to speak your response into the microphone. A sample outline of a response can be found below.

Sample Outline

Introduction:

Summary of the lecture's main point

Body:

Reason 1

Topic sentence

Details from the lecture

Reason 2

Topic sentence

Details from the lecture

Sample Response

Summary of lecture's main point

The reading and the professor both state that extroversion and introversion are caused by physiological differences.

→ Topic sentence

The professor says that one difference between introverts and extroverts is the area of the brain that is most activated. In introverts, there is more activity in brain areas used for internal processing, which makes them more inwardly focused. In extroverts, there is more activity in areas used for sensory processing, which makes them more social.

→ Details from lecture

→ Topic sentence

Another difference between introverts and extroverts is how their brains use energy. Extroverts use up energy quickly and regain energy through socializing. Introverts conserve energy and regain energy by being alone. So extroverts tend to seek out social activities while introverts are more likely to spend more time by themselves.

→ Details from lecture

Question 5

The following is a sample Question 5 similar to the one you will see when you take the test. You will listen to a conversation between two students about a campus-related problem. Read the conversation below. Keep in mind that this conversation will only be heard on the real test and will not appear on your screen.

W: Hey, Carl. How do you like your new roommate?

M: He's OK. He's a really neat person and everything. There's just one problem.

W: What's that?

M: Well, he's a mathematics major. He just loves graphs and numbers. Anyway, he's been hanging these really ugly graphs and charts on all the dorm room's walls.

W: And that bothers you because you're an art major, right?

M: Exactly. Besides, I get enough of that stuff in my own math classes. I don't want to have to look at it while I'm relaxing, too.

W: Can't you just ask him to take them down?

M: Yeah, I was thinking of that. The thing is, I don't want to hurt his feelings. Plus, he's a really good roommate.

W: What about establishing some boundaries?

M: What do you mean?

W: There are four walls in your room. Tell your roommate that he can put his ugly posters on two walls. Then you can put your stuff on the other two walls.

M: I'll have to think about that. I'd have to tell him to stop taking up all the walls with his stuff. Even worse, I'd still have to look at two ugly walls. Those graphs and charts really bother me.

W: Hmm. Well, I guess you'll have to decide which option will work better for you.

After the conversation concludes, you will see a prompt on your screen similar to the one below.

The students discuss two possible solutions to the man's problem. Describe the problem. Then state which of the two solutions you prefer and explain why.

You will have 30 seconds to prepare a response and 60 seconds to speak your response into the microphone. A sample outline of a response can be found on the next page.

Sample Outline

Introduction:

- Summary of the problem
- Suggestions
- Your preferred solution

Body:

Reason 1

- Topic sentence
- Reasons, examples, and details

Reason 2

- Topic sentence
- Reasons, examples, and details

Sample Response

The man's roommate is putting up ugly graphs and charts on the walls. The woman suggests that he either ask his roommate to remove them completely or ask his roommate to limit his charts to two walls. I think the first option is the better one.

Summary of problem

Suggestions

Your preferred solution

Topic sentence

First, I do not think the man should have to look at graphs and charts that he finds ugly up on his walls. It is his room, too, so he has a right to look at things that he finds pleasing.

Reasons, examples, and details

Topic sentence

Secondly, I think it is better for the man to be honest with his roommate. If they want to have a good relationship, they need to be able to talk to each other openly about things that bother them.

Reasons, examples, and details

Question 6

The following is a sample Question 6 similar to the one you will see when you take the test. You will listen to a lecture about an academic topic. Read the lecture below. Keep in mind that this lecture will only be heard on the real test and will not appear on your screen.

M: Scientists have long believed that one of the key differences between humans and all other animals is episodic memory—the kind of memory that lets us remember past events, times, places—even past emotions. Basically, they thought that we have it and that animals do not. But recent experiments have led many scientists to conclude that some animals actually do have episodic memory.

Several of these experiments have been carried out on a type of bird called a scrub jay. The experiments were designed to test whether scrub jays can recall past events and use what they remember to plan for the future. In one experiment, for example, researchers left out two types of food—worms and peanuts—for the jays to store for later use. When the birds dug up the worms, they found that many of them had spoiled. From then on, they dug up peanuts instead since they found that the peanuts were still good. This change in behavior led the researchers to believe that the birds remembered finding the spoiled worms in the past. Thus, they avoided digging them up in the future.

Other experiments have studied episodic memory in non-human primates, such as chimps and gorillas. There was one experiment, for example, that was conducted on a domesticated chimpanzee named Panzee at Georgia State University in Atlanta. During the experiment, researchers hid about thirty different items—items like fruits, balloons, and rubber snakes. They hid them one at a time—all while Panzee was watching from inside her cage. In more than ninety percent of the cases, Panzee correctly identified where each item was hidden. She directed her caretakers to each place the toys and fruits were hidden. This showed that she could recall the memory of the researchers hiding the items.

After the lecture concludes, you will see a prompt on your screen similar to the one below.

Using points and examples from the lecture, describe two cases in which animals exhibit episodic memory.

You will have 30 seconds to prepare a response and 60 seconds to speak your response into the microphone. A sample outline of a response can be found on the next page.

Sample Outline

Introduction:

Main topic

Body:

Key point 1

Topic sentence

Reasons, examples, and details

Key point 2

Topic sentence

Reasons, examples, and details

Sample Response

The professor says that recent experiments have led scientists to believe that animals, and not just humans, have episodic memory, or memories of past places and events.

↓
Main topic

↖
Topic sentence

One set of experiments showed that scrub jays have episodic memory. Researchers found that the jays can remember past events, such as finding spoiled worms, and use those memories to change their behavior. For example, after the jays initially dug up the worms and found them spoiled, they dug up stored peanuts instead of worms from then on.

↘
Reasons, examples and details

↖
Topic sentence

Other experiments have studied episodic memory in non-human primates. One experiment studied a chimpanzee named Panzee, who remembered which toys and foods the researchers had hidden and where they had hidden them. Both these experiments show that certain animals have episodic memory.

↘
Reasons, examples, and details

Part 1

Thinking and Speaking

- **Chapter 1** Independent Speaking:
Organizing Speech
- **Chapter 2** Integrated Speaking:
Synthesizing Information
- **Chapter 3** Integrated Speaking:
Stating Opinions and Summarizing
- **Vocabulary Review 1**
- **Vocabulary Review 2**

Chapter 1

Independent Speaking: Organizing Speech

Necessary Skills

- Describing a personal experience or expressing a personal preference
- Organizing ideas
- Expressing a clear topic statement and supporting points
- Speaking clearly and accurately with knowledge of grammar, vocabulary, and pronunciation

Strategies

Though preparation time is limited in the speaking portion of the test, it is nevertheless important to use this time to plan the organization of your response. This way, your response will be more relevant and coherent. An organizational process for preparing your speech is detailed below. In each step, there are certain things to keep in mind.

Process	Strategy
Read the prompt and understand the task.	Be sure that you understand the question and what it requires you to do.
Identify the main idea and create a topic statement.	Decide on the main idea or choose a position. Use the relevant parts of the prompt in making your topic statement.
Brainstorm and select supporting ideas.	Quickly think of supporting ideas from your own experiences. Choose ideas that most clearly support your topic statement.
Organize the ideas.	Arrange your ideas, putting them in order from most important to least important.

Q1

Practice 1 – Personal Experience

► Step 1

Read the prompt below. Write down your answer and related key points in the blanks.

Describe a city you visited in your past that you found fascinating. Why did you enjoy your visit so much? Include specific reasons and examples to support your answer.

A fascinating city that I visited in my past was _____

Reason 1: I enjoyed visiting there because _____

Reason 2: Another reason I enjoyed visiting there is _____

Read the related ideas and expressions below. Add at least two of your own.

Related Ideas and Expressions

city:

town, metropolis, settlement, _____, _____

visit:

stay, vacation, experience, _____, _____

fascinating:

captivating, charming, incredible, _____, _____

enjoy:

esteem, fancy, appreciate, _____, _____

originate:

to begin to exist for the first time

ancestor:

someone related to you who lived a long time ago

firsthand:

obtained directly by doing something oneself

date back:

to have begun at a certain time in the past

captivate:

to interest someone very much

► Step 2

🎧 Listen to a sample response. Write down any useful expressions. Track 152

Notes

Lined area for taking notes during the listening exercise.

► Step 3

Now create your own response using words and expressions from Steps 1 and 2. Use the prompts below to help you.

A fascinating city that I visited in my past was _____. I enjoyed myself there because _____. I had always wanted _____.

By traveling there, _____.

I also enjoyed _____.

Many _____.

These _____ captivated me, and I _____.

► Step 4

Read the response you wrote above out loud. Try to read slowly and clearly. Practice saying the whole response several times. Then close your book and say the response without looking at the words.

Q1

Practice 2 – Personal Experience

► Step 1

Read the prompt below. Write down your answer and related key points in the blanks.

What type of work would you like to choose as a career? Why would you make this choice? Include specific reasons and examples to support your answer.

The job that I would like to choose as a career is _____

Reason 1: _____

Reason 2: _____

Read the related ideas and expressions below. Add at least two of your own.

Related Ideas and Expressions

type:

kind, sort, category, _____, _____

job:

career, occupation, profession, _____, _____

choose:

decide, pick, prefer, _____, _____

enable:

allow, cause, make possible, _____, _____

photographer:
someone who takes
photographs

enable:
to give someone the
opportunity to do
something

remote:
far away from cities or
towns

diverse:
different from each other

habitat:
the place where a certain
animal normally lives

▶ Step 2

Listen to a sample response. Write down any useful expressions.

Track 153

Notes

▶ Step 3

Now create your own response using words and expressions from Steps 1 and 2. Use the prompts below to help you.

For my career, I would choose to be _____ . I would prefer this job because _____ would allow me to _____ . Such a career _____ . I would get to _____ .

The experiences _____ .

▶ Step 4

Read the response you wrote above out loud. Try to read slowly and clearly. Practice saying the whole response several times. Then close your book and say the response without looking at the words.

Q1

Practice 3 – Personal Experience

► Step 1

Read the prompt below. Write down your answer and related key points in the blanks.

Often a bad situation teaches us an important life lesson. Describe an important lesson that you learned from a bad situation. Include specific reasons and examples to support your answer.

One bad situation in my past that taught me an important life lesson was _____

I feel that this situation helped me learn an important life lesson because _____

Reason 1: _____

Example: _____

Reason 2: _____

Example: _____

Read the related ideas and expressions below. Add at least two of your own.

Related Ideas and Expressions

bad:

awful, negative, dreadful, _____, _____

situation:

occurrence, state, condition, _____, _____

important:

vital, crucial, key, _____, _____

lesson:

message, skill, warning, _____, _____

obtain:

to get something

goal:

something that one hopes to achieve

summit:

the top of a mountain

blizzard:

a storm with lots of snow and high winds

exhausted:

very tired

▶ **Step 2**

🔊 Listen to a sample response. Write down any useful expressions.

Track 154

Notes

▶ **Step 3**

Now create your own response using words and expressions from Steps 1 and 2. Use the prompts below to help you.

A bad situation recently taught me that _____

_____. I learned this while _____

_____. We wanted _____

_____. However, _____

_____. When _____

_____. I learned that _____

▶ **Step 4**

Read the response you wrote above out loud. Try to read slowly and clearly. Practice saying the whole response several times. Then close your book and say the response without looking at the words.

Q2

Practice 1 – Personal Preference

▶ Step 1

Read the prompt below. Write down your answer and related key points in the blanks.

Would you prefer to live in the mountains or near the ocean? Include specific reasons and examples to support your answer.

I would rather _____

Reason 1: _____

Example: _____

Reason 2: _____

Example: _____

Read the related ideas and expressions below. Add at least two of your own.

Related Ideas and Expressions

prefer:

like better, rather, desire, _____, _____

live:

dwell, occupy, abide, _____, _____

mountain:

alpine, peak, cliff, _____, _____

water sports:

sailing, diving, water skiing, _____, _____

skiing:

a winter sport where a person slides over the snow on thin objects called skis

drift:

to be pushed along slowly by the water's movement

endure:

to suffer something that is difficult or unpleasant

maritime:

near the ocean

alpine:

relating to mountains

▶ Step 2

🎧 Listen to two sample responses. Write down any useful expressions. **Track 155**

Notes

Handwritten notes area with horizontal lines.

▶ Step 3

Now create your own response using words and expressions from Steps 1 and 2. Use the prompts below to help you.

I would prefer to live somewhere that is near _____ . Then _____

_____. It is very _____ . In addition, _____

and _____

▶ Step 4

Read the response you wrote above out loud. Try to read slowly and clearly. Practice saying the whole response several times. Then close your book and say the response without looking at the words.

Q2

Practice 2 – Personal Preference

► Step 1

Read the prompt below. Write down your answer and related key points in the blanks.

Some people enjoy having many friends. Others prefer to have a few close friends. Which would you prefer? Include specific reasons and examples to support your answer.

I prefer to have _____

Reason 1: _____

Example: _____

Reason 2: _____

Example: _____

Read the related ideas and expressions below. Add at least two of your own.

Related Ideas and Expressions

friends:

playmates, comrades, acquaintances, _____, _____

relationship:

association, friendship, link, _____, _____

difficult:

complicated, tricky, challenging, _____, _____

support:

encourage, maintain, help, _____, _____

overwhelming:

emotionally overpowering

divide:

to separate into different parts

consult:

to ask for information

isolated:

lonely or separate from other people

reach out:

to offer help to someone

▶ Step 2

🔊 Listen to two sample responses. Write down any useful expressions. Track 156

Notes

▶ Step 3

Now create your own response using words and expressions from Steps 1 and 2. Use the prompts below to help you.

I prefer to have _____ rather than _____.

First of all, _____, and _____.

In my experience, _____. Secondly, _____.

I think _____. When _____.

▶ Step 4

Read the response you wrote above out loud. Try to read slowly and clearly. Practice saying the whole response several times. Then close your book and say the response without looking at the words.

Q2

Practice 3 – Personal Preference

► Step 1

Read the prompt below. Write down your answer and related key points in the blanks.

Some students like to work and earn money during the summer. Others like to have the summer off. Which would you prefer? Include specific reasons and examples to support your answer.

I prefer to spend my summer _____

Reason 1: _____

Example: _____

Reason 2: _____

Example: _____

Read the related ideas and expressions below. Add at least two of your own.

Related Ideas and Expressions

money:

cash, funds, capital, _____, _____

summer vacation:

time off, holiday, leave, _____, _____

busy:

full of activity, tiring, diligent, _____, _____

boring:

uninteresting, nothing to do, tedious, _____, _____

remarkable:

unusual in a surprising way

afford:

having enough money to pay for something

recuperate:

to recover or restore

hang out:

to spend time with other people in a casual situation

novel:

a long written work of fiction

► Step 2

 Listen to two sample responses. Write down any useful expressions. **Track 157**

Notes:

► Step 3

Now create your own response using words and expressions from Steps 1 and 2. Use the prompts below to help you.

I would prefer to _____ . This would _____

_____. For example, last _____

_____. If _____

Also, if _____

I would rather _____

► Step 4

Read the response you wrote above out loud. Try to read slowly and clearly. Practice saying the whole response several times. Then close your book and say the response without looking at the words.

Chapter 2

Integrated Speaking: Synthesizing Information

Necessary Skills

- Understanding information in reading and listening passages
- Taking notes on important information and using this information in your spoken response
- Synthesizing background information with more specific information
- Synthesizing the information given in the reading and listening; using the points in the listening to highlight principles or differences in the reading
- Recognizing a speaker's purpose and attitude
- Paraphrasing information

Strategies

An organizational process for responding to a prompt based on integrated material is detailed below. In each step, there are certain things that you need to keep in mind.

Process	Strategy
Read and listen.	Take notes on important information in both the reading and listening passages.
Read the prompt and understand the task.	Identify relationships between information in the listening passage and the reading passage. What aspects of each does the prompt want you to discuss?
Organize the ideas.	Arrange the ideas from the listening and reading passages. Think of a topic sentence that reflects the information.

Q3

Practice 1 – Reading and Conversation

► Step 1

Read the following announcement. Write five keywords or key phrases that would be useful in explaining the information to someone else. While reading, try to guess what the conversation will be about.

Important Announcement

As of the end of this month, the university will no longer be providing free printing paper in the student computer lab. If students wish to print from the lab printer, they will be required to bring their own paper with them to the lab. We have found that students too often waste the paper the university provides by printing unscholarly materials including Internet chat conversations and airline tickets. Furthermore, the money the university will save on paper will be set aside for purchasing additional computers. This will allow the lab to accommodate more students.

- printer:**
a machine that prints computer documents
- unscholarly:**
unconnected with school or learning
- chat:**
talking with someone
- purchase:**
to buy
- accommodate:**
to provide room for someone

**Keywords/
Key Phrases**

Cover the passage and look at the keywords and key phrases only. Restate the passage in your own words.

► Step 2

Now listen to a conversation related to the passage in Step 1. As you listen, take notes on important information. Write down five keywords or key phrases that would be useful in explaining this information to someone else. **Track 158**

Keywords/ Key Phrases	_____

distressing:
upsetting

draft:
something such as a research paper that requires changes before it is finished

Journal:
a document containing articles related to a specific profession or area of study

equipment:
tools or machines needed to perform a specific activity

hassle:
problem

Restate what you heard in the conversation using the notes or keywords you wrote above.

► Step 3

Read the prompt below. Circle the most important ideas in your notes from both the reading and the conversation. Write down the main points you need to speak about.

The woman expresses her opinion about the university's decision. State her opinion and explain the reasons she gives for holding that opinion.

Opinion: The woman _____

Reason 1: _____

Detail: _____

Reason 2: _____

Detail: _____

► Step 4

🎧 Listen to a sample response. Write down any useful expressions.

Track 159

Notes

A large rectangular box with rounded corners, containing ten horizontal lines for writing notes.

► Step 5

Now create your own response using words and expressions from Steps 3 and 4. Use the prompts below to help you.

The announcement says that students _____
_____. The woman _____. First, she thinks that the university
_____. Everyone she knows _____
_____. Secondly, she thinks using the money saved on printer paper _____
_____. She feels that _____
_____. Therefore, they _____

► Step 6

Read the response you wrote above out loud. Try to read slowly and clearly. Practice saying the whole response several times. Then close your book and say the response without looking at the words.

Q3

Practice 2 – Reading and Conversation

READING

LISTENING

SPEAKING

WRITING

PRACTICE TEST

Step 1

Read the following announcement. Write five keywords or key phrases that would be useful in explaining the information to someone else. While reading, try to guess what the conversation will be about.

Announcement from Campus Security

As of April 15, the price of parking tickets will be raised from \$35 to \$50 in part to deter students from parking illegally along the street. Parking along the street blocks traffic and prevents emergency vehicles, such as police cars and fire trucks, from easily accessing emergency fire lanes. We hope that a larger monetary penalty will help prevent students from blocking these lanes. We also hope that the larger fines will help raise money to build another student parking lot closer to the school so that students do not feel forced to park on the street.

deter:

to discourage

emergency:

an unexpected crisis or disaster

access:

to get into a place

monetary:

economic or financial

penalty:

a punishment or a fine

Keywords/
Key Phrases

Cover the passage and look at the keywords and key phrases only. Restate the passage in your own words.

► Step 2

👂 Now listen to a conversation related to the passage in Step 1. As you listen, take notes on important information. Write down five keywords or key phrases that would be useful in explaining this information to someone else. **Track 160**

Keywords/ Key Phrases	_____

substantial:
large or major

security:
the department or people
in an organization that
protect workers and
buildings

current:
present or existing

waste:
to squander or use more of
something than necessary

Restate what you heard in the conversation using the notes or keywords you wrote above.

► Step 3

Read the prompt below. Circle the most important ideas in your notes from both the reading and the conversation. Write down the main points you need to speak about.

The man expresses his opinion about the university's decision. State his opinion and explain the reasons he gives for holding that opinion.

Opinion: _____

Reason 1: _____

Detail: _____

Reason 2: _____

Detail: _____

▶ Step 4

 Listen to a sample response. Write down any useful expressions.

Track 161

Notes

▶ Step 5

Now create your own response using words and expressions from Steps 3 and 4. Use the prompts below to help you.

The announcement says that _____ . The man
_____ because _____ .

He thinks that by parking _____ , students are _____
because they are _____ . He also thinks that
_____ . It takes him _____ .
_____ . If _____ , students
_____ .

▶ Step 6

Read the response you wrote above out loud. Try to read slowly and clearly. Practice saying the whole response several times. Then close your book and say the response without looking at the words.

Q3

Practice 3 – Reading and Conversation

► Step 1

Read the following announcement. Write five keywords or key phrases that would be useful in explaining the information to someone else. While reading, try to guess what the conversation will be about.

Announcement from the Registrar

The university has decided to switch from a paper-based course catalogue to an electronic course catalogue. Students will no longer have access to paper catalogues and will instead register for classes online using the online course catalogue posted on the university's website. This will save the university the high cost of paper and ink. Online registration will also be more convenient for students, who will be able to register for classes from their dorm computers. Students can register on their own time and will be saved a trip to the registrar's office.

registrar:

the place at a university where official records are kept

catalogue:

a list or directory

register:

to sign up

post:

to announce or advertise

dorm:

a student's living quarters at a college or university

**Keywords/
Key Phrases**

Cover the passage and look at the keywords and key phrases only. Restate the passage in your own words.

► Step 2

Now listen to a conversation related to the passage in Step 1. As you listen, take notes on important information. Write down five keywords or key phrases that would be useful in explaining this information to someone else. **Track 162**

Keywords/ Key Phrases	_____

log on:
to access a website or network

network:
a set of computers that are connected to each other so each computer can send and receive information from other computers

Inconvenient:
causing difficulties

flip:
turn over

navigate:
to find and follow a path or course

Restate what you heard in the conversation using the notes or keywords you wrote above.

► Step 3

Read the prompt below. Circle the most important ideas in your notes from both the reading and the conversation. Write down the main points you need to speak about.

The man expresses his opinion about the university's decision. State his opinion and explain the reasons he gives for holding that opinion.

Opinion: _____

Reason 1: _____

Detail: _____

Reason 2: _____

Detail: _____

▶ Step 4

🔊 Listen to a sample response. Write down any useful expressions. **Track 163**

Notes

Blank lined area for taking notes.

▶ Step 5

Now create your own response using words and expressions from Steps 3 and 4. Use the prompts below to help you.

The announcement says that the university will _____
_____. The man thinks that this is _____
He feels _____, like _____
_____. The man also thinks the online catalogues _____
He mentions that _____. Many will _____
_____. He believes that _____
_____. He concludes by saying _____

▶ Step 6

Read the response you wrote above out loud. Try to read slowly and clearly. Practice saying the whole response several times. Then close your book and say the response without looking at the words.

Q4

Practice 1 – Reading and Lecture

► Step 1

Read the following passage. Write five keywords or key phrases that would be useful in explaining the information to someone else. While reading, try to guess what the lecture will be about.

Color Perceptions

The symbolism of color may vary slightly from culture to culture, but psychologists have found that color affects emotions in a universal way. This means that different cultures tend to associate color with similar patterns of feelings and emotions. In fact, colors are divided into two groups depending on the kind of emotions they evoke. Colors on the red side of the color spectrum, known as warm colors, bring on feelings of warmth and comfort. Colors on the blue side of the color spectrum, known as cool colors, inspire feelings of calmness and confidence.

vary:
to differ

symbolism:
the use of symbols to represent something

universal:
occurring across the world

evoke:
suggest or call to mind

color spectrum:
the distribution of colors

**Keywords/
Key Phrases**

Cover the passage and look at the keywords and key phrases only. Restate the passage in your own words.

► Step 2

Now listen to a lecture related to the passage in Step 1. As you listen, take notes on important information. Write down five keywords or key phrases that would be useful in explaining this information to someone else. **Track 164**

Keywords/ Key Phrases	_____

Induce:
to bring on; to cause or create

opponent:
a person that is competing against you

authority:
power

menacing:
threatening or alarming

consultant:
one who gives professional advice

Restate what you heard in the lecture using the notes or keywords you wrote above.

► Step 3

Read the prompt below. Circle the most important ideas in your notes from both the reading and the lecture. Write down the main points you need to speak about.

The professor describes two types of color. Explain what these are and how they are used to affect mood.

Warm colors: _____

Example of how they are used: _____

Cool colors: _____

Example of how they are used: _____

▶ Step 4

Listen to a sample response. Write down any useful expressions.

Track 165

Notes

▶ Step 5

Now create your own response using words and expressions from Steps 3 and 4. Use the prompts below to help you.

The reading mentions _____

_____. It says that _____

_____. The professor then _____

The professor mentions why _____ They do this _____

_____. The professor then mentions _____

▶ Step 6

Read the response you wrote above out loud. Try to read slowly and clearly. Practice saying the whole response several times. Then close your book and say the response without looking at the words.

Q4

Practice 2 – Reading and Lecture

► Step 1

Read the following passage. Write five keywords or key phrases that would be useful in explaining the information to someone else. While reading, try to guess what the lecture will be about.

Dominance Hierarchies

In the animal kingdom, members of the same species that live in close proximity to one another often establish dominance hierarchies. A dominance hierarchy is a type of social structure in which certain individuals control the allocation of resources like food or mates. Everyone else in the group follows the leadership of these dominant individuals. In this way, dominance hierarchies serve to maintain order among its various members. They also allow individuals in a group to resolve conflicts. The survival of many social animal species depends on dominance hierarchies to properly function.

proximity:

how near something is to another thing

social structure:

a system of social organization based on certain patterns of social interaction

dominant:

in control over others

allocation:

how something is distributed or shared

conflict:

a disagreement or an argument

**Keywords/
Key Phrases**

Cover the passage and look at the keywords and key phrases only. Restate the passage in your own words.

► Step 2

Now listen to a lecture related to the passage in Step 1. As you listen, take notes on important information. Write down five keywords or key phrases that would be useful in explaining this information to someone else. **Track 166**

Keywords/ Key Phrases	_____

baboon:
a large type of monkey
living in Africa or Asia

rank:
a level or position

scarce:
rare

savanna:
a large flat area of land
covered by grass

relaxed:
laid-back or casual

Restate what you heard in the lecture using the notes or keywords you wrote above.

► Step 3

Read the prompt below. Circle the most important ideas in your notes from both the reading and the lecture. Write down the main points you need to speak about.

The professor discusses dominance hierarchies in baboons. Explain how this behavior is used in baboon societies.

Species that uses dominance hierarchies: _____

Point 1: _____

Example: _____

Point 2: _____

Example: _____

▶ Step 4

🎧 Listen to a sample response. Write down any useful expressions. **Track 167**

Notes

Lined area for taking notes.

▶ Step 5

Now create your own response using words and expressions from Steps 3 and 4. Use the prompts below to help you.

The reading says that _____. The professor discusses _____.

_____ . There is _____.

_____ . The professor then says _____.

This is important _____. Therefore, _____.

_____ . Conversely, _____.

▶ Step 6

Read the response you wrote above out loud. Try to read slowly and clearly. Practice saying the whole response several times. Then close your book and say the response without looking at the words.

Q4

Practice 3 – Reading and Lecture

READING

LISTENING

SPEAKING

WRITING

PRACTICE TEST

► Step 1

Read the following passage. Write five keywords or key phrases that would be useful in explaining the information to someone else. While reading, try to guess what the lecture will be about.

Plate Tectonics

According to the theory of plate tectonics, the Earth's crust is divided into huge plates that float atop the molten rock underneath. Geologists first recognized the existence of tectonic plates in 1915, when German geologist Alfred Wegener proposed the hypothesis of continental drift.

Wegener contended that all the continents were previously one large continent called Pangea. Over the course of history, Pangea broke apart, and the pieces drifted away to become the continents that exist today. Evidence that Pangea once existed can be found through fossils spread out across the different continents. Similar rock formations on different continents also lend credence to Wegener's hypothesis.

crust:
an outer layer of something

molten:
made liquid by heat

hypothesis:
an educated guess

continent:
one of the seven main landmasses on the Earth

contend:
to argue or assert

credence:
credibility; weight

**Keywords/
Key Phrases**

Cover the passage and look at the keywords and key phrases only. Restate the passage in your own words.

► Step 2

🔊 Now listen to a lecture related to the passage in Step 1. As you listen, take notes on important information. Write down five keywords or key phrases that would be useful in explaining this information to someone else. **Track 168**

Keywords/ Key Phrases	_____

devise:
to plan or develop

jigsaw puzzle:
a game made up of differently shaped pieces that fit together to create a picture

fossil:
remains of an animal or plant in which the bones or tissue have been replaced by rock

deposit:
a concentration of mineral or rock

distinct:
clear or definite

Restate what you heard in the lecture using the notes or keywords you wrote above.

► Step 3

Read the prompt below. Circle the most important ideas in your notes from both the reading and the lecture. Write down the main points you need to speak about.

The professor discusses the theory of continental drift. Explain what it is and how it is supported.

Continental drift: _____

Evidence 1: _____

Example: _____

Evidence 2: _____

Example: _____

▶ Step 4

🎧 Listen to a sample response. Write down any useful expressions. Track 169

Notes

▶ Step 5

Now create your own response using words and expressions from Steps 3 and 4. Use the prompts below to help you.

The passage first _____

_____ . It states that _____

_____ . The professor explains _____

_____ . This led scientists _____

_____ . The professor also states _____

_____ . This further _____

▶ Step 6

Read the response you wrote above out loud. Try to read slowly and clearly. Practice saying the whole response several times. Then close your book and say the response without looking at the words.

Chapter 3

Integrated Speaking: Stating Opinions and Summarizing

Necessary Skills

- Understanding the key information in listening passages
- Taking notes on important information and using this information in your spoken response
- Paraphrasing information
- Expressing an opinion or preference
- Supporting an opinion with reasons or examples

Strategies

An organizational process for preparing your speech is detailed below. In each step, there are certain things to keep in mind.

Process	Strategy
Listen to a conversation or lecture.	Take notes on the key points and important details.
Read the prompt and understand the task.	Identify what you will need to discuss.
Organize the ideas.	Decide on your topic sentence and the supporting details. Be sure to include reasons and examples for any personal opinions expressed.

Q5

Practice 1 – Conversation

▶ Step 1

🎧 Listen to a conversation. As you listen, take notes on the problem and the solutions suggested. **Track 170**

Problem: _____ _____	organic: relating to living organisms
Solution 1: _____ _____	scholarship: a grant of financial aid given to a student attending college
Solution 2: _____ _____	transcript: a record of the student's classes and grades
	GPA: grade point average; the average grade earned by a student
	ace: to receive an A on a test or assignment

▶ Step 2

Read the prompt below. Write down your opinion.

The students discuss two possible solutions to the woman's problem. Describe the problem. Then state which of the two solutions you prefer and explain why.

Problem: _____

Best solution: _____

Reason 1: _____

Reason 2: _____

► Step 3

🔊 Listen to two sample responses. Write down any useful expressions.

Track 171

Notes

Handwriting practice area with 10 horizontal lines.

► Step 4

Now create your own response using words and expressions from Steps 1, 2, and 3. Use the prompts below to help you.

The woman is _____ . She needs to _____
 _____ . The man suggests that _____
 I think _____ is best. Since _____
 _____ . This could _____
 _____ . Also, _____
 _____ . It _____
 This _____

► Step 5

Read the response you wrote above out loud. Try to read slowly and clearly. Practice saying the whole response several times. Then close your book and say the response without looking at the words.

Q5

Practice 2 – Conversation

▶ Step 1

👂 Listen to a conversation. As you listen, take notes on the problem and the solutions suggested. **Track 172**

Problem: _____ _____	portion: a piece of something
Solution 1: _____ _____	trail: a path or track
Solution 2: _____ _____	sympathize: to show that you understand someone's problems
	anxious: nervous or uneasy
	extra credit: a task that a student can complete to raise his or her grade

▶ Step 2

Read the prompt below. Write down your opinion.

The students discuss two possible solutions to the man's problem. Describe the problem. Then state which of the two solutions you prefer and explain why.

Problem: _____

Best solution: _____

Reason 1: _____

Reason 2: _____

▶ Step 3

🎧 Listen to two sample responses. Write down any useful expressions.

Track 173

Notes

▶ Step 4

Now create your own response using words and expressions from Steps 1, 2, and 3. Use the prompts below to help you.

The man has to _____ . The trip

_____ . The woman suggests _____

_____ . I think it would be better _____

_____ . Since _____

_____ . Also, _____

_____ . It is _____

▶ Step 5

Read the response you wrote above out loud. Try to read slowly and clearly. Practice saying the whole response several times. Then close your book and say the response without looking at the words.

Q5

Practice 3 – Conversation

▶ Step 1

🎧 Listen to a conversation. As you listen, take notes on the problem and the solutions suggested. **Track 174**

Problem: _____ _____	load: weight or burden
Solution 1: _____ _____	exchange: to trade
Solution 2: _____ _____	flexible: adaptable or able to change easily
	loan: something that has been given with the expectation that it will be returned
	debt: something owed

▶ Step 2

Read the prompt below. Write down your opinion.

The students discuss two possible solutions to the woman's problem. Describe the problem. Then state which of the two solutions you prefer and explain why.

Problem: _____

Best solution: _____

Reason 1: _____

Reason 2: _____

▶ Step 3

🎧 Listen to two sample responses. Write down any useful expressions.

Track 175

Notes

Lined area for taking notes.

▶ Step 4

Now create your own response using words and expressions from Steps 1, 2, and 3. Use the prompts below to help you.

The woman _____

The man suggests _____ . It _____

_____ . This option _____ . She _____

_____ . In addition, _____

_____ . This way, _____

▶ Step 5

Read the response you wrote above out loud. Try to read slowly and clearly. Practice saying the whole response several times. Then close your book and say the response without looking at the words.

► Step 1

🎧 Listen to a lecture. Fill in the missing information in the notes. Track 176

Minimalism is _____ _____ Design techniques used by minimalist artists: a) _____ b) _____ Carl Andre's "Steel Zinc Plain": Used the technique of _____ Physical description: _____ Dan Flavin's "Monument for V. Tatlin": Used the technique of _____ Physical description: _____	<p>prominent: famous or well-known</p> <p>texture: the feel and appearance of a surface</p> <p>uniform: unvarying; identical</p> <p>zinc: a type of metal</p> <p>checkerboard: a pattern of squares of equal size and of two different colors</p> <p>interpret: to understand or explain</p> <p>miniature: small</p> <p>monument: a structure acting as a memorial</p> <p>revolving: tending to turn</p> <p>grandeur: majesty, magnificence or greatness</p>
---	--

► Step 2

Read the prompt below related to the lecture you heard.

Using points from the lecture, describe two characteristics of minimalist art and give examples of how these characteristics were used to create artwork.

Now create your own response using words and expressions from Step 1. Use the prompts below to help you.

Minimalist artists _____. The professor says _____
 _____. The first piece that the professor mentioned _____
 _____. In his piece, _____
 The second piece _____. For his piece, _____
 _____. This _____ was inspired _____

► Step 3

 Listen to a sample response. Write down any useful expressions. **Track 177**

Notes

► Step 4

Review the response you wrote in Step 2 and your notes in Step 3. Then close your book and give a response to the prompt below. Say your response slowly and clearly. Try to speak for at least 60 seconds.

Using points from the lecture, describe two characteristics of minimalist art and give examples of how these characteristics were used to create artwork.

Q6

Practice 2 – Lecture

▶ Step 1

🎧 Listen to a lecture. Fill in the missing information in the notes. **Track 178**

Charisma definition: _____ _____	attribute: a quality or trait
Traits of charismatic leadership:	compelling: convincing or persuasive
a) _____	vision: an idea or mental picture; a dream
b) _____	inspire: to motivate or encourage
Dr. Martin Luther King, Jr.:	delegate: to assign or appoint
He demonstrated _____	exhibit: to show or demonstrate
His accomplishments: _____	traffic jam: a situation when all traffic is very slow
General Patton:	jeep: a small, sturdy vehicle with 4-wheel drive
He demonstrated _____	subordinate: lower workers or associates
He showed this by _____	admiration: respect or high regard

▶ Step 2


Read the prompt below related to the lecture you heard.

Using points and examples from the lecture, describe the two traits of a charismatic leader and explain how these traits were used.

Now create your own response using words and expressions from Step 1. Use the prompts below to help you.

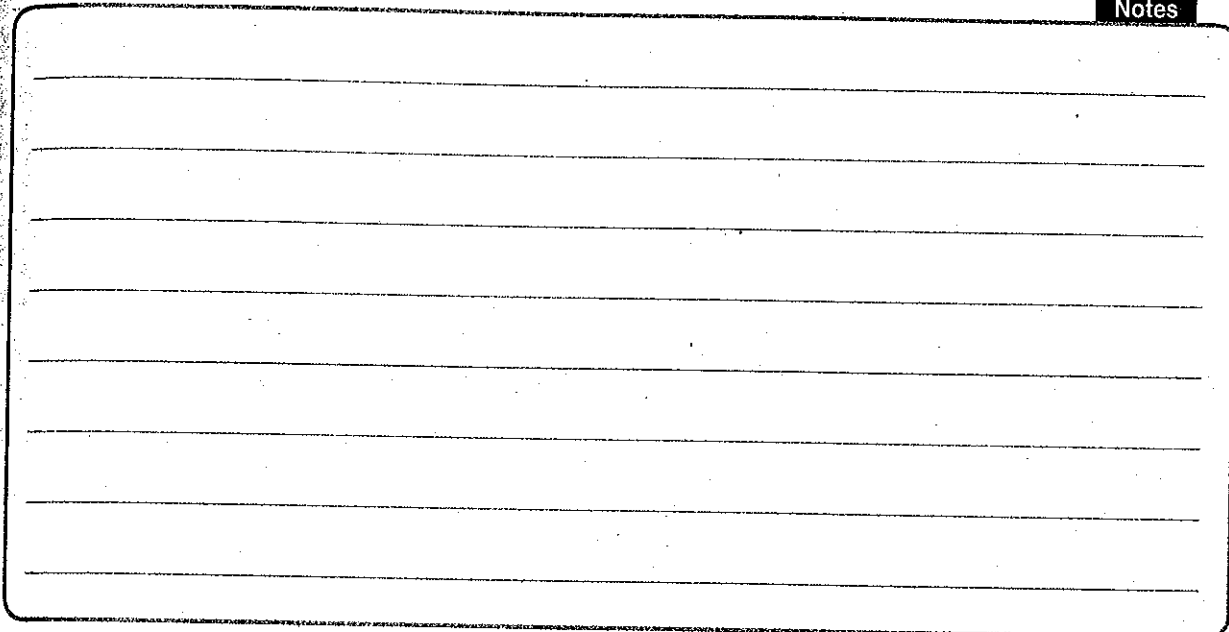
The professor _____ . One trait of a charismatic leader is _____ . The professor uses _____ as an example _____ . His vision _____ . He _____ . The second trait of a charismatic leader is _____ . The professor uses _____ as an example. He _____ .

▶ Step 3

 Listen to a sample response. Write down any useful expressions.

Track 179

Notes

**▶ Step 4**

Review the response you wrote in Step 2 and your notes in Step 3. Then close your book and give a response to the prompt below. Say your response slowly and clearly. Try to speak for at least 60 seconds.

Using points and examples from the lecture, describe the two traits of a charismatic leader and explain how these traits were used.

Q6

Practice 3 – Lecture

▶ Step 1

🎧 Listen to a lecture. Fill in the missing information in the notes. **Track 180**

The Asch experiment revealed _____ _____	tendency: likelihood; movement in a given direction
Description of Asch experiment: _____ _____	conform: to agree or match
Response of the last student: _____ _____	compromise: to cooperate or give in
What Asch believed would happen: _____ _____	series: a number of objects or events arranged one after another
What actually happened: _____ _____	ignorant: unaware
	previously: at an earlier time
	sacrifice: to give up or surrender
	crowd: a large number of people gathered together
	contradict: to disagree with or go against

▶ Step 2

Read the prompt below related to the lecture you heard.

Using points and examples from the lecture, describe Asch's experiment and what it says about conformity.

Now create your own response using words and expressions from Step 1. Use the prompts below to help you.

The professor says _____
For his experiment, _____, All _____
_____, Asch found _____
_____, Asch's
experiment showed _____

► Step 3

🎧 Listen to a sample response. Write down any useful expressions. **Track 181**

Notes

► Step 4

Review the response you wrote in Step 2 and your notes in Step 3. Then close your book and give a response to the prompt below. Say your response slowly and clearly. Try to speak for at least 60 seconds.

Using points and examples from the lecture, describe Asch's experiment and what it says about conformity.

Vocabulary Review 1

Instructions: Choose the best word or phrase to complete each sentence.

- In order to register for my classes, my university gave me a _____ of numbers which would act as my school ID.
(A) portion
(B) series
(C) rank
(D) load
- I am now attending university in San Francisco. However, I _____ in Tokyo and lived there until recently.
(A) exchanged
(B) accommodated
(C) registered
(D) originated
- When I become an adult, I would like to live in a(n) _____ climate. I'd particularly like to dwell on a tropical island.
(A) maritime
(B) remote
(C) alpine
(D) molten
- The rough _____ of this painting made it look as if the artist had hastily put it together.
(A) texture
(B) color spectrum
(C) symbolism
(D) proximity
- Many people consider certain laws to be _____. All cultures seem to share these laws.
(A) diverse
(B) substantial
(C) universal
(D) distinct
- Emily printed a first _____ of her research paper for her physics professor to look over. He marked several errors before returning it to her.
(A) journal
(B) catalogue
(C) novel
(D) draft
- The dog's behavior was very _____ toward me. It made me feel very afraid.
(A) dominant
(B) anxious
(C) menacing
(D) overwhelming
- Jason's computer was malfunctioning. It would not let him _____ his personal files.
(A) log
(B) access
(C) flip
(D) navigate
- The lemurs, types of monkeys from Madagascar, are becoming endangered because their homes are being destroyed.
(A) habitats
(B) continents
(C) summits
(D) savannas
- The mother decided to let her daughter recover from her recent cold by allowing her to stay home from school.
(A) drift
(B) sympathize
(C) induce
(D) recuperate

Instructions: Choose the word or phrase closest in meaning to the underlined word.

- The lemurs, types of monkeys from Madagascar, are becoming endangered because their homes are being destroyed.
(A) habitats
(B) continents
(C) summits
(D) savannas
- The mother decided to let her daughter recover from her recent cold by allowing her to stay home from school.
(A) drift
(B) sympathize
(C) induce
(D) recuperate

11. Although I had studied hard the night before, I felt so apprehensive about the test that I nearly made myself sick.

- (A) exhausted
- (B) anxious
- (C) relaxed
- (D) flexible

12. As manager of this photography studio, I try to treat my workers with the utmost respect.

- (A) photographers
- (B) consultants
- (C) subordinates
- (D) authorities

13. Despite the fact that I didn't agree with him, I found his argument to be very persuasive.

- (A) compelling
- (B) inconvenient
- (C) relaxed
- (D) prominent

14. I received the money that I needed on credit, but I'll have to pay it back later.

- (A) fundraiser
- (B) load
- (C) debt
- (D) loan

15. My sister decided to help others by volunteering at the local charity.

- (A) hang out with
- (B) date back to
- (C) reach out to
- (D) hang up on

Instructions: Write the missing words. Use the words below to fill in the blanks.

penalty afford ignorant
scholarship unscholarly

One bad event that taught me a lesson happened last year. I couldn't **16.** _____ to pay for college anymore, so I had applied for and won a **17.** _____. Yet I was **18.** _____ of its conditions. The next semester, I took a physical education class for fun. However, the terms of my scholarship stated that I could not take any class that was **19.** _____ in nature. Hence, I almost lost it because I did not read the terms carefully enough. That would have been a severe **20.** _____ for such a simple mistake.

Instructions: Match the words that have opposite meanings.

- | | |
|--------------|----------------|
| 21. current | (A) ally |
| 22. ancestor | (B) plenty |
| 23. scarce | (C) nearby |
| 24. opponent | (D) dated |
| 25. isolated | (E) descendent |

Vocabulary Review 2

Instructions: Choose the best word or phrase to complete each sentence.

- Susie got a prescription for medication from her medical doctor, but she decided that she would wait to _____ her therapist before she took any new pills.
(A) obtain
(B) consult
(C) ace
(D) chat
- My teacher resolved a recent _____ between myself and a friend.
(A) opponent
(B) debt
(C) conflict
(D) hassle
- In the mountains close to my house, there is a large _____ of the rock, granite.
(A) trail
(B) zinc
(C) attribute
(D) deposit
- I needed to make a(n) _____ stop at the nearest car repair shop because my tire had blown out.
(A) firsthand
(B) emergency
(C) overdue
(D) monetary
- The actor's compassionate actions _____ me to participate more in improving my own community.
(A) enabled
(B) deterred
(C) inspired
(D) evoked
- George could speak Italian fluently, but he was still unable to _____ what the plot of the opera was about.
(A) post
(B) enable
(C) devise
(D) interpret
- Her high-school science project had been so _____ for Cynthia that it nearly brought her to tears.
(A) overwhelming
(B) exhausted
(C) anxious
(D) remarkable
- On Monday, I need to visit the _____ office to get a list of my previous classes.
(A) transcript's
(B) security's
(C) registrar's
(D) network's

Instructions: Choose the word closest in meaning to the underlined word or phrase.

- Whenever I stop by the store, I prefer to buy natural food over food with lots of added preservatives.
(A) prominent
(B) organic
(C) substantial
(D) current
- The outer covering of the Earth covers the liquid mantle that exists below the Earth.
(A) deposit
(B) fossil
(C) continent
(D) crust

11. The mother tried to split her time evenly between her three-year-old and her newborn.
- (A) vary
(B) waste
(C) divide
(D) exhibit
12. Even though the appointment was time-consuming and very problematic, I was happy to get it over with.
- (A) prominent
(B) inconvenient
(C) flexible
(D) scarce
13. The scientist came up with a solid promise to explain the observations he had witnessed.
- (A) hypothesis
(B) allocation
(C) goal
(D) vision
14. Since they couldn't agree on which restaurant to eat at, my parents decided to negotiate by selecting a third restaurant choice.
- (A) sacrifice
(B) compromise
(C) conform
(D) contradict
15. The small building that the architect constructed was modeled after its larger counterpart.
- (A) diverse
(B) universal
(C) miniature
(D) revolving

Instructions: Write the missing words. Use the words below to fill in the blanks.

endures grandeur remarkable
traffic jam monument

My favorite vacation was when my family and I went to visit Mount Rushmore, a

16. _____ in the United States.

It was hard to get there at first because our vehicle got stuck in a 17. _____.

However, when we finally got there, I was amazed by the 18. _____ of the site. It was 19. _____ to see the large heads of past American presidents carved out in stone. Best of all, this site

20. _____ rain, snow, and the tests of time, which allows people like me to see it in the future.

Instructions: Choose one word in each group that does not belong.

21. contend assert
insist rebuke
22. admiration esteem
dejection veneration
23. uniform varied
identical equal
24. assume delegate
assign allocate
25. previously subsequently
prior to formerly

Part 2

Making Speech Coherent

- Chapter 4 Independent Speaking:
Test Questions 1 and 2
- Chapter 5 Integrated Speaking:
Test Questions 3 and 4
- Chapter 6 Integrated Speaking:
Test Questions 5 and 6
- Vocabulary Review 3
- Vocabulary Review 4

Chapter 4

Independent Speaking: Test Questions 1 and 2

A response to the independent speaking question generally includes the following:

- An introduction to the general topic of the essay — usually one sentence
- A statement of your opinion — usually one sentence
- Your reasons + examples/details to support them — one or two sentences each

Within 60 seconds, the time given for your response, you should be able to say about eight sentences. These sentences would be similar in length to the following: "I often take my guitar to parties and play music for my friends there."

Before speaking:

- Choose an opinion that is easily supported.
- Organize the flow of your response in your mind.
- Make sure that you have adequate reasons and examples.

When speaking:

- Make a clear statement of your opinion on the given topic.
- State clear reasons for your opinion.
- Use concrete examples.
- Use transitions to improve the flow of your speech.

Q1

Practice 1 – Personal Experience

▶ Step 1

Read and think about the prompt below.

Where is your favorite place to go in your city? Why do you enjoy going there? Include specific reasons and examples to support your answer.

The sentences below make up a response to the prompt above. Read the sentences and underline any transitions you find.

- (A) For instance, I can watch people jogging, couples walking their dogs, or children playing at the playground.
- (B) This game is a great way to meet new friends, get some exercise, and take a break from schoolwork.
- (C) My favorite place to go to in my city is the huge park downtown.
- (D) It is fun to see how they all interact with each other.
- (E) I love going there because it is a great place to watch people doing various activities.
- (F) Also, I enjoy going to the park because I can almost always find someone to play volleyball with.

downtown:

the central part of a city that usually consists of the business center

various:

of different kinds

jog:

to run at a steady pace

playground:

an outdoor area set up for children to play

volleyball:

a game played by two teams where a ball is hit over a net

Look at the sentences again. Think about the role of each sentence in the response. Then list the sentences in the correct order.

► Step 2

Do NOT look at the sentences in Step 1. Answer the following questions in complete sentences.

1. Where is this person's favorite place?

2. What does she like to do there?

3. Why does she choose to do these activities there?

Using the answers you wrote above, try to speak for 60 seconds explaining this person's response. Use the words and phrases below while you are speaking. Record your time.

for instance also favorite place always enjoy fun

★ Response 1: Speaking time: _____ seconds

► Step 3

🎧 Now listen to the sample response. How is it different from yours? What parts of the response can you use in your own? Write down any helpful expressions you hear. **Track 182**

Notes

🎧 Listen again and repeat after the response. Pay close attention to pronunciation, intonation, and word stress. **Track 183**

► Step 4

Now write your own answers to the following questions in complete sentences.

1. Where is your favorite place to go in your city?

2. What activities do you like to do there?

3. Why do you choose to do these activities there?

Using the short answers you wrote above, give a spoken response to the prompt. Try to incorporate useful expressions from Step 3, while also paying attention to your pronunciation and intonation. Record your time.

Where is your favorite place to go in your city? Why do you enjoy going there? Include specific reasons and examples to support your answer.

Response 2:

Speaking time: _____ seconds

Q1

Practice 2 – Personal Experience

READING

LISTENING

SPEAKING

WRITING

PRACTICE TEST

► Step 1

Read and think about the prompt below.

Describe a favorite book that you read as a child. Why did you like it so much? Include specific reasons and examples to support your answer.

The sentences below make up a response to the prompt above. Read the sentences and underline any transitions you find.

- (A) I liked the book mostly because of its great pictures.
- (B) I felt proud because I could recite the story even before I knew how to read.
- (C) Even though the Wild Things are supposed to be fearsome monsters, they are actually quite comical in the pictures.
- (D) It is about a boy who uses his imagination to turn his room into a wild forest where he becomes the king of the Wild Things.
- (E) I also liked the book because the story was simple and easy to memorize.
- (F) As a child, one of my favorite books was *Where the Wild Things Are*.

imagination:

ability to think of intelligent and original ideas or thoughts

memorize:

to learn something so that you can remember it completely

fearsome:

alarming or terrible

comical:

funny

recite:

to repeat or perform a piece of writing

Look at the sentences again. Think about the role of each sentence in the response. Then list the sentences in the correct order.

► **Step 2**

Do NOT look at the sentences in Step 1. Answer the following questions in complete sentences.

1. What was this person's favorite book about?

2. Why did he like this book as a child?

3. What was surprising about the monsters in the story?

Using the answers you wrote above, try to speak for 60 seconds explaining this person's response. Use the words and phrases below while you are speaking. Record your time.

as a child even though also like mostly favorite because

Response 1: Speaking time: _____ seconds

► **Step 3**

🎧 Now listen to the sample response. How is it different from yours? What parts of the response can you use in your own? Write down any helpful expressions you hear. **Track 184**

Notes

🎧 Listen again and repeat after the response. Pay close attention to pronunciation, intonation, and word stress. **Track 185**

▶ Step 4

Now write your own answers to the following questions in complete sentences.

1. What was your favorite book about?

2. Why did you like this book as a child?

3. What was surprising about the book?

Using the answers you wrote above, give a spoken response to the prompt. Try to incorporate useful expressions from Step 3, while also paying attention to your pronunciation and intonation. Record your time.

Describe a favorite book that you read as a child. Why did you like it so much? Include specific reasons and examples to support your answer.

Response 2:

Speaking time: _____ seconds

Q1

Practice 3 – Personal Experience

▶ Step 1

Read and think about the prompt below.

Describe a teacher who has positively impacted your life. How has he or she influenced you? Include specific reasons and examples to support your answer.

A sample outline of a response is given below. Write down transition words or phrases that can be used to link the ideas.

Teacher: Ms. Murphy, 9th grade

- Reason 1: Helped me develop a passion for literature
- Reason 2: Taught me how to deal with conflicts

Transition words/phrases:

_____	_____
_____	_____
_____	_____

Using the above outline, give a spoken response to the prompt. Record your time.

Response 1: Speaking time: _____ seconds

▶ Step 2

Now listen to the sample response. How is it different from yours? What parts of the response can you use in your own? Write down any helpful expressions you hear. Track 186

Notes

- impact:**
to influence
- passion:**
love and enthusiasm for something
- pursue:**
to follow or go after
- rationally:**
sensibly, reasonably
- temper:**
a state of calm and balance

Listen again and repeat after the response. Pay close attention to pronunciation, intonation, and word stress. Track 187

► Step 3

Without listening to the sample again, give another spoken response to the prompt. Try to incorporate useful expressions from Step 2, while also paying attention to your pronunciation and intonation. Record your time.

Response 2: Speaking time: _____ seconds

► Step 4

Make your own outline for the prompt. Try to incorporate transition words and useful phrases introduced in Steps 1 and 2.

Teacher: _____

• Reason 1: _____

• Reason 2: _____

Transition words/phrases:

_____	_____
_____	_____
_____	_____

Using your outline, respond to the prompt. Record your time.

Describe a teacher who has positively impacted your life. How has he or she influenced you? Include specific reasons and examples to support your answer.

Response 3: Speaking time: _____ seconds

Q1

Practice 4 – Personal Experience

► Step 1

Read and think about the prompt below.

Who has given you good advice and what was it? Why was this good advice? Include specific reasons and examples to support your answer.

A sample outline of a response is given below. Write down transition words or phrases that can be used to link the ideas.

Mother's advice: Focus on schoolwork

- Reason 1: Received high grades
Detail: Earned a college scholarship
- Reason 2: Allowed me to graduate at the top of my class
Detail: Eligible for many jobs

Transition words/phrases:

_____	_____
_____	_____
_____	_____

Using the above outline, give a spoken response to the prompt. Record your time.

Response 1: Speaking time: _____ seconds

► Step 2

Now listen to the sample response. How is it different from yours? What parts of the response can you use in your own? Write down any helpful expressions you hear. **Track 188**

Notes

concentrate:
to think; to focus
acquire:
to obtain or possess
eventually:
finally or ultimately
habit:
a routine or custom
eligible:
qualified for

Listen again and repeat after the response. Pay close attention to pronunciation, intonation, and word stress. **Track 189**

► **Step 3**

Without listening to the sample again, give another spoken response to the prompt. Try to incorporate useful expressions from Step 2, while also paying attention to your pronunciation and intonation. Record your time.

Response 2: Speaking time: _____ seconds

► **Step 4**

Make your own outline for the prompt. Try to incorporate transition words and useful phrases introduced in Steps 1 and 2.

_____ advice: _____

• Reason 1: _____

Detail: _____

• Reason 2: _____

Detail: _____

Transition words/phrases:

Using your outline, respond to the prompt. Record your time.

Who has given you good advice and what was it? Why was this good advice? Include specific reasons and examples to support your answer.

Response 3: Speaking time: _____ seconds

Q2

Practice 1 – Personal Preference

► Step 1

Read and think about the prompt below.

Some students prefer to attend prestigious national universities. Others prefer to attend local colleges. Which would you prefer and why? Use specific reasons and examples to support your answer.

The sentences below make up a response to the prompt above. Read the sentences and underline any transitions you find.

- (A) In high school, when I was doing poorly in a class, they were there to give me the advice I needed to pass it.
- (B) I know many graduates of less expensive local colleges who have attained even more success than those from prestigious universities.
- (C) Secondly, I think I would receive as good an education at a local college as at a national college, and at half the cost.
- (D) This way, if I encountered any problems, my family would be nearby to provide assistance.
- (E) I would prefer to attend a local college.
- (F) I would also want their support in college.

local:

nearby; close to home

encounter:

to meet or come across

assistance:

help; aid

attain:

achieve; accomplish

prestigious:

high-status

Look at the sentences again. Think about the role of each sentence in the response. Then list the sentences in the correct order.

► Step 2

Do NOT look at the sentences in Step 1. Answer the following questions in complete sentences.

1. Which type of college or university does this person wish to attend?

2. What is one reason she gives for holding this opinion?

3. What is another reason she gives for holding this opinion?

Using the short answers you wrote above, try to speak for 60 seconds explaining this person's response. Use the words and phrases below, while you are speaking. Record your time.

also prefer prestigious local secondly college this way

Response 1:

Speaking time: _____ seconds

► Step 3

Now listen to the sample response. How is it different from yours? What parts of the response can you use in your own? Write down any helpful expressions you hear. **Track 190**

Notes

Listen again and repeat after the response. Pay close attention to pronunciation, intonation, and word stress. **Track 191**

► Step 4

Now write your own answers to the following questions in complete sentences.

1. Which type of college or university would you like to attend?

2. What is one reason you have for holding this opinion?

3. What is another reason you have for holding this opinion?

Using the short answers you wrote above, give a spoken response to the prompt. Try to incorporate useful expressions from Step 3, while also paying attention to your pronunciation and intonation. Record your time.

Some students prefer to attend prestigious national universities. Others prefer to attend local colleges. Which would you prefer and why? Include specific reasons and examples to support your answer.

Response 2:

Speaking time: _____ seconds

Q2

Practice 2 – Personal Preference

READING

LISTENING

SPEAKING

WRITING

PRACTICE TEST

► Step 1

Read and think about the prompt below.

When some people travel to new areas, they like to visit educational places like museums. Others prefer to spend time at more entertaining places like amusement parks. Which do you prefer and why? Include specific reasons and examples to support your answer.

The sentences below make up a response to the prompt above. Read the sentences and underline any transitions you find.

- (A) Since I can visit places like those at home, I would rather spend my time at places I will not see again.
- (B) I also enjoy visiting educational places because they are often distinctive to an area.
- (C) Primarily, I like visiting educational places like museums because I am often curious about the area and the people I am visiting.
- (D) In contrast, places for entertainment like movie theaters or amusement parks can generally be found anywhere.
- (E) I prefer to visit educational places when I travel to new areas.
- (F) I think that knowing the history and culture of a place helps me to better understand and appreciate it.

primarily:

mainly; chiefly

museum:

a building where valuable objects are kept so that people can see them

curious:

eager to learn

distinctive:

specific to a certain place

generally:

usually or normally

Look at the sentences again. Think about the role of each sentence in the response. Then list the sentences in the correct order.

► Step 2

Do NOT look at the sentences in Step 1. Answer the following questions in complete sentences.

1. Which type of place does this person prefer to visit?

2. What is the first reason he gives for his preference?

3. What does he say is a major difference between educational places and places devoted solely to entertainment?

Using the short answers you wrote above, try to speak for 60 seconds explaining this person's response. Use the words and phrases below, while you are speaking. Record your time.

since also in contrast primarily educational entertainment

Response 1: Speaking time: _____ seconds

► Step 3

🎧 Now listen to the sample response. How is it different from yours? What parts of the response can you use in your own? Write down any helpful expressions you hear. **Track 192**

Notes

🎧 Listen again and repeat after the response. Pay close attention to pronunciation, intonation, and word stress. **Track 193**

► Step 4

Now write your own answers to the following questions in complete sentences.

1. Which type of place would you prefer to visit?

2. What is the first reason you would give for your preference?

3. In your opinion, what is one major difference between educational places and places devoted solely to entertainment?

Using the short answers you wrote above, give a spoken response to the prompt. Try to incorporate useful expressions from Step 3, while also paying attention to your pronunciation and intonation. Record your time.

When some people travel to new areas, they like to visit educational places like museums. Others prefer to spend time at more entertaining places like amusement parks. Which do you prefer and why? Include specific reasons and examples to support your answer.

Response 2:

Speaking time: _____ seconds

Q2

Practice 3 – Personal Preference

▶ Step 1

Read and think about the prompt below.

Some people believe that learning material should be the sole responsibility of teachers. Others feel that parents should be involved in choosing the material children learn in school. Which view do you believe? Include specific reasons and examples to support your answer.

A sample outline of a response is given below. Write down transition words or phrases that can be used to link the ideas.

Should parents influence curriculum? Yes

- Reason 1: Parents know best what their children are ready to learn.
- Reason 2: The opinions of parents can be helpful in developing a curriculum.
- Reason 3: Parents can speak for their children when their children are having problems.

Transition words/phrases:

_____	_____
_____	_____
_____	_____

Using the above outline, give a spoken response to the prompt. Record your time.

Response 1: Speaking time: _____ seconds

▶ Step 2

Now listen to the sample response. How is it different from yours? What parts of the response can you use in your own? Write down any helpful expressions you hear. **Track 194**

Notes

firmly:
confidently; resistant to pressure

judge:
one who evaluates

struggle:
to have trouble with

curriculum:
the courses of study offered by an institution

intervene:
to interfere or get involved in

🎧 Listen again and repeat after the response. Pay close attention to pronunciation, intonation, and word stress. **Track 195**

▶ **Step 3**

Without listening to the sample again, give another spoken response to the prompt. Try to incorporate useful expressions from Step 2, while also paying attention to your pronunciation and intonation. Record your time.

Response 2: Speaking time: _____ seconds

▶ **Step 4**

Make your own outline for the prompt. Try to incorporate transition words and useful phrases introduced in Steps 1 and 2.

Should parents influence curriculum? _____

Transition words/phrases:

- Reason 1: _____

- Reason 2: _____

- Reason 3: _____

Using your outline, respond to the prompt. Record your time.

Some people believe that learning material should be the sole responsibility of teachers. Others feel that parents should be involved in choosing the material children learn in school. Which view do you believe? Include specific reasons and examples to support your answer.

Response 3: Speaking time: _____ seconds

Q2

Practice 4 – Personal Preference

► Step 1

Read and think about the prompt below.

In today's busy world, people are constantly on the move. Many prefer this active lifestyle because they feel it is more exciting. Do you think it is a good idea to be constantly active? Include specific reasons and examples to support your answer.

A sample outline of a response is given below. Write down transition words or phrases that can be used to link the ideas.

Is it good to be constantly active? No

- Reason 1: Too much activity drains us of energy.
- Reason 2: Bodies need rest to function properly.
- Reason 3: It is more efficient to take breaks between activities.

Transition words/phrases:

_____	_____
_____	_____
_____	_____

Using the above outline, give a spoken response to the prompt. Record your time.

Response 1: Speaking time: _____ seconds

► Step 2

Now listen to the sample response. How is it different from yours? What parts of the response can you use in your own? Write down any helpful expressions you hear. **Track: 196**

Notes

- drain:**
to use up or exhaust
- recharge:**
to renew or refresh
- counterproductive:**
making something worse rather than better
- efficiently:**
to do well or capably
- break:**
a pause in work

Listen again and repeat after the response. Pay close attention to pronunciation, intonation, and word stress. **Track: 197**

► Step 3

Without listening to the sample again, give another spoken response to the prompt. Try to incorporate useful expressions from Step 2, while also paying attention to your pronunciation and intonation. Record your time.

Response 2: Speaking time: _____ seconds

► Step 4

Make your own outline for the prompt. Try to incorporate transition words and useful phrases introduced in Steps 1 and 2.

Is it good to be constantly active? _____

Transition words/phrases:

• Reason 1: _____

• Reason 2: _____

• Reason 3: _____

Using your outline, respond to the prompt. Record your time.

In today's busy world, people are constantly on the move. Many prefer this active lifestyle because they feel it is more exciting. Do you think it is a good idea to be constantly active? Use specific reasons and examples to support your answer.

Response 3: Speaking time: _____ seconds

Chapter 5

Integrated Speaking: Test Questions 3 and 4

A response to the integrated speaking questions generally includes the following:

Question 3

- A statement of the problem or situation, as expressed in the reading
- A statement of the speaker's opinion, as introduced in the conversation
- His or her reasons + additional information, as taken from the conversation.

Question 4

- A statement of the main idea or topic of the reading and lecture
- Key points that are similar
- Key points that contrast

Before speaking:

- Identify the topic and supporting details.
- Organize the flow of your response in your mind.
- Make sure that you have adequate reasons and examples.

While speaking:

- Begin your response by clearly stating the opinion / main idea of the reading and the conversation/lecture.
- Give reasons or details from the conversation or lecture to support your opinion.
- Make sure statements are clearly connected so that the scorer will more easily understand your points.

Q3

Practice 1 – Reading and Conversation

▶ Step 1

Read the passage below and underline important information.

Attention Honors Students

The English Department is now making it mandatory for all honors students who are planning to attend graduate school to take pre-graduate classes offered by the English Department. For those of you who are planning on pursuing a master's or doctoral degree, these classes are designed specifically to prepare you for graduate courses. They will facilitate the transition from college to graduate education. These high-level courses will also allow your graduate school application to stand out from among a pool of applicants from other schools.

mandatory:
required; compulsory

doctoral:
relating to the highest academic degree

specifically:
particularly or expressly

facilitate:
to assist or to make easy

transition:
a change in state

pool:
a joint supply that is used by members of a group

Write down the main idea and any key points.

Notes

🎧 Now listen to a related conversation. Take notes on the woman's opinion. **Track: 198**

Opinion: _____

Reason 1: _____

Reason 2: _____

policy:
procedure

bet:
to think or expect

excel:
to do well

competitive:
relating to competition

applicant:
someone that applies for something

▶ Step 2

Read and think about the prompt below.

The woman expresses her opinion of the English Department's decision. State her opinion and explain the reasons she gives for holding that opinion.

WITHOUT looking at the original reading passage, review your notes from the reading and listening passages. Select the information you think is important. Fill in the blanks of the sample response below.

The announcement says _____.

The woman _____ with this idea. She says that _____.

She supports this point _____.

She thinks _____. Also, _____.

_____. She says that _____.

After you have filled in the blanks, read the response out loud. Pay attention to your pronunciation, intonation, and word stress.

▶ **Step 3**

🎧 Now listen to a sample response. How does it differ from your response? Write down any differences in information or phrasing. **Track 199**

Notes

🎧 Listen again and repeat after the response. Pay close attention to pronunciation, intonation, and word stress. **Track 200**

▶ **Step 4**

Now give your own spoken response to the prompt. Try to incorporate useful expressions from Steps 2 and 3, while also paying attention to your pronunciation and intonation. Record your time.

Response: Speaking time: _____ seconds

Q3

Practice 2 – Reading and Conversation

READING

LISTENING

SPEAKING

WRITING

PRACTICE TEST

Step 1

Read the passage below and underline important information.

Announcement

All counselors at the Business School will now have open office hours at three specified times during the week to talk with students and answer questions. In the past, students have had to schedule counseling appointments weeks in advance and have consequently been unable to get their questions answered in a timely manner. Additionally, we often did not have enough counselors available during the whole week to handle student demand. We expect that by providing open office hours, students can get answers to questions quickly and there will be enough counselors available during these times to meet the demand.

In advance:
beforehand or prior to

counselor:
a person who provides advice and assistance to students at an institution

timely:
occurring at a suitable time

manner:
method or way

available:
at hand; able to be obtained

Write down the main idea and any key points.

Notes

Now listen to a related conversation. Take notes on the man's opinion. **Track 20.1b**

Opinion: _____

Reason 1: He often has trouble _____

Example: _____

Reason 2: His questions _____

Example: _____

bulletin:
a brief report or announcement

news:
new information about recent events

exasperating:
annoying or irritating

issue:
a subject or topic

show up:
to come or attend

precisely:
exactly

► **Step 2**

Read and think about the prompt below.

The man expresses his opinion of the university's decision. State his opinion and explain the reasons he gives for holding that opinion.

WITHOUT looking at the original reading passage, review your notes from the reading and listening passages. Select the information you think is important. Fill in the blanks of the sample response below.

The announcement says _____
_____. The man thinks _____
_____. He _____
He also _____
Most counselors _____. Therefore, _____
Now, according to the man, _____. Since

After you have filled in the blanks, read the response out loud. Pay attention to your pronunciation, intonation, and word stress.

► Step 3

🎧 Now listen to a sample response. How does it differ from your response? Write down any differences in information or phrasing. **Track 202**

Notes

🎧 Listen again and repeat after the response. Pay close attention to pronunciation, intonation, and word stress. **Track 203**

► Step 4

Now give your own spoken response to the prompt. Try to incorporate useful expressions from Steps 2 and 3, while also paying attention to your pronunciation and intonation. Record your time.

Response: Speaking time: _____ seconds

Q4

Practice 1 – Reading and Lecture

▶ Step 1

Read the passage below and underline important information.

Ways the Brain Can Recover from Damage

Neuroscientists have often observed that children who have suffered from severe brain damage can sometimes miraculously recover much of the brain's functions. Adults have a harder time recovering from similar brain damage because once the brain stops developing, it becomes hard-wired. Neuroscientists used to believe that brain damage was permanent in adults.

However, neuroscientists now think that adults who have severe brain damage can recover brain functions that were once thought to be lost. According to this theory, parts of the adult brain can sometimes create new brain cells. In addition, the brain can also partially recover by adapting to take on new functions.

neuroscientist:

an individual who studies the nervous system, including the brain

hard-wired:

fixed or unchangeable

permanent:

something that lasts forever

cell:

the smallest structural unit of an organism

adapt:

to change or alter

Write down the main idea and any key points.

Notes

🎧 Now listen to a related lecture. Fill in the missing information.

Track 204

Ways the Adult Brain _____

Way 1: _____

How this happens: _____

How this was discovered: _____

Way 2: _____

How this happens: _____

Example: _____

tissue:

a collection of similar cells working together to form specific functions within the body

regenerate:

to form or create new things

degree:

level or amount

task:

a job or a piece of work

stroke:

an injury to the brain that happens when inadequate blood flow causes the death of brain cells

motor:

related to movement

► Step 2

Read and think about the prompt below.

The professor discusses two ways the brain can recover from brain damage. Explain what they are and how they occur.

WITHOUT looking at the original reading passage, review your notes from the reading and listening passages. Select the information you think is important. Fill in the blanks of the sample response below.

According to the reading, _____
_____. The professor explains _____
She says _____ She says _____
_____. She then explains _____
_____. The professor gives _____
_____. Sometimes _____
_____. They _____

After you have filled in the blanks, read the response out loud. Pay attention to your pronunciation, intonation, and word stress.

▶ **Step 3**

🎧 Now listen to a sample response. How does it differ from your response? Write down any differences in information or phrasing. **Track 205**

Notes

🎧 Listen again and repeat after the response. Pay close attention to pronunciation, intonation, and word stress. **Track 206**

▶ **Step 4**

Now give your own spoken response to the prompt. Try to incorporate useful expressions from Steps 2 and 3, while also paying attention to your pronunciation and intonation. Record your time.

Response:

Speaking time: _____ seconds

Q4

Practice 2 – Reading and Lecture

READING

LISTENING

SPEAKING

WRITING

PRACTICE TEST

► Step 1

Read the passage below and underline important information.

Interactive Television

Interactive television has many negative effects on today's children. Interactive television involves a variety of systems that allow viewers to interact with television content as they view it. For children, interactive television systems are usually designed with an educational component in mind. Such systems come with a controller by which a child can manipulate the games and videos playing on a television screen. However, researchers are now theorizing that interactive television can negatively affect intelligence in children. Moreover, interactive television can also allow companies to target children for non-educational purposes.

content:
materials

component:
factor or feature

manipulate:
to influence or control

theorize:
to come up with a theory;
to guess

target:
to aim or pursue

Write down the main idea and any key points.

Notes

Now listen to a related lecture. Fill in the missing information.

Track 207

Negative Effects of _____

Effect 1: _____

Study 1: _____

Study 2: _____

Effect 2: _____

How this happens: _____

Why this is a problem: _____

cognitively:
relating to mental
awareness and perception

toddler:
a young child learning to
walk; a child under age two

beverage:
a liquid used for drinking

inherently:
an essential characteristic
or something that occurs
naturally

vulnerable:
weak or defenseless

gender:
identity based on sex

► Step 2

Read and think about the prompt below.

The professor discusses interactive television. Explain what this is and how it can have a negative effect on children.

WITHOUT looking at the original reading passage, review your notes from the reading and listening passages. Select the information you think is important. Fill in the blanks of the sample response below.

According to the reading, _____
_____. The professor expands on this first point _____
_____. Tests _____
_____. Yet _____
He also says _____
_____. They can _____
Children _____


After you have filled in the blanks, read the response out loud. Pay attention to your pronunciation, intonation, and word stress.

▶ Step 3

 Now listen to a sample response. How does it differ from your response? Write down any differences in information or phrasing. **Track 208**

Notes

<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>

 Listen again and repeat after the response. Pay close attention to pronunciation, intonation, and word stress. **Track 209**

▶ Step 4

Now give your own spoken response to the prompt. Try to incorporate useful expressions from Steps 2 and 3, while also paying attention to your pronunciation and intonation. Record your time.

Response: Speaking time: _____ seconds

Chapter 6

Integrated Speaking: Test Questions 5 and 6

A response to the integrated speaking questions generally includes the following:

- A statement of the problem or situation, as expressed in the conversation
- A statement of suggested solutions, as mentioned in the conversation
- An opinion of the suggested solutions
- Reasons + examples and details to support them
- A summary of the main points of the lecture

Before speaking:

- Choose the opinion most easily supported.
- Organize the flow of your answer in your mind.
- Make sure that you have adequate reasons and examples.

When speaking:

- Make a clear statement of your opinion on the given topic.
- State clear reasons for your opinion.
- Use concrete examples.
- Use transitions to improve the flow of your speech.

To describe problems:

- She/He is having a problem with _____.
- The problem is _____.
- She/He needs help with _____.
- She/He is having trouble _____.
- She/He cannot figure out _____.

To present opinions/solutions:

- She/He needs to _____.
- She/He should _____.
- One (Another) thing she/he can do is _____.
- The best thing she/he can do is _____.
- If I were her/him, I would _____.

Q5

Practice 1 – Conversation

▶ Step 1

🎧 Listen to a conversation. Take notes on the problem presented and the possible solutions suggested. **Track 210**

Problem: _____	lab: short for laboratory; a place or room dedicated to scientific research and experimentation data: factual information suggestion: a proposal or idea occupied: busy or engaged converse: to talk or communicate clarify: to explain
Solution 1: _____	
Advantages: _____ _____	
Disadvantages: _____	
Solution 2: _____	
Advantages: _____ _____	
Disadvantages: _____	

On your own, think of some possible benefits to each solution suggested in the conversation. Write them in the extra spaces provided above.

▶ Step 2

Read and think about the prompt below. Answer the following questions in complete sentences.

The students discuss two possible solutions to the man's problem. Describe the problem. Then state which of the two solutions you prefer and explain why.

1. What is the problem?

2. What should the man do?

3. Why?

► Step 3

Now create your own response to this topic using words and expressions from Steps 1 and 2.

The man wants _____ . However, _____

_____ . The woman suggests _____

_____ . I think _____

_____ . His professor _____

I am sure _____ . Also, _____

_____ . He will _____

Now listen to a sample response. How does it differ from your response? Write down any differences in information or phrasing. **Track 211**

Notes

Listen again and repeat after the response. Pay close attention to pronunciation, intonation, and word stress. **Track 212**

► Step 4

Now give your own spoken response to the prompt. Try to incorporate useful expressions from Step 3, while also paying attention to your pronunciation and intonation. Record your time.

Response: Speaking time: _____ seconds

Q5

Practice 2 – Conversation

► Step 1

🎧 Listen to a conversation. Take notes on the problem presented and the possible solutions suggested. **Track 213**

Problem: _____	enroll: to register or sign up for something
Solution 1: _____	uneasy: worried or anxious
Advantages: _____ _____	campus: the grounds of an institution, usually a school
Disadvantages: _____	escort: a person accompanying someone as a guard or guide
Solution 2: _____	awkward: uncomfortable
Advantages: _____ _____	security guard: a guard who keeps watch over something
Disadvantages: _____	several: more than a few
	park: to put or leave a vehicle in a certain location

On your own, think of some possible benefits to each solution suggested in the conversation. Write them in the extra spaces provided above.

► Step 2

Read and think about the prompt below. Answer the following questions in complete sentences.

The students discuss two possible solutions to the woman's problem. Describe the problem. Then state which of the two solutions you prefer and explain why.

1. What is the problem?

2. What should the woman do?

3. Why?

► Step 3

Now create your own response to this topic using words and expressions from Steps 1 and 2.

The woman wants _____ . However, _____

The man suggests _____

I think _____

That way, _____

Also, _____

🎧 Now listen to a sample response. How does it differ from your response? Write down any differences in information or phrasing. **Track 214**

Notes

🎧 Listen again and repeat after the response. Pay close attention to pronunciation, intonation, and word stress. **Track 215**

► Step 4

Now give your own spoken response to the prompt. Try to incorporate useful expressions from Step 3, while also paying attention to your pronunciation and intonation. Record your time.

Response: _____ Speaking time: _____ seconds

▶ Step 1

🎧 Listen to a lecture. Take notes on the information presented. **Track 216**

Main topic: _____

Shared characteristic of the aristocratic hero: _____

Example 1: _____

Details: _____

Example 2: _____

Details: _____

hero:
a character in a story that has great strength and courage

noble:
royal; someone from the upper class

aristocratic:
someone from the upper class

portray:
to show

legendary:
famous or renowned

reclaim:
to get back or regain

trial:
a test or a hardship

drastically:
significantly; considerably

literary:
relating to literature

comedy:
a work that is humorous and that has a happy ending

▶ Step 2

Read and think about the prompt below. Answer the following questions in complete sentences.

Using points and examples from the lecture, describe the aristocratic hero of Classicism and explain its use in classical literature.

1. What characteristic did all classical heroes share?

2. What does the speaker mention about the Greek gods in ancient Greek literature?

3. What is one characteristic that is rarely seen in Shakespeare's heroes?

► Step 3

Now create your own response to this topic using words and expressions from Steps 1 and 2.

The professor says _____
 _____, This _____, The professor says _____
 She mentions _____, He is _____
 _____, The professor mentions _____
 _____, The professor then says _____
 She mentions _____
 Even _____

🎧 Now listen to a sample response. How does it differ from your response? Write down any differences in information or phrasing. **Track 217**

Notes

🎧 Listen again and repeat after the response. Pay close attention to pronunciation, intonation, and word stress. **Track 218**

► Step 4

Now give your own spoken response to the prompt. Try to incorporate useful expressions from Step 3, while also paying attention to your pronunciation and intonation. Record your time.

Response: Speaking time: _____ seconds

Q6

Practice 2 – Lecture

► Step 1

🎧 Listen to a lecture. Take notes on the information presented. **Track 219**

Main topic: _____

Claim the professor makes: _____

Point 1: _____

Example: _____

Point 2: _____

Example: _____

prosperous:

rich; wealthy

civilization:

a society that has developed its own culture and achievements

flourish:

to grow or prosper

agriculture:

the practice of cultivating soil and raising crops

settle down:

to stay in a certain place

irrigation:

a water supply system

ditch:

a long narrow channel dug into the ground

forage:

to scavenge or look for food

import:

to bring or carry in from other lands

export:

to bring or send good to other lands

route:

a road or course

► Step 2

Read and think about the prompt below. Answer the following questions in complete sentences.

Using points and examples from the lecture, describe how building near water sources benefited ancient cities.

1. What was the importance of water sources to ancient cities?

2. What is the reason that the Sumerian civilization formed?

3. According to the professor, how did water contribute to Egypt's success?

► Step 3

Now create your own response to this topic using words and expressions from Steps 1 and 2.

The professor says _____.

First, _____. For example, _____.

_____ Because _____.

they _____. Living close to _____.

This _____. The _____, for example, _____.

_____. Therefore, _____.

_____.

👂 Now listen to a sample response. How does it differ from your response? Write down any differences in information or phrasing. **Track 220**

Notes

👂 Listen again and repeat after the response. Pay close attention to pronunciation, intonation, and word stress. **Track 221**

► Step 4

Now give your own spoken response to the prompt. Try to incorporate useful expressions from Step 3, while also paying attention to your pronunciation and intonation. Record your time.

Response: _____ Speaking time: _____ seconds

Vocabulary Review 3

Instructions: Choose the best word or phrase to complete each sentence.

- The _____ in front of the elementary school was undergoing renovations, so students had to stay inside during recess.
(A) campus
(B) playground
(C) lab
(D) museum
- The president made a deal to _____ fresh grapes into this country from California.
(A) import
(B) drain
(C) export
(D) concentrate
- It was _____ for the girl to write a 300-word essay in order for her to get accepted into the organization.
(A) prestigious
(B) accidental
(C) mandatory
(D) intentional
- Even though the creatures in the movie were supposed to be _____, I was not that scared.
(A) comical
(B) curious
(C) vulnerable
(D) fearsome
- I prefer to go to the _____ library because it only takes me fifteen minutes to walk there from my house.
(A) local
(B) typical
(C) minimal
(D) prestigious
- Janet was listening to her CD player when it suddenly stopped. It was time to _____ the battery.
(A) reclaim
(B) represent
(C) recharge
(D) release
- Make sure that you _____ hold the vase in your hand so you won't drop it.
(A) generally
(B) firmly
(C) specifically
(D) efficiently
- King Arthur was a _____ king of England who was known for his bravery and goodness.
(A) legendary
(B) fearsome
(C) competitive
(D) decorative
- I was able to _____ the entire alphabet from memory by the time I was four years old.
(A) memorize
(B) clarify
(C) theorize
(D) recite
- The _____ I gave him on how to improve his poster was to change his text to a bigger font.
(A) data
(B) suggestion
(C) component
(D) break

11. I'm not sure if I am _____ to apply for a degree in literature, but I would like to apply if at all possible.
- (A) eligible
(B) literary
(C) distinctive
(D) prosperous
12. Even though I did my best in high school, I was not able to _____ the high grades that I wanted.
- (A) encounter
(B) award
(C) attain
(D) dispute
13. In order to get my daily exercise, I _____ all the way down the block to the store and back.
- (A) forage
(B) jog
(C) facilitate
(D) flourish
14. Newspapers try to print the most _____ news; otherwise, people begin to lose interest in subjects as more time elapses.
- (A) noble
(B) timely
(C) various
(D) awkward
15. Sylvia recently graduated from State University. She managed to _____ a bachelor's degree in liberal arts.
- (A) acquire
(B) realize
(C) archive
(D) inquire

Instructions: Choose the word or phrase closest in meaning to the underlined word or phrase.

16. A turning door was put at the entrance of the hotel. It turns whenever anyone presses against it.
- (A) expanding
(B) revolving
(C) twisting
(D) circling
17. Andrea was so busy that she didn't have time to proofread her paper before turning it in.
- (A) uneasy
(B) exhausted
(C) overwhelming
(D) occupied
18. The psychologist advised her patients to practice self-esteem techniques each day before they went to school.
- (A) security guard
(B) counselor
(C) judge
(D) neuroscientist
19. As the leader had so much work to do, he began to pass on many of the tasks to his workers.
- (A) delegate
(B) post
(C) contend
(D) deter
20. The Middle East is often referred to as the Fertile Crescent. It's so known because it was the birthplace of the very first cities.
- (A) agriculture
(B) irrigation
(C) cathedrals
(D) civilizations

21. Too much work is negative because people get so stressed out that they cannot perform adequate work.
- (A) exasperating
 - (B) counterproductive
 - (C) anxious
 - (D) menacing
22. Whenever I baby-sit for young children, I always try to keep them entertained with various activities.
- (A) charges
 - (B) toddlers
 - (C) applicants
 - (D) siblings
23. The noble gentlemen were common heroes in classical literature. They were usually the ones who were favored by the gods.
- (A) aristocratic
 - (B) wealthy
 - (C) common
 - (D) heroic
24. I expect that I'll win at this game, since I've almost always won it in the past.
- (A) theorize
 - (B) manipulate
 - (C) bet
 - (D) intervene
25. The substance of the report was disorganized, and there were many spelling errors.
- (A) news
 - (B) task
 - (C) policy
 - (D) content
26. I was forced to choose between many diverse applicants. I couldn't make an appropriate decision.
- (A) various
 - (B) separate
 - (C) similar
 - (D) opposite
27. The manager wanted to resolve the dispute between her workers in a professional way.
- (A) degree
 - (B) issue
 - (C) trial
 - (D) manner
28. The recreational center had a new policy: anyone who wanted to sign up for an activity had to do so through the Internet.
- (A) converse
 - (B) pursue
 - (C) enroll
 - (D) clarify
29. The mother tried to maintain a positive attitude, but she was finding it increasingly hard to do so.
- (A) beverage
 - (B) lightness
 - (C) quality
 - (D) temper
30. Many of the students in my class don't apply themselves to their schoolwork.
- (A) few
 - (B) some
 - (C) several
 - (D) select

Instructions: Write the missing words. Use the words below to fill in the blanks.

- | | |
|------------|-----------------|
| hard-wired | neuroscientists |
| permanent | tissue |
| adapt | cognitively |
| strokes | regenerate |
| cells | motor |

The brain is truly a fascinating area of study, and **31.** _____ are constantly astounded by the new discoveries they make. In fact, in the last few decades, they've discovered that adults can **32.** _____ recover from brain damage. It used to be thought that brain damage was **33.** _____ in adults. Adult brains are considered to be **34.** _____ and are thus less likely to change. Yet now scientists know of at least two methods the adult brain can use to recover from brain damage. First, if a part of the brain is damaged, brain **35.** _____ can **36.** _____ to form new cells. These cells can help replace damaged brain **37.** _____. Secondly, the brain is able to **38.** _____ to compensate for damaged areas. This has been observed to occur frequently in people who have suffered from **39.** _____. They have been able to recover certain **40.** _____ skills that were once thought to be lost.

Instructions: Choose one word from each group that does not belong.

- | | |
|-------------------------|-------------|
| 41. portray | depict |
| conceal | display |
| 42. clarify | mystify |
| explain | illuminate |
| 43. exasperating | infuriating |
| vexing | fulfilling |
| 44. volleyball | soccer |
| tennis | swimming |
| 45. comical | hilarious |
| sensible | ridiculous |

Instructions: Label each pair of words as similar (S) or opposite (O).

- | | | |
|------------------|------------|------------|
| 46. _____ | ditch | mound |
| 47. _____ | excel | surpass |
| 48. _____ | vulnerable | invincible |
| 49. _____ | passion | enthusiasm |
| 50. _____ | habit | convention |

Vocabulary Review 4

Instructions: Choose the best word or phrase to complete each sentence.

- The _____ was so bad that I couldn't see anything. I put on my hood to cover my face from the snow.
(A) tornado
(B) thunderstorm
(C) sandstorm
(D) blizzard
- Strict dominance hierarchies can perhaps best be observed in the _____ species. These large primates live in both the savanna and in the jungle.
(A) monkey
(B) baboon
(C) chimpanzee
(E) human
- The _____ news that I just heard today is that the stock market is experiencing an all-time low.
(A) current
(B) timely
(C) inconvenient
(D) instant
- According to one theory, people need to be able to display _____ in order to be effective leaders.
(A) visions
(B) dominance
(C) charisma
(D) imagination
- The beautiful mountains completely _____ me, so that I completely forgot where I was and what I was doing.
(A) unnerved
(B) captivated
(C) concerned
(D) grabbed
- As I got an A on my mid-term, I was able to raise my class grade to an A-. This will significantly increase my _____.
(A) extra credit grade
(B) transcript
(C) scholarship
(D) GPA
- For the moment, I am content with my job as an assistant manager. _____, however, I would like to go on to manage my own company.
(A) rapidly
(B) precisely
(C) eventually
(D) immediately
- His logic was so sound that nobody dared to _____ him because they were afraid of getting humiliated.
(A) argue
(B) dispute
(C) assent
(D) cooperate
- In wartime, _____ can be an efficient vehicle to use because of their sturdiness and their ability to get people to places quickly.
(A) a jeep
(B) a motorcycle
(C) a bus
(D) a train
- James knew that it would be hard work, but he was determined to get his _____ degree. It was the highest degree that he could earn.
(A) doctoral
(B) associate
(C) bachelor's
(D) master's

11. I'm not certain what type of characteristics the color green _____, but I associate the color with life and re-growth.

- (A) means
- (B) defines
- (C) embodies
- (D) informs

12. Glen often lost his temper and got himself in trouble. For this reason, he worked extra hard to handle his disputes more _____.

- (A) rationally
- (B) generally
- (C) efficiently
- (D) drastically

13. The new company was sending a _____ of machine components overseas to its first foreign client.

- (A) payload
- (B) cargo
- (C) weight
- (D) luggage

14. One product that has become quite popular in big buildings or warehouses is _____ lamps. These skinny lamps give off light more efficiently than other types of lamps.

- (A) fluorescent
- (B) antique
- (C) modern
- (D) ultraviolet

15. Nearly all communal animals have some sort of _____. These are needed to maintain order within the group.

- (A) society
- (B) government
- (C) social structure
- (D) territory

Instructions: Choose the word closest in meaning to the underlined word or phrase.

16. No one was really sure how the scientist had come up with his theory, but it seemed to work in every tested experiment.

- (A) conspired
- (B) diagrammed
- (C) plotted
- (D) devised

17. I think it would be more financially beneficial to wait to invest in the stock until after it has gone down in price.

- (A) advantageous
- (B) profitable
- (C) available
- (D) positive

18. My sister's favorite thing to do when we go to the beach is to float in the water and let the waves push her back and forth.

- (A) drift
- (B) sink
- (C) flow
- (D) cruise

19. The gathering of people was so large that Amelia couldn't see the stage. She had to stand up on a chair in order to see anything.

- (A) heap
- (B) crowd
- (C) collection
- (D) size

20. The buildup of rust on the nail caused it to break. As a result, the picture fell off the wall.

- (A) distribution
- (B) deposit
- (C) hoard
- (D) display

21. Shelley agreed with her manager's opinion: it was time to expand the company.
- (A) concurred
 - (B) permitted
 - (C) refuted
 - (D) corresponded
22. The man's signature was so unique that nobody could even come close to copying it.
- (A) characteristic
 - (B) peculiar
 - (C) surprising
 - (D) distinctive
23. The man's cousin angers him so much that he hardly ever likes to go to family gatherings.
- (A) ancestor
 - (B) relative
 - (C) spouse
 - (D) successor
24. The hot liquid mass of lava burst forth from the volcano and destroyed the abandoned town.
- (A) bubbling
 - (B) festering
 - (C) molten
 - (D) seething
25. Emily walked back to her room at the college to put her school things away, and then she hurried to her next appointment.
- (A) dorm
 - (B) lobby
 - (C) office
 - (D) lab
26. The Earth is made up of many plates. When these plates slip past each other, even if it's only slightly, it can cause earthquakes.
- (A) fall
 - (B) bend
 - (C) sneak
 - (D) shift
27. George has a propensity for leaving his clothes out around the house, even though his mother continually reminds him to put them away.
- (A) preference
 - (B) custom
 - (C) convention
 - (D) tendency
28. My mother witnessed personally the launch of the space shuttle to the moon in 1969.
- (A) individually
 - (B) specifically
 - (C) firsthand
 - (D) obviously
29. Once the Greeks came into power, they established an elaborate system of trade between the different countries of the Mediterranean.
- (A) network
 - (B) association
 - (C) organization
 - (D) approach
30. Although Judith hoped that college would help her to get a good job, she mainly wanted to go to better herself as a person.
- (A) effectively
 - (B) roughly
 - (C) broadly
 - (D) primarily

Instructions: Write the missing words. Use the words below to fill in the blanks.

encounter	facilitate
campus	assistance
impact	escort
park	applicants
pool	transition

Adjusting to college can significantly

31. _____ the lives of incoming freshmen. Therefore, it may be helpful for these students to seek **32.** _____ from people who have already graduated from college, like parents or friends. These people could

33. _____ the **34.** _____ from high school to college. Probably the first advice they would give to high school students who are applying to college is to create a creative admissions essay. **35.** _____ who are creative make their essays stand out from

a **36.** _____ of other admissions essays. Next, students may find it helpful to purchase a parking pass so they can **37.** _____ on **38.** _____.

Also, parents and friends will probably point out that students often **39.** _____ lots of stress in college, so students need to be sure to ask for plenty of help and support from loved ones if they feel overwhelmed. Also, students should remember never to compromise their safety. In fact, it is beneficial for students who take night classes to request a(n)

40. _____ to walk them back to their cars.

Instructions: Use the words below to fill in the blanks.

back out up down off

41. Phil was hoping to hang _____ with Barbara once class was over.

42. Mark showed _____ his talent as a magician by performing magic tricks in class.

43. Whenever I go to the gas station, I always fill _____ my gas tank with premium gasoline.

44. The teacher asked the unruly children to please settle _____ or else face punishment.

45. The fossil dated _____ all the way to twelve million years ago.

Instructions: Match the words that have opposite meanings.

- | | |
|-------------------------|-----------------|
| 46. sympathetic | (A) avoid |
| 47. prominent | (B) humble |
| 48. aristocratic | (C) premature |
| 49. access | (D) anonymous |
| 50. overdue | (E) insensitive |

Part 3

Speaking Naturally

- Chapter 7 Pronunciation
- Chapter 8 Stress and Intonation
- Chapter 9 Pausing

Chapter 7 Pronunciation

Chapter 8 Stress and Intonation

Chapter 9 Pausing

The tips below can help you to improve both your fluency and clarity of speech:

During the speech:

- Open your mouth while speaking. Try not to mumble.
- Pay special attention to the pronunciation of content words and key terms.
- Stress each syllable correctly and accurately.
- Clearly pronounce both vowels and consonants.
- Smoothly link sounds between words within a phrase and in consonant clusters.
- Change pitch between stressed and unstressed syllables.
- Speak in sentences or phrases, not word by word.
- Speak with appropriate speed, not too quickly.

When practicing:

- Practice speaking by writing down every word you say and marking each place where you pause or vary intonation.
- Examine this transcript of your speech and look for possible mistakes. Practice these parts again, focusing on correcting the previous mistakes.
- Record and listen to your speech. Note any areas for improvement.

Stress and intonation are very important in English. The rhythm of sentences spoken in English alerts listeners to the message presented. Words or phrases important to the content of the message tend to be stressed, whereas words or phrases that are not important tend to be reduced.

Chapter 7 Pronunciation

Stress on content words

Certain words within a sentence are given importance because of the meaning they communicate. These words are referred to as content words. Words with little or no meaning outside their grammatical function are usually not stressed within the sentence.

→ **Content words:** nouns, verbs, adjectives, adverbs

→ **Function words:** modal auxiliary verbs, "be" verbs, most pronouns, prepositions, articles

Stressed syllables are pronounced longer, pitched higher, and spoken slightly louder.

► Step 1

🎧 Listen to the sentences and underline the words that are stressed. **Track 222**

1. However, I would definitely like to go to the park on my new scooter.
2. After this annual seminar is over, please do not forget to sign up for the one next year.
3. The small child was uncertain as to whether or not he should raise his hand.
4. I think it is better to keep a calendar in order to remember important dates.
5. My grandparents significantly influenced my happiness as a child.
6. Although I would like to take Saturday off, I believe it is more important that I go to the tutoring session.
7. So far, my experiences with skydiving have been fun and exciting.
8. The professor must conduct lots of research in order to publish his findings.

🎧 Listen again and repeat the sentences.

► Step 2

🎧 Listen to the paragraph. Write only the words you hear most clearly. **Track 223**

Stress on function words

The normal pattern of sentence stress reduces function words. However, function words can be stressed when the speaker is expressing strong emotion, is disagreeing, or is clarifying mistaken information.

Ex. Don't you agree that English is easy?

I do not agree! (Non-contracted forms are often used to show stress).

► Step 1

🎧 Listen to the following sentences and indicate whether each underlined word is reduced (R) or stressed (S). **Track 224**

1. However, Roger should know how to wash his own clothes. _____
2. Actually, I did guess many of the correct answers on yesterday's test. _____
3. Fifty years ago, my grandparents were married in Hawaii. _____
4. I am ready to register for my classes next week. _____
5. Despite evidence to the contrary, George is certain that he will get picked for the part. _____
6. He is not the one with the cold. I am. _____
7. I could participate in the game, but I really don't want to play. _____
8. Should you decide to attend the seminar, you will need to present a report. _____

🎧 Listen again and repeat the sentences.

► Step 2

🎧 Listen to the following sentences. Circle any underlined words that should be stressed. More than one word may be stressed in each sentence. **Track 225**

Example: Even though he did not win the marathon, he did win a trophy for second place.

1. I know you think I cannot do it, but I really can handle an after-school job.
2. Last year, it both rained and snowed during the month of June.
3. Are you absolutely certain that you cannot make the meeting today?
4. She prefers cleaning her bedroom over cleaning her bathroom.
5. I have so much homework that I do not know where to start.
6. It is impossible to trust anything that my best friend says.
7. Marketing 413 is only for business majors.
8. The instructor taught the girl to play the piano beautifully.

🎧 Listen again and repeat the sentences.

Intonation is also very important to English. The pitch of the speaker's voice alerts listeners to the particular message being conveyed. By modifying the pitch of the voice to rise, fall, or do both, the speaker stresses certain words and meanings. When modifying the pitch, the speaker often lengthens the amount of time each word is pronounced.

Chapter 8 Stress and Intonation

Changing pitch for emphasis

At the beginning of a conversation, the last content word in each sentence is usually the focus of meaning. Therefore, the primary stress in these sentences usually falls on the last content word. The sound of the speaker's voice rises on the focus word and then falls. If the sentence is a question, the sound of the speaker's voice rises but does not fall at the end of the sentence.

Ex. Is that a deer? No, it is a big dog.

However, the focus of a sentence can change. Thus, one sentence can have more than one intonation pattern. By noticing the word the speaker emphasizes, the listener can guess what will come next.

Ex. It is not small dog. It is a big dog.

► Step 1

👂 Listen to the first sentence and underline the focus word. Then choose the sentence most likely to come next. **Track 226**


1. It is a bad idea to wait until the night before a test to begin studying.
 - a. Tests are some of the hardest parts of school.
 - b. It is also not wise to wait until the last minute to do homework.
2. Teenagers should have certain restrictions on their driver's licenses.
 - a. Children should not be allowed to smoke until they reach adulthood.
 - b. However, those over 18 do not need any driving restrictions.
3. Are you sure you do not want to have lunch with me?
 - a. No, lunch is not until one o'clock.
 - b. No, I am eating lunch with another friend.
4. That is a really large piece of cake.
 - a. Actually, I made the cake for somebody else.
 - b. It is way too much for me to eat.

👂 Listen again and repeat the sentences. Ensure your voice is rising on the stressed syllables and dropping afterwards.

▶ Step 2

Read the two sentences. Try to figure out how the second sentence relates to the first. Underline the focus word in the first sentence according to this context.

1. The recreational center will offer a new self-defense course. It will teach young people how to protect themselves.
2. Butterflies are usually active during the day. Moths are more active at night.
3. I prefer not to have homework over the weekends. However, I do not mind having a little bit of homework then.
4. Everyone wants to buy a beautiful house. For this reason, houses that are ugly do not sell very well.
5. The fifth-grader was a very messy worker. Her partner was very organized.
6. The woman bought a new bag at the mall downtown. It had just opened a couple of weeks before.

 Listen and repeat the sentences. Ensure your voice is rising on the stressed syllables and dropping afterwards. **Track 227**

Commas and series with *and* or *or*

When there is a series of words with the conjunctions *and* or *or*, the intonation rises on all members of the series except the last. The last member has a rising-falling intonation.

Ex. We went to the park, / (↗) the beach, / (↗) and the mountains. (↘)

You can do it Monday / (↗) or Tuesday. (↘)

After the comma used between a sentence and an additional phrase, the intonation rises.

Ex. It is three blocks from here, / (↗) near the supermarket. (↘)

As for me, / (↗) I will have the soup and salad. (↘).

► Step 1

Divide the sentences into thought groups by using slashes (/) and mark the intonation of each group with arrows (↗ or ↘).

1. The man's chores included walking the dog, doing the laundry, cleaning the bathroom, and washing the car.
2. Recycling campaigns have been very successful in our city, partially due to the friendly publicity from local newspapers.
3. I was not certain whether the text should be placed at the top of the page or in the middle.
4. Young people often experience pressure from outside influences to conform to certain trends, particularly when they get into high school.
5. He could have told his mother that he had spent the evening studying, but it would not have been the truth.
6. The man was not sure whether to pick the striped tie, the green tie, or the purple tie.

 Listen and repeat the sentences. Track 228

Having appropriate pauses is also an important part of spoken English. Pauses are given after each message unit in order to give listeners time to process the information. If a speaker speaks too rapidly or without thought to the grouping of the information presented, listeners may have difficulty distinguishing the important content of the message.

Chapter 9 Pausing

Pausing, like stress and pronunciation, greatly adds to the clarity of speech. There are several reasons for adding a pause:


- To make the meaning clear: **Ex.** When the wind blows [pause] the waves run high.
- For emphasis: **Ex.** Frankly [pause] I am disappointed in you.
- To enable the speaker to catch a breath
- To give listeners time to understand complex sentences

Therefore, it is helpful to pause after commas, transitional words, and complicated ideas, such as lengthy subjects, prepositional phrases, and clauses in compound and complex sentences.

▶ Step 1

Look at the following sentences and circle any (/) that indicates an appropriate pause.


1. Although the Greeks / were credited with the first Western democracy / neither women / nor slaves had the right / to vote.
2. During the debate / the woman proved that Jason's argument was flawed / thereby embarrassing him / in front of everyone.
3. Those pineapples were / in my opinion / the best fruit / that I had ever tasted.
4. Many critics believe / that modern movies lack / what early movies possessed / namely / a strong plot and good actors.
5. Common pets / in American households include birds / cats / and dogs.
6. Nevertheless / I still do not agree that animal testing / is worthwhile.

 Listen and repeat the sentences. **Track 229**

► Step 2

Practice saying the sample response and write a slash (/) where you would pause.

1. His ability to track creatures across long distances enabled the man to compete in an annual competition where contestants tracked certain animals.
2. Many scientists contend that the universe started with a big bang, releasing enormous amounts of energy to create the solar systems and planets.
3. In the last three years, Joe's friends not only supported him during his illness, but they did everything in their power to make life easier for him so that he could recover more quickly.
4. Neela, a foreign exchange student from India, came from a small village in the mountains that depended almost entirely on farming.

 Listen and repeat the sentences. **Track 230**

Pause and pitch

Every clause or thought group within a sentence contains a focus word. A rise and then a fall in pitch is used to mark this focus word. This change alerts listeners to the central meaning of the thought group. The fall in intonation, combined with pausing, helps listeners recognize the end of a thought group.

Ex. I remembered to bring paper, / but I forgot my book.

When the water boils rapidly, / put the spaghetti in the pot.

When the water boils, / rapidly put the spaghetti in the pot.

► Step 1

Practice saying the sentences. Be sure to use appropriate pauses and pitch.

1. Remember that when the timer rings, it is time to give the baby his bottle.
2. Ultimately, a person's success in life depends on two things: hard work and dedication.
3. Albert Einstein, the scientist known for his strange hair, came up with his theory of relativity in 1915.
4. A college education should be provided for by the government, according to my economics teacher, Ms. Brown.
5. Since she had disobeyed her parents earlier, Emily was forbidden to leave her room for the rest of the night.
6. On the other hand, I do not believe that art should replace reading, writing, and arithmetic as a student's main priorities in school.

 **Listen and repeat the sentences.** Track 231

Mastering

Skills for the

TOEFL[®] iBT

WRITING

WRITING

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The TOEFL® iBT Writing Section

The writing section of the test is designed to assess your ability to organize and support your ideas in essay format. You will have two writing tasks. One task is based on both a reading and a lecture. You will be required to summarize the information you have read and to relate information heard in the lecture to information in the passage. The second task requires you to generate an essay based on your own experience. In this second task, you will be given no material to work with; it will be based completely on your own ideas.

- **Question Types**

Questions for the writing section of the TOEFL® will appear in the following order:

Question Type	Type	Suggested Time	Response Length	Description
1	Integrated: 250–300 word reading 250–300 word lecture	20 minutes	150–225 words	Contrast information presented in the reading passage with information presented in the lecture
2	Independent	30 minutes	300+ words	Present a personal opinion or describe an experience, including details and examples

Study Tips

● Integrated Writing

- ⇒ Look for magazine or newspaper articles that are about 300 words long. Time yourself as you read the articles. You should aim to read 300 words in less than three minutes. After reading, try to outline the article. Then, without looking back at the article, try to write a summary of the article from your outline.
- ⇒ Practice listening to short reports given in English. There are many websites where such reports are available online. While you listen to a report, take notes. Try to summarize the report from your notes.
- ⇒ Look for a variety of exercises in writing books you have studied that practice paraphrasing. Study the methods such books suggest for paraphrasing. Focus especially on exercises that practice the usage of synonyms and/or changing the grammar of given sentences in order to paraphrase them.
- ⇒ Review useful phrases and expressions for citing sources. Pay attention to where these citation phrases can be placed in sentences and how the phrases should be punctuated.
- ⇒ Practice your typing skills in English. You must type your essay for the TOEFL®.

● Independent Writing

- ⇒ Practice writing TOEFL® essays. Get a list of sample topics at www.ets.org/Media/Tests/TOEFL/pdf/989563wt.pdf. Select a topic at random and write a 30-minute draft essay. Correct the essay, with the assistance of a teacher if possible, and rewrite it with the suggested corrections.
- ⇒ When you are studying a group of writing topics, practice sorting the topics into "opinion" or "experience" topics. This will help you quickly determine the appropriate writing task you will have when you take the test.
- ⇒ Practice outlining ideas before you write. You can do this by taking five or six topics for writing and making a short outline for each one. Don't write the essays, just write the outlines. You can also use different techniques for prewriting, such as making simple charts of information, drawing bubble diagrams, or creating lists of ideas.
- ⇒ Look for a variety of exercises in writing books you have studied that practice writing introductions and conclusions. Study the methods that these books suggest for writing introductions and conclusions. Pay attention to tips for beginning and ending introductions and conclusions.
- ⇒ Practice your typing skills in English. You must type your essay in the actual TOEFL®.

Test Management

- For the integrated writing task, you will read a passage and listen to a lecture afterwards. The reading passage disappears during the lecture and reappears afterward, so do not worry about taking notes on all of the key points in the reading. You will NOT be able to hear the lecture again, so it is important to take good notes while you listen.
- You must type out your answers. You can use icon buttons at the top of the screen for editing. The editing tools include cut, paste, undo, and redo.
- Keep the style of essay writing in English in mind. First select a main idea, explain it clearly, then support and develop it using details and/or examples. Be sure your essay has a logical flow. There should be a reason for every sentence in your essay. Such reasons include introducing a new example or detail to support the main idea, or explaining or supporting an example or detail mentioned previously. Do not write any sentences that are unrelated to your main idea or that do not fit into the organizational structure of your essay just to increase your word count.
- Make every effort to use effective language and appropriate sentence structure and vocabulary. Try NOT to use vocabulary or constructions that you are not confident with, as this will increase your chances of making errors.
- Use a variety of language. English has a large number of synonyms and analogous constructions, so using the same construction repeatedly is considered poor style.
- Keep the 50-minute time limit for the entire writing section in mind. Remember that graders are expecting to read draft essays, not finely polished final products. If you find yourself stuck on a particular part of your essay, it is best to move on and complete the essay, then go back and fix the difficult area if time allows.
- Try to leave at least five minutes for revision. When revising, be sure to look for spelling or grammatical errors (remember, there is no spell checker on the test), as well as ways to improve the structure and flow of your essay.

How Writing Will Be Scored

ETS graders will score test takers' essays for **integrated** writing tasks according to the following scale:

Score	General Description	Key Points
5	The essay includes important information from both the reading and the lecture and appropriately explains the information with regard to the prompt.	The essay is well organized; it may include minor errors in grammar or word choice, but the errors do not make sentences difficult to understand.
4	The essay includes most of the key points from the reading and the lecture as they relate to the prompt. Some points may not be fully explained or the explanation may be vague.	There are several minor errors with language; some ideas may not seem connected, but there are no real problems with clarity.
3	The essay has one or more of the following problems: does not include a key point from the lecture or reading, shows only a limited understanding of the information, incorrectly explains a key point, has problems with grammar or word choice that make some sentences unclear.	Errors in sentence structure and word choice may make the meaning of some sentences unclear; transitions or connections between ideas are not always easy to follow; overall, the important ideas in the essay can be understood.
2	The essay has one or more of the following problems: does not include sufficient information from the reading, lecture, or both, contains many problems with grammar or word choice so the reader cannot follow connections between ideas.	Errors in sentence structure and word choice make ideas in the essay difficult to understand; readers unfamiliar with the reading and lecture may not be able to follow the essay.
1	The essay includes few or none of the key points from the reading, lecture, or both. The essay is poorly written and difficult to understand.	Frequent and serious errors in grammar and word choice make some sentences in the essay impossible to understand.
0	The essay only copies words from the prompt or is not related to the topic at all.	There is not enough of the student's writing available to score.

How Writing Will Be Scored

ETS graders will score test takers' essays for **independent** writing tasks according to the following scale:

Score	General Description	Key Points
5	The response answers the question or prompt well. The essay is easy to understand and well organized.	There is good use of language, including correct choice of words and idioms to express ideas. Minor errors in grammar and word choice are acceptable.
4	The response answers the question or prompt, but not all of the ideas are fully developed. The essay can be understood, but there are some clearly noticeable mistakes in the writing.	There is good use of language, including a variety of sentence structures and appropriate range of vocabulary. There are some minor errors in sentence structure, word form, or the use of idioms, but these errors do not make comprehension difficult.
3	The essay gives a basic answer to the question or prompt, but not many examples or details are provided. Most sentences can be understood, but errors in grammar or word choice could make the meaning of some sentences unclear.	Little use of connectors to link ideas or show progression of thought. Sentence constructions are very simple, or there are frequent errors in more complex sentence structures. Word choice and poor grammar may make some sentences vague or difficult to comprehend.
2	The essay is very short and not well organized. The ideas are not connected and examples are not explained.	Errors in grammar or word choice appear in almost every sentence. Overall, ideas are difficult to follow.
1	The essay is short and confusing. Little or no detail is given to support ideas, and irrelevant information is included. Some sentences cannot be understood by the reader.	There are serious errors in grammar and word choice.
0	The essay only copies words from the prompt or is not related to the topic at all.	Not enough of the student's writing is available to score.

The following is a sample Integrated Writing task similar to the one you will see when you take the test. You will first be asked to read a passage. On the real test, the reading passage will remain on your screen throughout the task.

In light of our growing energy crisis, ethanol has been proposed as a replacement for gasoline. Ethanol is a type of alcohol that is commonly made from corn. Although it has gained widespread popularity as an alternative fuel, ethanol has some serious disadvantages which make it an impracticable replacement for gasoline.

Perhaps the greatest disadvantage of ethanol is that its production means less food to feed the world's hungry. Ethanol requires a lot of corn to produce. This is corn that could be used to feed people in starving countries. Some critics have said that the amount of corn it would take to create one tank of ethanol would be enough to feed a person for an entire year. As a result, the large-scale production of ethanol would seriously reduce the food available and create worldwide starvation.

Ethanol is also highly damaging to the environment. This may seem ironic because one of the praises of ethanol is that it creates less pollution than gasoline does. Yet as one scholar recently pointed out, ethanol creates major erosion of the Earth's soil. Corn is one of the most damaging crops in regards to soil erosion. Therefore, the mass farming of corn to produce ethanol would create a severe amount of soil erosion.

Finally, the large-scale production of ethanol requires lots of energy. More gasoline would be needed in order to produce this energy, not less. Countries will have to ship in more oil to run the ethanol factories, which will make our energy crisis even worse. Considering all of these disadvantages, it would be better if ethanol was not used to replace gasoline.

Now read the professor's lecture below. On the real test, you will listen to this lecture with your headphones. The lecture will NOT appear on your screen.

All right, folks. Today we're going to talk about some alternative fuels we could use to replace the use of gasoline in vehicles. I'm sure most of you know that ethanol has become well-known as a possible replacement for gasoline. Now recently, reports have come out from scientists that criticize the use of ethanol in automobiles. However, when all these criticisms are researched properly, you'll find that they're pretty much false.

Now first off, there really isn't any way that ethanol can cause starvation. It's absolutely true that ethanol requires a lot of corn, so yes, we will have to dedicate more cornfields for ethanol production. One would think that since we already have so many starving people out there in the world, this would be wasting a dwindling food supply. Well, let me let you in on a little secret . . . there is currently enough food to feed everyone in this world. How can this be possible with so many starving people? It's because the available food never gets to these people. Starvation is

caused by unstable governments, war, lack of transport—not because we don't have enough food to feed everyone. Therefore, we really don't have to worry about ethanol production causing food shortages.

We also don't have to worry about ethanol harming the environment. A couple of years ago, this one scientist—I forget his name—brought up the fact that corn isn't an environmentally-friendly crop. He said that the large-scale corn production needed to produce ethanol would be highly damaging to the Earth's soil. He was correct on the first point, but wrong on the second. Corn does cause a lot more soil erosion than other crops do. Now fifty years ago, this may have been a problem. But today, conservation efforts have become so advanced that we've found new ways to reduce the soil erosion caused by crops like corn. This soil erosion will be a lot less than what the scientist predicted.

Then there's this faulty assumption that the energy needed to produce ethanol will require more gasoline. This is one hundred percent incorrect. Yes, ethanol does require a lot of energy to produce it, but most of this energy will be provided by coal and other natural gases. And unlike gasoline, we have plenty of coal available to use as energy! We won't have to worry about shipping in more gasoline and reducing our already declining oil reserves.

So, to sum it all up, ethanol is a pretty good alternative for gasoline. Most of the claims against it are faulty, and the benefits are many. I think we'll soon see ethanol taking the place of gasoline to power our cars.

When the lecture concludes, you will be given a prompt that will ask you to give your response for this task. A prompt for this task might be as follows:

Summarize the points made in the lecture you just heard, explaining how they cast doubt on points made in the reading.

The reading passage will appear once again on your screen. You will have 20 minutes to plan and write your response for this task. A sample outline of a response and a sample response can be found on the next page.

Sample Outline

Introduction:

- Topic
- Main idea of the reading passage
- Main idea of the lecture

Body:

Key point 1

- Supporting information from the reading passage
- Supporting information from the lecture

Key point 2

- Supporting information from the reading passage
- Supporting information from the lecture

Key point 3 (optional)

- Supporting information from the reading passage
- Supporting information from the lecture

Conclusion:

- Summary of the main ideas from the reading passage and the lecture

Sample Essay

The reading and lecture both discuss whether ethanol, a form of alcohol produced from corn, can replace fossil fuels. The reading suggests that there are a number of problems with ethanol that make it a bad replacement for gasoline. However, the lecture disagrees, saying that these problems commonly associated with ethanol are untrue.

Topic Main idea of reading
Main idea of lecture

The reading and lecture first discuss the issue of starvation. The reading suggests that using corn for ethanol means less corn can be used for food, resulting in mass starvation. The professor, on the other hand, points out that the world currently has enough food to feed all of the people. He says that starvation is caused by unstable governments and many other factors, not by lack of food.

Key point 1 Supporting info from reading
Supporting info from lecture

Secondly, the reading and lecture discuss ethanol's harm to the environment. The reading states that the corn that produces ethanol creates a lot of soil erosion. In contrast, the professor says that recent conservation efforts have greatly reduced soil erosion caused by corn production, so large-scale corn farming will not be a problem.

Key point 2
Supporting info from reading Supporting info from lecture

Finally, the reading and lecture discuss the amount of energy needed to produce ethanol. The reading points out that lots of energy is needed to produce ethanol, which will require more gasoline and not less. However, the professor says that this energy is usually provided by coal and other forms of natural gases, not by gasoline.

Key point 3 Supporting info from reading
Supporting info from lecture

In conclusion, the speaker says the claims that ethanol is worse than fossil fuels are not valid. He says that ethanol is a good replacement for fossil fuels.

Summary of reading and lecture main points

Independent Writing Task Preview

The following is a sample Independent Writing task similar to the one you will see when you take the test. You will first see a prompt on your screen describing the task.

Some single people like to live with a roommate, while others prefer to live alone. Which would you prefer? Give specific reasons and examples to support your answer.

You will then have 30 minutes to plan and write your response for this task. A sample outline of a response and a sample response can be found below.

Sample Outline

Introduction:

Topic

Thesis statement

Body:

Key point 1

Topic sentence

Reasons, examples, and details

Key point 2

Topic sentence

Reasons, examples, and details

Key point 3 (optional)

Topic sentence

Reasons, examples, and details

Conclusion:

Restatement of thesis and concluding sentence

Sample Essay

Lots of people who are single prefer to live with a roommate to keep them company, while others would rather live by themselves. I believe that it is best to live by yourself, at least for a time. Living by yourself provides benefits that you could never experience while living with someone else.

Topic
Thesis statement

First of all, living by yourself teaches you how to be responsible. You learn to take care of yourself because there is no one else around to take care of you. Some people might think this is a disadvantage. For example, no one will be around to help you pay the rent. However, in my opinion it is a great advantage. You will have to learn such important skills as saving money and living practically. This measure of independence is the best part of living on your own.

Topic sentence
Reasons, examples, and details

Another advantage of living on your own is that you become more of an individual. You can make whatever decisions and choices you would like. This is very important because you'll discover aspects of yourself that you may keep hidden when you are around other people. Being able to know yourself and make your own decisions is crucial to becoming an individual.

Topic sentence
Reasons, examples, and details

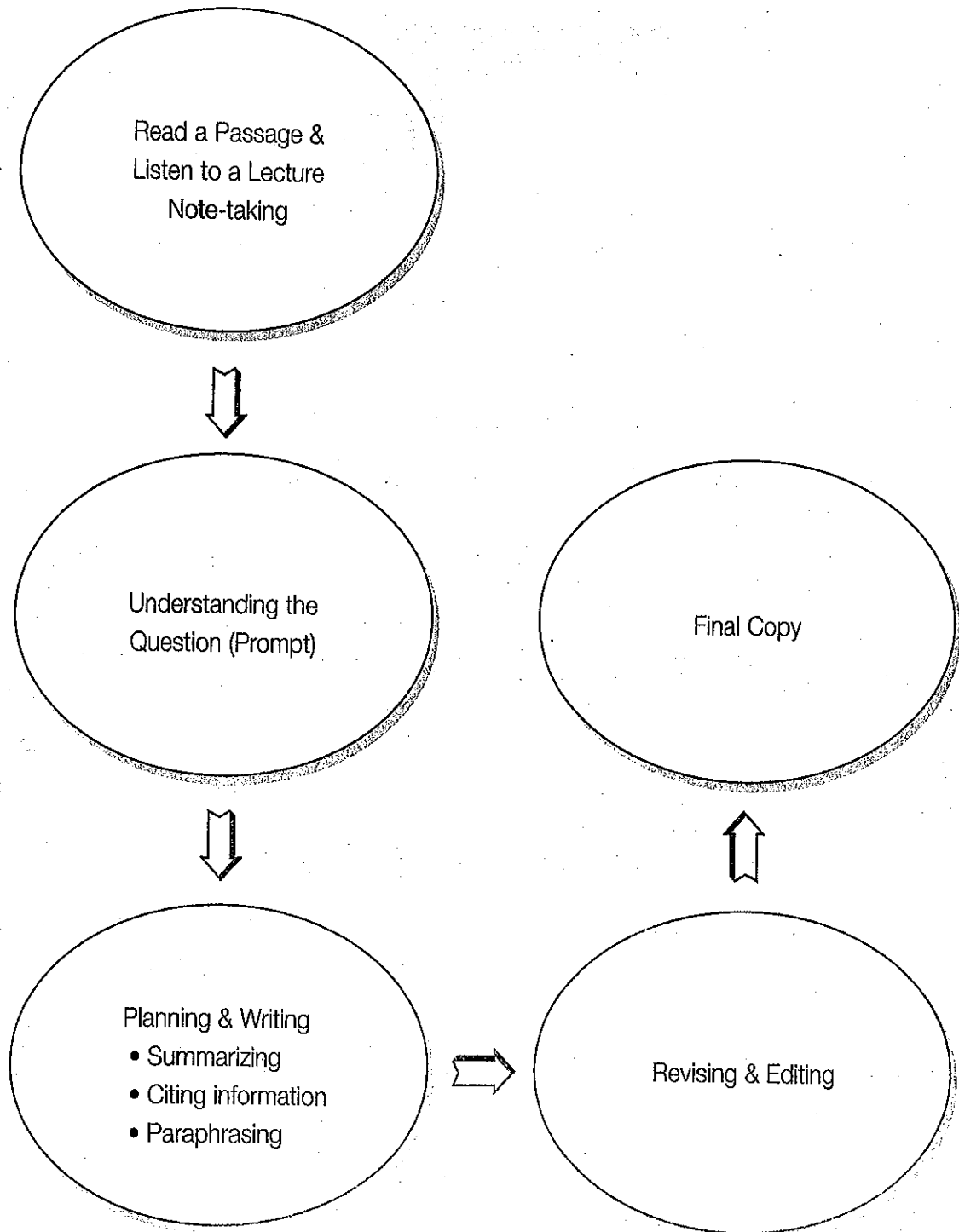
Finally, living alone helps you to avoid conflict with other people. Some of the biggest disadvantages I experience living with my parents and siblings are lots of noise and fighting. Living on your own allows you to create your own fight-free, quiet environment. Your home can look however you want it to look, and you can live however you want to live, without someone disagreeing with you.

Topic sentence
Reasons, examples, and details

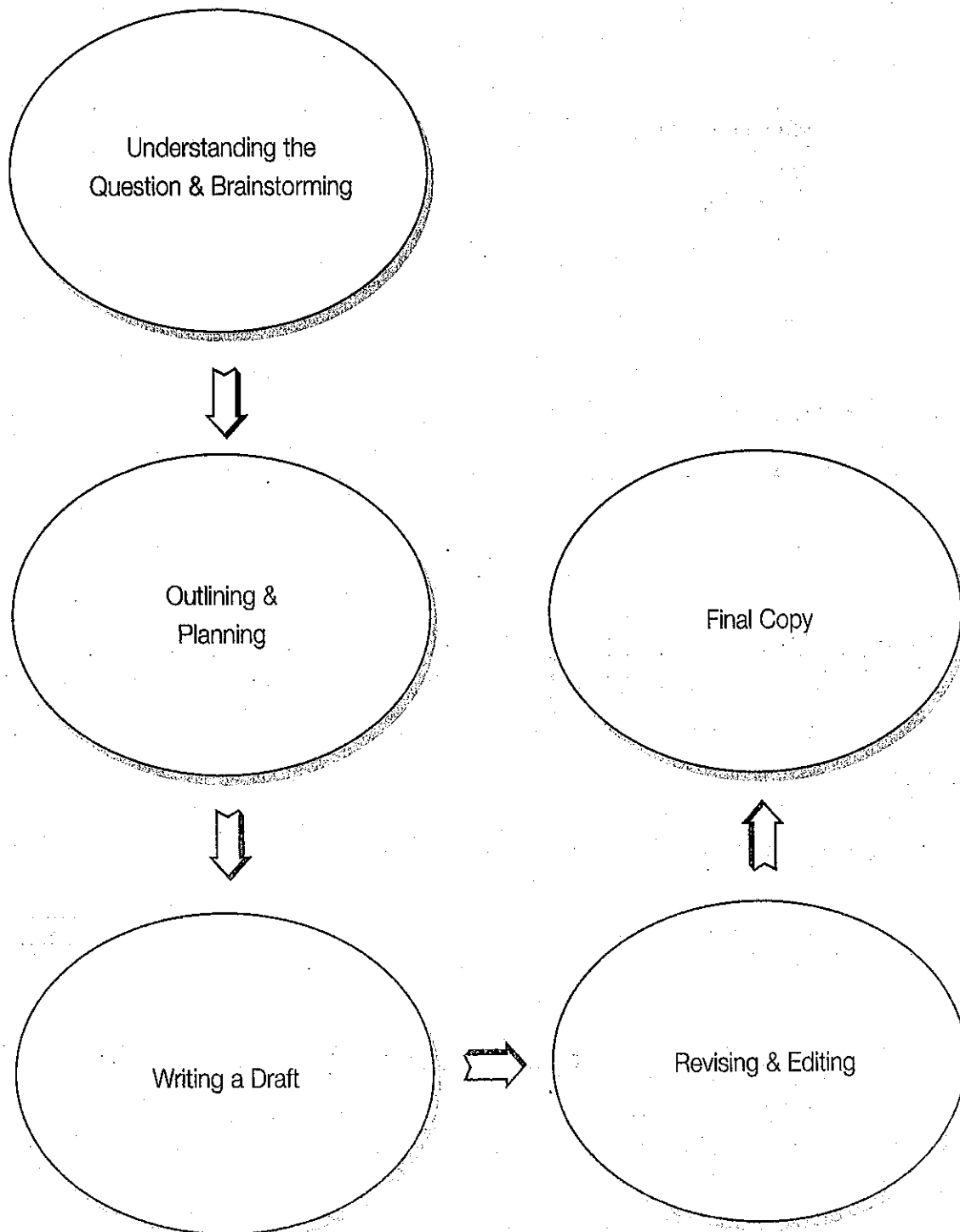
In conclusion, I feel that it is best for all people to spend at least some time living on their own. Living on your own will give you experiences that will help to define yourself as a person.

Restatement of thesis

Integrated Writing Process



Independent Writing Process



1. Read the question carefully and be sure that you understand the task.
2. Make a mind map or a traditional outline.
3. Using your mind map or outline, decide on a thesis statement.
4. Make sure that the topic sentences support the thesis statement.
5. Make sure that all supporting ideas relate to the topic.
6. Read through your draft again while editing and making revisions.

Part 1

Integrated Writing

- **Chapter 1 Organizing Information**
- **Chapter 2 Paraphrasing**
- **Chapter 3 Making Connections**
- **Vocabulary Review 1**
- **Vocabulary Review 2**

Chapter 1 Organizing Information

Necessary Skills

- Understanding information from both the reading and the listening passages
- Taking notes on the reading and listening passages
- Using information from your notes in your writing
- Synthesizing the information taken from both the reading and listening passages

Strategies

- Though preparation time is limited in the writing portion of the test, it is nevertheless important to use this time to plan the organization of your response. This way, your response will be more relevant and coherent. An organizational process for preparing your response is detailed below. In each step, there are certain things to keep in mind.

Process	Strategy
Read, listen, and take notes.	You will not see the prompt until after you finish reading and listening, so taking notes is essential. Take notes on major points from both the reading and the lecture.
Read the question and understand the task.	Identify what kind of relationship between the reading and the lecture the prompt asks you to discuss.
Select ideas from your notes.	Choose the points you need to discuss. Think about how points in the lecture relate to points in the reading. The lecture will present details that either challenge information presented in the reading, present a counter example, or describe the consequences of an attempt to solve a problem presented in the reading.
Organize the ideas.	Include information from both the reading and the lecture. Clearly show the relationship between information presented in the lecture and that presented in the reading. Limit the time for organizing to less than two minutes in order to give yourself more time for writing and editing.

▶ Step 1

Read the following passage. Then look at the note diagram and fill in the missing information.

In the past several years, a number of technological advances have made laser eye surgery more widely available. The procedure uses tiny lasers to alter the surface of the eyeball, significantly improving a patient's vision. In spite of its growing popularity, however, laser eye surgery is a costly procedure. Given the number of problems that may accompany the laser vision correction procedure, it is unlikely that many will choose to undergo the surgery.

The first problem with laser eye surgery is the cost. The process requires sophisticated laser systems, which can cost several million dollars. In order to remain in business, the doctors administering laser eye surgery have to charge patients approximately \$1,000 to \$2,000 per eye. For many people, this is far too costly.

In addition, there are concerns about post-operative problems, which are issues that may arise after the surgery. There have been reports of the cornea (the lenses at the front of the eye) detaching themselves from the eyes after laser vision correction. Moreover, laser vision correction advertises a quick recovery time, but many patients report taking weeks and sometimes months to heal fully from the surgery.

It also remains unclear how long laser vision correction will last. A number of people have to go back to a doctor just four or five years after their surgery for another procedure. Even worse, others have to receive a second round of surgery just a few months after the initial procedure in order to perfect their vision. For most consumers, the benefit is not worth the risks and costs involved with the procedure.

accompany:

to be present with; to go along with

procedure:

a way of doing something

sophisticated:

developed and complex

administer:

to give or perform

arise:

to come about; to occur

recovery:

a return to a normal state of health

initial:

original or first

Main idea: _____ with laser vision correction surgery.

Key point 1: Laser vision correction surgery _____ because of _____

Key point 2: Serious problems like _____ problems and lengthy _____ occur after laser vision correction surgery.

Key point 3: Laser vision correction surgery _____

▶ Step 2

Now listen to a lecture related to the topic in Step 1. Fill in the blanks of the note diagram below with keywords or key phrases used in the lecture. **Track 232**

<p>Main idea: _____ with laser vision correction surgery.</p> <p>Key point 1: Laser vision correction surgery _____ because of _____ and lower _____.</p> <p>Key point 2: After surgery, problems _____ and recovery times _____.</p> <p>Key point 3: Laser vision correction surgery _____.</p>	<p>competition: the struggle to be more successful than others</p> <p>approximately: close to the actual; not completely accurate</p> <p>detach: to separate or disconnect</p> <p>apparently: as far as one knows or can see</p> <p>extreme: exceptional; very severe or serious</p> <p>corrective: intended to fix or correct something</p> <p>evidence: available facts or information</p>
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▶ Step 3

Review your notes from both the reading and the lecture. Pay attention to the main ideas and supporting details. Using the information from your notes, complete the following outline.

Introduction:

Main topic: _____

Main idea of the reading passage: _____

Main idea of the lecture: _____

Body:

Key point 1: _____

Supporting information from the reading passage: _____

Supporting information from the lecture: _____

Key point 2: _____

Supporting information from the reading passage: _____

Supporting information from the lecture: _____

Key point 3: _____

Supporting information from the reading passage: _____

Supporting information from the lecture: _____

Conclusion:

Summary: _____

► Step 4

Use the main ideas and details from Steps 1, 2, and 3 to complete the passage. Include information from both the reading and the lecture.

Both the lecture and the passage discuss laser vision _____ surgery. While the passage predicts that the procedure will not be _____, the lecturer says that it will.

First, the passage says the surgery is too _____ for most people. The lecturer refutes this, explaining that the cost is starting to _____. Moreover, he says it will cost even _____ in the future. Second, the passage mentions that many people may experience _____ after having the surgery. Again, the professor disagrees. He says that the complications mentioned in the passage are _____. Finally, the passage says that the effects of the surgery do not last long. The lecturer denies this, explaining that in most cases, the procedure is _____ for many years.

Corrective laser surgery is a developing _____. The passage says that it will never be popular; however, the lecturer says many people will want to undergo the surgery in the _____.

▶ Step 1

Read the following passage. Then look at the note diagram and fill in the missing information.

Over the past few years, a new debate has emerged over how universities should concentrate their faculty's work. Many universities have begun shifting their focus away from research and toward better teaching methods. However, a number of reasons exist which suggest that this research is essential for universities to function properly.

One of the most important considerations for any college is its ranking among other institutions. A higher ranking benefits a university by drawing in more students. Most ranking systems put an emphasis on research work done by the faculty. Without an adequate base of research and published work, it is unlikely that a university will gain high marks in university rankings.

Another benefit of focusing on research is that more faculty are likely to gain wider recognition. "Public intellectuals"—famous professors whose work has been recognized by the public at large—do a great deal to increase a university's prestige. Public intellectuals draw in more students and attract funding for the college. Without a focus on research, it is less likely that a university will produce a public intellectual.

Besides public appearance for a university, a focus on research can also directly benefit the students that attend the university. Professors that do more research in their field tend to have a better grasp of their subject and are more informed. This results in a better education for the students learning under them.

These considerations make it clear how important it is for colleges to focus on research. Choosing to focus on research not only improves the university's standing, but also ensures that the students attending get only the very best education.

emerge:
to develop or come into view

essential:
extremely important or necessary

ranking:
a position on a scale to compare with others

adequate:
satisfactory or acceptable

prestige:
widespread admiration or respect for someone or something

funding:
money that an institution receives

grasp:
an understanding

ensure:
to make certain that something occurs

Main idea: Universities should _____

Key point 1: Ranking systems will give higher ranks to _____

Key point 2: Public intellectuals _____
and therefore attract _____

Key point 3: More research gives the professor _____

► Step 2

🎧 Now listen to a lecture related to the topic in Step 1. Fill in the blanks of the note diagram below with keywords or key phrases used in the lecture. **Track 233**

Main idea:	Universities should _____ _____	focus: to pay special attention to
Key point 1:	Ranking systems are more concerned with _____ _____	accessible: easily understood
Key point 2:	Public intellectuals are professors _____ _____	relevant: closely connected or appropriate to a matter
Key point 3:	Teaching and research _____	average: typical, not unique or unusual
		conduct: to organize and carry out
		unrelated: separate from; not associated with

► Step 3

Review your notes from both the reading and the lecture. Pay attention to the main ideas and supporting details. Using the information from your notes, complete the following outline.

Introduction:

Main topic: _____

Main idea of the reading passage: _____

Main idea of the lecture: _____

Body:

Key point 1: _____

Supporting information from the reading passage: _____

Supporting information from the lecture: _____

Key point 2: _____

Supporting information from the reading passage: _____

Supporting information from the lecture: _____

Key point 3: _____

Supporting information from the reading passage: _____

Supporting information from the lecture: _____

Conclusion:

Summary: _____

► Step 4

Use the main ideas and details from Steps 1, 2, and 3 to complete the passage. Include information from both the reading and the lecture.

Both the lecture and the passage discuss how universities should concentrate the _____ of professors. While the passage says that they should focus on _____, the lecturer says it is better to emphasize _____.

First, the passage claims that research helps universities _____ better than other schools. In contrast, the lecturer points out that ranking systems now consider teaching as part of their _____. Next, the passage says that professors gain _____ if they do more research. The lecturer counters by saying those who emphasize teaching are more _____ to a wider audience, and therefore more _____. Lastly, the passage says that research makes professors better _____. The lecturer denies this by saying that professors who focus on teaching become better instructors because they practice _____.

Many professors struggle with balancing research and teaching. While the passage says it is better to focus on research, the lecturer says it is better to emphasize teaching.

► Step 1

Read the following passage. Then look at the note diagram and fill in the missing information.

Across the United States, nearly all grocery stores provide their customers with plastic grocery bags to carry their groceries. However, both consumers and the environment are encountering considerable problems with these plastic bags. Therefore, it may be more advantageous to switch from using plastic grocery bags to using reusable ones.

The most obvious benefit of reusable bags over plastic bags is that they reduce environmental waste. Reusable bags can be used hundreds of times. Other bags can only be used a few times. Although some consumers reuse the plastic bags that they receive at the grocery store, most people throw the bags away after just one use. Every year between 500 billion and a trillion plastic bags are thrown into the garbage, where they may take hundreds of years to disintegrate.

Moreover, reusable bags would save grocery stores money. Currently, grocery stores that freely give plastic grocery bags to shoppers have to pay for the bags—the bags are not particularly expensive, but their costs do add up. These costs are often added to the cost of food. By substituting reusable bags for plastic bags, grocery stores could save a significant amount of money, which would most likely result in lower-priced products for consumers.

In addition, using reusable bags as a substitute for plastic bags will help save petroleum. Plastic grocery bags are currently made from petroleum and natural gases. Since petroleum is made into fuel and is becoming more expensive, using petroleum to create plastic bags is a wasteful practice. Reusable bags, on the other hand, will reduce our use of petroleum because the bags will be reused over and over again.

consumer:

someone who buys goods and services

reusable:

capable of being used over and over again

waste:

material that is not wanted; trash

disintegrate:

to be completely destroyed by breaking up into lots of small pieces

currently:

at the present time

substitute:

to use something in the place of something else

petroleum:

oil found under the ground; used to power machinery

Main idea: Reusable grocery bags _____

Key point 1: Reusable grocery bags _____

Key point 2: Reusable grocery bags _____

Key point 3: Reusable grocery bags will help _____

► Step 2

Now listen to a lecture related to the topic in Step 1. Fill in the blanks of the note diagram below with keywords or key phrases used in the lecture. **Track 234**

<p>Main idea: _____ should be replaced with reusable ones.</p> <p>Key point 1: Plastic grocery bags take _____; they can harm animals.</p> <p>Key point 2: Getting rid of plastic grocery bags would save _____ per bag; thousands of bags are used every day.</p> <p>Key point 3: We would save _____ on petroleum if we got rid of plastic bags.</p>	<p>push: to use effort to promote or accomplish something</p> <p>collect: to bring together into a group</p> <p>landfill: an area where large amounts of trash are buried</p> <p>decompose: to break down or decay</p> <p>noticeable: easily seen or observed</p> <p>discard: to get rid of something because it is no longer useful</p> <p>nonrenewable: objects that exist in limited amounts</p>
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► Step 3

Review your notes from both the reading and the lecture. Pay attention to the main ideas and supporting details. Using the information from your notes, complete the following outline.

Introduction:

Main topic: _____

Main idea of the reading passage: _____

Main idea of the lecture: _____

Body:

Key point 1: _____

Supporting information from the reading passage: _____

Supporting information from the lecture: _____

Key point 2: _____

Supporting information from the reading passage: _____

Supporting information from the lecture: _____

Key point 3: _____

Supporting information from the reading passage: _____

Supporting information from the lecture: _____

Conclusion:

Summary: _____

► Step 4

Use the main ideas and details from Steps 1, 2, and 3 to complete the passage. Include information from both the reading and the lecture.

Both the lecture and the passage discuss the _____ of using plastic grocery bags. The passage says that it is best if people start to use _____ bags. The lecturer agrees and _____ the view with examples.

First, the passage says that plastic bags create too much extra _____. The lecturer supports the claim by adding that plastic bags just pile up as _____. Reusable bags, meanwhile, are better because they can be used _____. Next, the passage claims that reusable bags are more _____ for both grocery stores and consumers. The lecturer agrees, emphasizing that the cost of plastic bags adds up, while reusable bags only have to be purchased _____. Finally, the passage says that _____ and natural gas can be _____ by not using plastic bags anymore. Again, the lecturer supports this by explaining that 1.6 billion gallons of petroleum are used to make plastic bags annually.

The lecturer and the passage both agree that people should not use plastic bags anymore, and use reusable bags instead.

► Step 1

Read the following passage. Then look at the note diagram and fill in the missing information.

Spanking, or the act of hitting children on their bottoms, is a common punishment in many cultures around the world. However, recently child psychologists have begun questioning whether spanking is a good form of punishment. Although a consensus has yet to be reached, there are a number of advantages to using spanking as a disciplinary tool.

One of the most apparent advantages of spanking is that it helps children understand the difference between right and wrong. Spanking helps children remember that an act is not allowed by creating a psychological association between a particular forbidden act and the traumatic experience of being spanked. In establishing this association, children come to understand what is right and what is wrong.

Additionally, spanking is far more effective than other types of discipline. Unlike time-outs, which remove children from a situation and force them to stay in a quiet area, spanking has been shown to be more effective among children between the ages of three and five. After being spanked, children are much less likely to behave in the same way than if they had simply been put in time-out.

Finally, spanking is an understandable form of punishment. It can be used on nearly any young child. In contrast, young children may not understand that time-outs are punishments. For a young child that does not completely understand situations, a time-out can easily be mistaken for something else—children put in a time-out, for instance, might think that they are being removed from a situation for their own safety or because it is time for a nap. As a result, spanking is a valuable tool for parents to use because the child cannot understand it as anything other than a punishment.

punishment:

rough treatment or a penalty intended to teach a lesson

consensus:

an agreement among people

disciplinary:

something intended to change a person's behavior for the better

psychological:

Involving or influencing the brain

association:

a relation or connection made between two or more things

traumatic:

very unpleasant and having a lasting effect

nap:

a short sleep during the day

Main idea: Spanking is _____

Key point 1: Spanking helps _____

Key point 2: Spanking is more _____

Key point 3: Spanking _____

► Step 2

Now listen to a lecture related to the topic in Step 1. Fill in the blanks of the note diagram below with keywords or key phrases used in the lecture. **Track 235**

Main idea: Spanking is not a good _____ for children.	inevitable: impossible to avoid
Key point 1: Spanking does not help children make the association between _____.	practice: the customary act of doing something
Key point 2: Studies show spanking is no more effective than _____.	morality: principles of right and wrong behavior
Key point 3: Children do not associate _____ _____ ; it teaches _____ instead.	justification: a fact that shows something to be true or correct
	inference: a conclusion based on reasoning
	reasonable: sensible; making sense
	comprehend: to understand something
	conventional: a usual or traditional way

► Step 3

Review your notes from both the reading and the lecture. Pay attention to the main ideas and supporting details. Using the information from your notes, complete the following outline.

Introduction:

Main topic: _____

Main idea of the reading passage: _____

Main idea of the lecture: _____

Body:

Key point 1: _____

Supporting information from the reading passage: _____

Supporting information from the lecture: _____

Key point 2: _____

Supporting information from the reading passage: _____

Supporting information from the lecture: _____

Key point 3: _____

Supporting information from the reading passage: _____

Supporting information from the lecture: _____

Conclusion:

Summary: _____

▶ Step 4

Use the main ideas and details from Steps 1, 2, and 3 to complete the passage. Include information from both the reading and the lecture.

Both the passage and the lecture discuss _____. The passage says that spanking is a good _____ tool, while the lecturer says that it is not.

First, the passage says that spanking teaches children the difference between right and wrong. The lecturer says this is _____ because spanking does not teach children _____. Those have to be taught by talking to the child. Next, the passage says that spanking is more _____ than other punishments. The lecturer denies this by saying that research has _____ that spanking does not teach children any lessons. Finally, the passage says that spanking is good because it sends a _____ message to children that they are being _____. The professor disagrees and points out that spanking does not teach children not to misbehave. Instead, it sends them _____ messages because it teaches them that situations can be dealt with by using _____.

Many people are curious about whether spanking is a good disciplinary tool for children. While the passage says it is good, the lecturer says it is actually bad.

Chapter 2

Paraphrasing

Necessary Skills

- Understanding the original text accurately
- Using your own words to convey essential information and ideas from the reading and the lecture
- Being able to express the same information using different vocabulary and sentence structure

The Process of Paraphrasing

- Understand the full meaning of the original text.
- Take notes on the passage. Write down key information including a few phrases, major points, and important details.
- WITHOUT looking at the original passage, paraphrase the information in your own words, just by looking at your notes.
- Check the original passage for any missed key information.

Strategies

- Use related words and phrases, including synonyms and antonyms of words and concepts in the original passage.

Example: The average daytime temperature in the Gobi desert does not often go below 38°C. → The average daytime temperature in the Gobi desert is usually at or above 38°C.

- Change word forms, and rephrase to make things simpler.

Example: for organization → in order to organize
people at the age of thirty → thirty-year-old people

- Use different sentence structure.

Example: Many Asian countries export rice to North America. → Rice is exported to North America by many Asian countries.

- Change the order of presentation of the information.
- Cite information from the original source by using signal words.

Example: According to the professor/passage . . .
The professor says/mentions/states/argues/believes/found that . . .

01 Zoology

► Step 1

Read the following passage. Predict how the listening passage may contrast with the reading. Then look at the note diagram and fill in the missing information.

Thousands of animals currently reside in zoos around the world. Recently, there has been much debate about the value of zoos in today's world. Careful consideration of the facts reveals that zoos are unethical and should be closed.

First, defenders of zoos say that they are an important way of saving animals from extinction. However, in actuality, zoos have had very little success in protecting animals. One reason for this is because many animals do not thrive in zoos. Breeding in captivity is often difficult to encourage. Endangered animals fare far better with protection programs that allow them to stay in the wild.

Additionally, zoos do not adequately provide animals with living spaces that are like their natural habitats. As a result, animals are not able to behave as they normally would. For example, a lion in a small cage is not able to run around, much less hunt. In the end, the animals end up depressed or with behavioral problems. This would not occur, of course, if they were not kept in zoos in the first place.

Finally, zoos simply are not the best way to study animals. There are a number of well-researched books available. Alternately, wildlife biologists stand to gain much more knowledge about animals by observing them in the wild. That way, they see how animals interact with other creatures without human interference.

reside:

to live in a place

reveal:

to show something

extinction:

the state of no longer existing

endangered:

unlikely to exist soon because there are few of the species left

fare:

get along

habitat:

the natural surroundings of a species

interact:

to communicate or react with somebody/something else

Main idea: Zoos are not _____

Key point 1: Zoo animals _____

Key point 2: Animals behave differently in zoos because _____

Key point 3: Zoos are not the best way to _____

▶ Step 2

Below is important information from the reading passage above. After each sentence are two possible paraphrases of it. Choose the best paraphrase for each sentence.

- A. Zoos have not been very successful in helping endangered animals because many creatures do not breed in captivity.
1. Captive animals often do not breed, making it harder for zoos to keep them enclosed.
 2. Endangered animals do not benefit from living in zoos because they do not always breed.
- B. Zoos do not give animals a home that is like their natural habitat, leading to behavioral and psychological problems for the creatures.
1. Animals need to live in their natural habitats in order to avoid psychological and behavioural problems.
 2. Zoos have failed in providing animals with proper psychological and behavioural care in their habitats.
- C. In the space below, write a paraphrase of the main idea of the reading passage.
- _____

▶ Step 3

Now listen to a lecture related to the topic in Step 1. Fill in the blanks of the note diagram below with keywords or key phrases used in the lecture. **Track 236**

Main idea:	Zoos _____ in several ways.	reputation: the opinion that people have about something or somebody.
Key point 1:	Zoos help protect animals from _____ through _____ programs.	encourage: to make something more likely to happen
Key point 2:	Many zoos now have a _____, which provides animals with surroundings that closely resemble those _____.	breed: to produce offspring
Key point 3:	Zoos provide the best way to _____ animals.	reintroduce: to return the animal to its former habitat
		captivity: the state of being kept somewhere and not allowed to leave
		resemble: to be like something else
		sprawling: spread out over a large distance

► Step 4

Choose the sentences that best combine the main idea and key points from the reading passage and the lecture.

1. a. The passage states that zoos are bad because they do not benefit animals in any way. They should be eliminated completely.
b. The professor disagrees with the passage by claiming that zoos are beneficial to animals in several respects.
2. a. The lecturer explains how captive breeding programs work. They encourage animals in zoos to breed until they are safe from extinction.
b. The passage argues that zoos do not help protect animals; however, the professor says that zoos have saved some species from extinction.
3. a. While the passage says that zoos harm animals by removing them from their natural habitat, the professor says that many zoos provide animals with natural surroundings.
b. The passage says that zoos fail to provide animals with the environment they need. As a result, they end up suffering from psychological disorders.
4. a. The passage claims that it is better to study animals through books rather than at zoos.
b. Unlike the passage, the professor thinks that the best way to study animals is at zoos.

► Step 5

A. Changing Keywords

Below are four incomplete paraphrases of key information from the reading passage and the lecture. Fill in the missing parts with words or phrases from the box. These words and phrases are synonyms or are similar in meaning to the actual words used in the reading passage and lecture.

- | |
|---|
| <ol style="list-style-type: none">1. critical / harmful / risky / breed / observe / benefit2. supports / confirms / counters / protect / treat / train3. behavior / habitats / patterns / food / surroundings / companions4. without / aside / throughout / visit / observe / help |
|---|

1. While the reading claims that zoos are _____ to animals, the lecture maintains that they _____ animals in many ways.
2. The professor _____ the passage's argument that zoos do not _____ animals by giving the example of the California condor.

3. The reading claims that zoos take animals away from their natural _____, though the speaker mentions that many zoos are devoted to providing animals with _____ that resemble their natural homes.
4. The passage argues that there are better ways to study animals _____ zoos. However, the professor says that zoos provide students with a live animal to _____.

B. Changing Sentence Structure

Complete the following paraphrases of the sentences from part A above.

1. In the lecture, zoos are said to _____ animals, while the reading says they are _____.
2. The passage says that zoos do not _____ animals, to which the professor _____ by saying they protected the California condor.
3. The speaker says zoos give animals _____ that look like their natural homes, though the reading says zoos remove animals from their natural _____.
4. The professor says that observing _____ animals in the zoo is the best way to study them; however, the passage says there are better ways to study animals _____ of zoos.

► Step 6

Read the following sentences taken from the reading and the lecture. Create new sentences by combining the ideas in each pair of sentences.

1. a. One reason for this is because many animals do not thrive in captivity.
b. To make a long story short, the program was very successful: the scientists had no problems getting the birds to breed in captivity.
- _____
- _____
2. a. Additionally, zoos do not adequately provide animals with living spaces that are like their natural habitats.
b. What this means is that all of the zoo's exhibits are designed to resemble the real habitats that animals come from.
- _____
- _____

02 Paleontology

► Step 1

Read the following passage. Predict how the listening passage may contrast with the reading. Then look at the note diagram and fill in the missing information.

The woolly mammoth was a prehistoric animal that resembled an elephant and lived during the Ice Age. Some versions of the species are known to have survived until 6000 BCE, although most became extinct around 12000 BCE. Its extinction is best explained by a combination of climate change and over hunting by predators.

The woolly mammoth was well-adapted to the frigid, icy climate of the Ice Age, but as the period of cold concluded and the planet started to become warmer, the environment became unfriendly to woolly mammoths. The hair that kept them insulated against icy weather was approximately fifty centimeters long. Once the climate became warmer, however, this adaptation undoubtedly created serious problems for these animals and caused their populations to dwindle considerably.

Furthermore, during this climate change, predators like the saber-toothed tiger continued to hunt the mammoth. Saber-toothed tigers were roughly the size of lions and had twenty-centimeter-long teeth, allowing them to pierce through the fat of woolly mammoths effortlessly. Saber-toothed tigers also hunted in packs, offering them an important hunting advantage over the woolly mammoths. It is likely that saber-toothed tigers had a significant role in the woolly mammoth's extinction.

Finally, the woolly mammoth was a desirable animal to hunt for many wandering human tribes. Nearly all parts of woolly mammoths could be used by humans, making it a popular target for tribes—the mammoth's thick skin provided insulation against the cold, its bones could be used to create tools and the meat provided necessary protein and calories. Because woolly mammoths were so desirable, humans probably concentrated the majority of their hunting efforts on woolly mammoths alone, which dramatically diminished woolly mammoth populations and eventually led to their extinction.

climate:
the weather conditions in an area

predator:
a species that feeds on or hunts another species

adaptation:
a change that allows an organism to survive

effortlessly:
with little or no difficulty

wander:
to move from place to place

insulation:
material used to block out natural elements

Main idea: Woolly mammoths went extinct _____.

Key point 1: The climate change _____
because it raised _____.

Key point 2: Predators like _____ helped reduce mammoth populations.

Key point 3: Humans hunted _____.

► Step 2

Below is important information from the reading passage above. After each sentence are two possible paraphrases of it. Choose the best paraphrase for each sentence.

- A. Accustomed to living in cold weather, when the Earth's climate changed, the woolly mammoth could not handle the warmer temperatures.
1. The woolly mammoth could not survive the climate change because they were used to living in cold weather.
 2. The Earth's temperatures changed when the woolly mammoth was unable to live in warm weather.
- B. Saber-toothed tigers were very efficient at hunting woolly mammoths, leading to further decline of the mammoth population.
1. Saber-toothed tigers hunted woolly mammoths very well even though their numbers were already low.
 2. The woolly mammoth population decreased because saber-toothed tigers were good at hunting them.
- C. In the space below, write a paraphrase of the main idea of the reading passage.
- _____

► Step 3

Now listen to a lecture related to the topic in Step 1. Fill in the blanks of the note diagram below with keywords or key phrases used in the lecture. **Track 237**

<p>Main idea: Woolly mammoths probably _____</p> <p>_____</p> <p>_____</p>	<p>paleontologist: a scientist who uses fossils to study the history of the Earth</p>
<p>Key point 1: Woolly mammoths probably just _____</p> <p>_____ to where it was colder.</p>	<p>factor: one of the things that influence an event</p>
<p>Key point 2: Woolly mammoths were too _____</p> <p>to have any _____;</p> <p>_____ of saber-toothed tigers was too weak.</p>	<p>skeleton: the set of bones that support humans and animals</p>
<p>Key point 3: Humans _____</p> <p>_____ because there were _____</p> <p>_____</p>	<p>pole: one of the points on the bottom or top of the Earth</p> <p>pierce: to poke a hole through something</p> <p>rational: based on practical reasons</p> <p>sloth: an animal that lives in trees, moves slowly and lives in Central and South America</p>

► Step 4

Choose the sentences that best combine the main idea and key points from the reading passage and the lecture.

1. a. The reading says that woolly mammoths went extinct as a result of climate change and over hunting. The professor disputes each of these claims.
b. The reading theorizes that woolly mammoths went extinct due to over hunting and climate change, but the professor believes that woolly mammoths went extinct simply because of the climate change.
2. a. Although the passage states that woolly mammoths could not adapt to the warmer climate, the lecture says that mammoths moved up toward the cold northern pole.
b. While the passage suggests that woolly mammoths could not adjust to the warmer climate, the lecture states that they would have adjusted just fine.
3. a. Even though the passage says that the saber-toothed tiger would have hunted woolly mammoths, thereby reducing their numbers, the lecture argues that mammoths did not have animal predators because they were too large to hunt.
b. The passage agrees with the lecture that predators would have led to the woolly mammoth's decline.
4. a. Whereas the author of the passage states that humans over hunted woolly mammoths because of their many beneficial uses, the speaker believes that humans would have hunted other animals that were just as useful.
b. Despite the fact that the author of the passage thinks woolly mammoths went extinct because of over hunting, the speaker feels that humans would not have hunted the woolly mammoth.

► Step 5

A. Changing Keywords

Below are four incomplete paraphrases of key information from the reading passage and the lecture. Fill in the missing parts with words or phrases from the box. These words and phrases are synonyms or are similar in meaning to the actual words used in the reading passage and lecture.

- | |
|--|
| <ol style="list-style-type: none">1. achievements / effects / trials / agrees / refuses / denies2. decline / intensity / result / pursued / relocated / settled3. prey / predator / hunter / avoided / deterred / furthered4. doubt / extent / size / scarce / plenty / ample |
|--|

1. The author states that woolly mammoths went extinct due to the combined _____ of over hunting and climate change, while the professor _____ that this theory had anything to do with the woolly mammoth's extinction.
2. The reading blames the warmer climate change for the _____ of the woolly mammoth, but the speaker thinks that woolly mammoths simply _____ toward the northern pole.

3. The passage assumes that woolly mammoths were the _____ of saber-toothed tigers. The professor points out that the woolly mammoth's large size would have _____ any animal predators from hunting it for food.
4. The reading claims that humans hunted woolly mammoths to a great _____. However, the professor suggests that there were _____ of other animals for humans to hunt.

B. Changing Sentence Structure

Complete the following paraphrases of the sentences from part A above.

1. While the professor _____ that _____ had anything to do with the woolly mammoth's extinction, the author _____ were, in fact, responsible.
2. The speaker thinks that mammoths _____, but the reading blames the decline of the woolly mammoth on the _____.
3. The professor points out the fact that animal predators _____ from hunting the woolly mammoth because of its large size. The passage assumes that _____ on woolly mammoths.
4. The professor suggests that there were _____ for humans to hunt. However, the reading claims that woolly mammoths were hunted by _____.

► Step 6

Read the following sentences taken from the reading and the lecture. Create new sentences by combining the ideas in each pair of sentences.

1. a. Once the climate became warmer, however, this adaptation undoubtedly created serious problems for these animals and caused their populations to dwindle considerably.
b. Do not get me wrong, mammoths clearly were not suited for life on the equator in extremely warm environments, but who is to say they did not just move up north to Arctic regions.
- _____
- _____
2. a. Because woolly mammoths were so desirable, humans probably concentrated the majority of their hunting efforts on woolly mammoths alone.
b. There were many other animals that could have been hunted to create the same type of objects—animals like buffalo, giant sloths, or bears, for example.
- _____
- _____

03

Geography

► Step 1

Read the following passage. Predict how the listening passage may contrast with the reading. Then look at the note diagram and fill in the missing information.

The construction of dams along many major rivers prevents much of the water from traveling into the areas below the dams. As a result, water will occasionally be released from the dam into the river below. This great release of water effectively floods the river below the dam and produces a number of beneficial effects.

The most significant benefit of flooding rivers is the silt that the flooding provides. Silt is nutrient-rich soil that is carried by a river. When a dam is constructed, silt collects in the reservoir behind the dam, depriving the river ecosystem below the dam of the silt's beneficial nutrients. By releasing a large amount of water from the dam, silt stored in the reservoir can be released and make its way into the river below the dam, providing much-needed nutrients for plants and animals that live along and within the river.

Flooding a river also allows the natural geographic features of the river to be restored. Sandbars, or large collections of sand, erode over time. Without a large flow of water to carry new sand down the river and restore them, sandbars eventually disappear. Sandbars provide habitat for a number of creatures that inhabit the river, and by flooding a river, this habitat can be maintained.

Flooding also causes the river to rise beyond its peak level. This helps establish plants along the banks of the river by creating a moist, fertile habitat where new plant life can take hold. This plant life, in turn, stabilizes the bank of the river by preventing erosion and enriches the ecosystem of the river.

dam:

structure built along a river to hold back water

reservoir:

an artificial or natural lake where water is stored

deprive:

to deny the possession or use of something

nutrient:

substance that provides material necessary for growth or survival

erode:

to gradually wear something away

habitat:

the natural environment or home of something

fertile:

able to produce large amounts of resources

stabilize:

to reach a point where there are no longer any problems

Main idea: Flooding _____

Key point 1: Flooding _____

Key point 2: Flooding _____

Key point 3: Flooding _____

► Step 2

Below is important information from the reading passage above. After each sentence are two possible paraphrases of it. Choose the best paraphrase for each sentence.

- A. Flooding distributes nutrient-rich silt throughout the river, which helps animals and plants along and in the river.
 1. Flooding helps animals spread out nutrient-rich silt throughout the river.
 2. Wildlife that lives in and near the river benefits from flooding because it spreads out silt.
- B. High floodwater helps plants grow, which in turn prevents erosion along the banks of the river.
 1. Flooding helps plants grow faster, though it does not prevent erosion of the riverbank.
 2. Plant growth, which is encouraged by floodwater, helps protect banks from erosion.
- C. In the space below, write a paraphrase of the main idea of the reading passage.

► Step 3

Now listen to a lecture related to the topic in Step 1. Fill in the blanks of the note diagram below with keywords or key phrases used in the lecture. **Track 238**

Main idea:	Flooding _____	reverse: to cause something to return to its normal state
Key point 1:	Flooding _____	solve: to find an answer or explanation to something
Key point 2:	Flooding _____	bed: the bottom of a river
Key point 3:	Flooding _____	restore: to bring back to a previous state
		moisten: to cause something to become wet
		wipe out: to destroy or eliminate completely
		uproot: to remove something from the ground
		artificial: made or produced by humans; not occurring in nature

► Step 4

Choose the sentences that best combine the main idea and key points from the reading passage and the lecture.

1. a. Although artificially flooding a river does benefit the river below a dam, too much artificial flooding can harm the river.
b. The passage states that flooding a river below a dam is beneficial to the river's ecosystem, but the speaker says that this flooding process can be harmful.
2. a. While the author of the passage writes that flooding provides silt to the river, the professor asserts that this silt is damaging to the river.
b. The reading says that flooding provides silt to the river. The professor claims that it removes silt from the river.
3. a. The writer explains that flooding restores natural sandbars in the river's ecosystem. However, the speaker says that flooding wipes out these sandbars.
b. The reading explains that flooding carries sand through the water. The lecture explains that flooding does not carry enough sand through the water to create sandbars.
4. a. Even though the reading claims that flooding establishes plants along the river's banks, the lecture maintains that this flooding destroys the plants.
b. While the passage says that flooding makes the river's banks fertile, the lecture says that flooding ruins the soil along the river's bank.

► Step 5

A. Changing Keywords

Below are four incomplete paraphrases of key information from the reading passage and the lecture. Fill in the missing parts with words or phrases from the box. These words and phrases are synonyms or are similar in meaning to the actual words used in the reading passage and lecture.

- | |
|--|
| <ol style="list-style-type: none">1. mark / cause / impact / constructive / destructive / effective2. supplies / contributes / brings / durable / productive / nourishing3. reconstructs / returns / recalls / detaches / concludes / eliminates4. position / cultivate / expose / beside / among / between |
|--|

1. The author writes that flooding a river has a positive _____ on the river. However, the professor maintains that flooding a river is more _____ than beneficial.
2. While the reading states that flooding _____ the river with silt, the speaker claims that flooding takes away this _____ soil from the river.

3. The passage says that flooding _____ the river's sandbars, but the lecture states that flooding _____ natural sandbars.
4. Although the reading says that flooding helps _____ vegetation on the river's banks, the professor argues that flooding removes vegetation from _____ the river.

B. Changing Sentence Structure

Complete the following paraphrases of the sentences from part A above.

1. The professor states that it is _____ to flood a river. On the other hand, the author argues that flooding a river _____.
2. The speaker claims that _____ is removed from the river by flooding, but the reading states that flooding actually _____ to the river.
3. The lecturer states that natural sandbars _____ by flooding, but the passage says that the river's sandbars _____ by flooding.
4. The professor argues that vegetation is removed _____ during flooding, although the reading says that vegetation _____ by flooding.

► Step 6

Read the following sentences taken from the reading and the lecture. Create new sentences by combining the ideas in each pair of sentences.

1. a. By releasing a large amount of water from the dam, silt stored in the reservoir can be released and make its way into the river below the dam.
b. In actuality, the flooding process can carry a lot of the silt already in the river away.
- _____
- _____
2. a. Without a large flow of water to carry new sand down the river and restore them, sandbars will eventually disappear.
b. You see, the flow of the river is so great that the sandbars just get worn down during the flooding process and rather than restoring sandbars, it actually wears them down significantly.
- _____
- _____

04

Education

► Step 1

Read the following passage. Predict how the listening passage may contrast with the reading. Then look at the note diagram and fill in the missing information.

For many people, college is the means to secure a better-paying job. However, students that wish to attend college now have to pay far more than they would have had to pay 50 years ago. These financial considerations provide a number of reasons to eliminate tuition and make college free for students who wish to attend.

One of the most compelling factors for eliminating tuition is the startling number of high school graduates that choose not to go to college because of the cost of a college education. In many cases, these students feel as if the time and money used on college would be better spent working and buying a house or a car. Thus, eliminating tuition costs would encourage many more young people to attend college, due to the reduced financial burden.

Additionally, many of the students who do attend college drop out before finishing their degree due to financial concerns. Many of these students find the financial burden of college too much to bear and, faced with acquiring even more debt, are forced to drop out. Getting rid of tuition costs would most likely reduce the college dropout rate significantly.

Even students that manage to complete college in spite of these concerns find themselves facing a large debt once they graduate. Most college graduates will acquire a significant amount of debt in the course of getting their degrees that will take them several years to pay off in full. By eliminating the tuition costs, it becomes much more likely that students can graduate debt-free and immediately move on to careers without the burden of debt.

financial:

relating to the saving and spending of money

compelling:

causing interest or encouraging action

startling:

very surprising

bear:

to assume responsibility for something

acquire:

to buy or obtain something

debt:

money that is owed

graduate:

to complete a degree or certification

Main idea: _____

Key point 1: _____

Key point 2: _____

Key point 3: _____

► Step 2

Below is important information from the reading passage above. After each sentence are two possible paraphrases of it. Choose the best paraphrase for each sentence.

- A. High tuitions discourage high school students from pursuing a university education and make them feel that the money is better spent on other things.
 1. High school students would rather spend their money on tuition than on other things.
 2. Paying for college makes high school students reconsider attending university.

- B. Even after graduation, people are usually left with many debts from the cost of financing their education.
 1. The high cost of education follows people after graduation in the form of debt.
 2. Graduates of universities have to find different ways of paying off their debts.

- C. In the space below, write a paraphrase of the main idea of the reading passage.

► Step 3

Now listen to a lecture related to the topic in Step 1. Fill in the blanks of the note diagram below with keywords or key phrases used in the lecture. **Track 239**

<p>Main idea: _____</p> <p>_____</p> <p>_____</p>	<p>calculate: to determine the amount of something</p>
<p>Key point 1: _____</p> <p>_____</p> <p>_____</p>	<p>average: common; the usual case</p>
<p>Key point 2: _____</p> <p>_____</p> <p>_____</p>	<p>pursue: to seek or attain a certain goal</p>
<p>Key point 3: _____</p> <p>_____</p> <p>_____</p>	<p>pocket change: a small amount of money</p>
	<p>translate: to be equal to</p>
	<p>burden: something that causes one hardship or difficulty</p>
	<p>numerous: great in number</p>

► Step 4

Choose the sentences that best combine the main idea and key points from the reading passage and the lecture.

1. a. While the passage says that college tuition should be eliminated, the lecture disagrees with its points.
b. Both the reading and the lecture state that college tuition should be eliminated.
2. a. The reading asserts that many high school graduates do not go to college because of the tuition cost. Similarly, the professor says that college tuition is the reason why most people avoid college altogether.
b. The passage and the professor both agree that high school students will not go to college unless tuition is significantly reduced.
3. a. The author states that many students drop out of college because of the expense. The speaker says that college dropouts claim college costs as the major reason why they left college.
b. The reading says that most college students leave college because of the expense. Conversely, the lecturer claims that most students leave college because of their grades.
4. a. The passage remarks that even when students graduate, most of them still have debts to pay off. The professor confirms this by saying that the typical college graduate has an average of \$19,000 in debt.
b. The reading states that students who graduate from college incur lots of debt. The passage reinforces this by saying that average college tuition is \$19,000.

► Step 5

A. Changing Keywords

Below are four incomplete paraphrases of key information from the reading passage and the lecture. Fill in the missing parts with words or phrases from the box. These words and phrases are synonyms or are similar in meaning to the actual words used in the reading passage and lecture.

1. extending / lowering / removing / endorses / opposes / combines
2. discourages / assembles / convinces / attests / disproves / verifies
3. commitment / considerations / persuasion / cite / limit / refute
4. enabled / confirmed / forced / performs / exhibits / discloses

1. The author of the passage makes a case for _____ tuition in colleges. The professor _____ a similar view.
2. The reading claims that high college tuition _____ many high school graduates from attending college. The lecturer _____ this by providing some statistics on college tuition.

3. The passage says that financial _____ cause many college students to drop out. The speaker mentions that a number of college dropouts _____ college expenses as the main reason for why they left.
4. The author mentions that those who graduate from college are often _____ to pay off a large college debt over the next several years. The lecturer _____ the fact that the average college graduate will have to pay back \$19,000 in college debt.

B. Changing Sentence Structure

Complete the following paraphrases of the sentences from part A above.

1. The professor _____ that is similar to the author's. The author argues that tuition should be _____.
2. By providing statistics on college tuition, the lecturer was able _____ what the reading claimed. According to the reading, many high school graduates _____ from attending college because of high college tuition.
3. The speaker mentions that college expenses _____ by college dropouts as the main reason for why they left. The passage supports this view by claiming that many college students drop out due to _____.
4. The lecturer _____ that the average college student has _____. The author agrees, stating that being _____ a large debt is a reality for many college graduates.

► Step 6

Read the following sentences taken from the reading and the lecture. Create new sentences by combining the ideas in each pair of sentences.

1. a. Many of these students find the financial burden of college too much to bear and, faced with acquiring even more debt, are forced to drop out.
b. Statistics show that one in every four freshmen who attend college drops out in the first year.
- _____
- _____
2. a. By eliminating the tuition costs, it becomes much more likely that students can graduate debt-free and immediately move on to careers without the burden of debt.
b. A typical college graduate ends up with an average of \$19,000 in debt—that is enough for a down payment on a house.
- _____
- _____

Chapter 3

Making Connections

Strategies

- After determining the framework of your essay, further consideration must be given to the organization within the paragraphs themselves.

First paragraph contains:

- the main idea of the whole response
- one key point
- examples and/or connections to the reading

Supporting paragraphs contain:

- additional key points
- examples and/or connections to the reading

- When developing your points, make sure that the statements are well connected so that the relationships between ideas can be seen clearly.
- Use transitional words and phrases to indicate the relationships among ideas.
- Use appropriate expressions to indicate when citing the source.

To Cite Information

- According to the lecture/passage . . .
- The reading stated that . . .
- In the reading, the author states that/discusses how . . .
- In the author's/professor's opinion . . .
- According to the theory in the reading/lecture . . .
- The professor made the point that . . .
- The lecture supports/illustrates the idea that . . .
- The lecture contradicts/refutes the idea that . . .

To Compare and Contrast

- similarly, likewise, also, just as, both, by comparison, compared to, but, yet, although, in contrast, on the contrary, contrary to, on the other hand, however, conversely, is the opposite of, while, whereas, nevertheless, although, meanwhile, after all, although this may be true, in spite of, despite

To Show Cause and Effect

- because, since, for, thus, therefore, hence, as a result, accordingly, for the same reason

► Step 1

Read the following passage. Then look at the note diagram and fill in the missing information.

In recent years, there has been a dramatic increase in the availability of organic foods. Organic foods are regulated by the government; thus in order to officially be termed "organic", they must be grown without pesticides or artificial fertilizers. In just a short time, it has become overwhelmingly clear that consuming only organic fruits and vegetables has a number of benefits.

First, organic foods have been shown to have a positive impact on human health. Most foods are grown using many chemicals, some of which eventually end up being consumed by people. Research has proven that eating chemical additives harms humans over time. For example, a recent study linked the consumption of artificial additives found in non-organic foods to behavioral disorders in children. However, since organic foods are grown without pesticides, people do not have to worry about unexpected side effects from eating chemicals.

Next, organic foods also benefit the environment. Traditional farming techniques dump hundreds of pesticides into the ground every year. Additionally, chemicals used in farming remain in the ground for many years afterwards. Organic foods, on the other hand, do not use any harmful pesticides or fertilizers. As a result, there are fewer pollutants entering the Earth's land and water systems.

Finally, the consumption of organic foods also benefits small farmers. Most of the world's food supply is produced and sold by large corporations. This makes it very difficult for small farmers to compete. However, the majority of organic foods are grown on family farms. Buying more organic food means that small farmers are able to make a living off of farming.

dramatic:

very noticeable

regulate:

to control; to make rules concerning

pesticide:

a chemical used to kill harmful insects

fertilizer:

a substance that helps plants grow

additive:

something that is added to a food to help preserve it

link:

to connect to

side effect:

an unintended consequence

Main idea: There are many advantages _____ only organic foods.

Key point 1: Humans consume _____ when they eat organic foods, greatly _____ their health.

Key point 2: Organic farming _____ the amount of chemicals introduced to the _____.

Key point 3: Buying organic foods helps _____ compete with large corporations.

► Step 2

Now listen to a lecture related to the topic in Step 1. Fill in the blanks of the note diagram below. **Track 240**

<p>Main idea: Organic food is not _____ for many reasons.</p> <p>Key point 1: Organic farmers use _____, which affect _____ adversely.</p> <p>Key point 2: Organic farmers _____ by cutting down trees to make room for more _____.</p> <p>Key point 3: Large _____ are attracted to organic farming, making it harder for _____ to compete.</p>	<p>misconception: an idea that is wrong because one does not understand the whole situation</p> <p>toxic: poisonous</p> <p>forthcoming: willing to provide information</p> <p>conventional: the typical way of doing something</p> <p>biodiversity: the range of different animals and plants that live in an area</p> <p>erosion: to wear away over time</p> <p>small-time: not on a large scale</p>
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► Step 3

Read the sample response below. Then answer the questions. Finally, revise the sample response.

The passage and the lecture are about organic foods. The professor says that the benefits mentioned in the passage about consuming organic food are not true and that organic foods are actually harmful.

The reading claims that organic foods improve human health because they do not use artificial pesticides. The chemicals found in pesticides can have harmful effects.

Next, the reading says that growing organic foods helps the environment because it puts less harmful chemicals into the ground. The professor disagrees, stating that organic farming techniques harm the environment because organic farmers often cut down trees in order to plant more crops.

Finally, the professor argues that buying organic food does not help small farmers because large corporations own most of the farms.

In conclusion, the professor feels that there are many problems with buying organic foods, while the passage says it is beneficial in a lot of ways.

Evaluate the sample response by answering the following guide questions.

1. Does the introduction clearly explain the author's point of view? Does it explain the speaker's?

Yes No

2. Does each body paragraph compare the key points of the reading and the lecture?

Yes No

3. Does the conclusion include any unnecessary information or personal opinion?

Yes No

Revise the sample response by correcting the problems you noted in Step 3.

A large rectangular box containing ten horizontal dashed lines for writing a revised response.

▶ Step 4

Now write your own response to the reading passage and the lecture. Then answer the questions. Do NOT use the same wording as the sample response.

Handwriting practice area with 10 horizontal lines.

Use your own response to answer the following guide questions.

1. Does the introduction clearly explain the author's point of view? Does it explain the speaker's?

Yes

No

2. Does each body paragraph compare the key points of the reading and the lecture?

Yes

No

3. Does the conclusion include any unnecessary information or personal opinion?

Yes

No

02 Technology

► Step 1

Read the following passage. Then look at the note diagram and fill in the missing information.

With the speculation by many leading geologists that petroleum reserves will be exhausted within the next fifty years, a number of alternatives to petroleum have been proposed. One of the most promising alternatives being researched is hydrogen cell technology, which could easily replace traditional gasoline as fuel for automobiles. The adoption of hydrogen as an alternative fuel has many advantages.

First, hydrogen is one of the most abundant elements on the planet. It is a naturally occurring element that can be found around the world. One of the most common sources of hydrogen is H_2O , or water, which consists of two hydrogen atoms and one oxygen atom. Since water makes up over seventy-five percent of the Earth, hydrogen would be an ideal source of energy for nearly all countries on the planet.

Moreover, hydrogen can be concentrated and stored in small containers called "cells." Hydrogen cells are smaller and far easier to transport than gasoline, since they can simply be stacked on a truck for transportation instead of carried in a large tank. Unlike gasoline, which can leak out of the tank and catch fire if there is an accident, hydrogen cells' easily transportable form makes them far safer to move.

Additionally, when placed in cars, hydrogen is much more efficient than gasoline. It takes far more gasoline to move a car across a certain distance than it does for hydrogen. In fact, hydrogen fuel cells can transform twice as much energy into power as gasoline can. Adopting hydrogen cell technology in automobiles would vastly improve the efficiency of our vehicles. As such, countries looking to adopt new sources of energy would be wise to research hydrogen as an alternative fuel source.

speculation:

a guess about what might happen in the future

geologist:

a person formally trained to study Earth's physical structure

adoption:

the decision to use or accept an idea or practice

abundant:

numerous; commonly occurring

atom:

the smallest unit of a chemical element

ideal:

perfect for

stack:

to place or arrange in a pile

transportation:

the action or process of moving something

Main idea: Adopting hydrogen as an alternative fuel source _____

Key point 1: Hydrogen is _____

Key point 2: Hydrogen is _____

Key point 3: Hydrogen is _____

▶ Step 2

Now listen to a lecture related to the topic in Step 1. Fill in the blanks of the note diagram below. **Track 241**

<p>Main idea: Hydrogen is _____ _____.</p> <p>Key point 1: Hydrogen is _____ _____. Hydrogen must be in a _____.</p> <p>Key point 2: Hydrogen is _____ and is much _____.</p> <p>Key point 3: Hydrogen is _____ _____ because _____ _____ _____.</p>	<p>lookout: a state of being concerned or alert</p> <p>readily: easily</p> <p>technically: according to a strict interpretation of fact</p> <p>flammable: easily set on fire</p> <p>comparison: the act or instance of comparing something</p> <p>purification: the process of removing extra material from something</p> <p>alternative: used in place of another</p>
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▶ Step 3

Read the sample response below. Then answer the questions. Finally, revise the sample response.

The reading says hydrogen is a good alternative to gasoline, while the professor suggests otherwise.

The passage says that hydrogen is present around the world. However, the professor refutes this by explaining that hydrogen does not exist in a pure form.

Next, the passage says hydrogen is easier to transport than gasoline. Conversely, the professor then says that hydrogen is more explosive and dangerous to transport than gasoline. Because of this, it is not as safe as gasoline.

The passage finally says that hydrogen is more efficient than gasoline when used in automobiles. The professor, though, says that it takes lots of energy to put hydrogen into a pure form. For this reason, it is less efficient.

In conclusion, the professor says that hydrogen should not be used as an alternative fuel source.

Evaluate the sample response by answering the following guide questions.

1. Does the introduction mention the main idea from both the reading passage and the lecture?

Yes No

2. Does each body paragraph compare the key points of the reading and the lecture?

Yes No

3. Does the conclusion summarize the main points of both the reading passage and the lecture?

Yes No

Revise the sample response by correcting the problems you noted in Step 3.

A large rectangular box containing ten horizontal dashed lines for writing.

► Step 4

Now write your own response to the reading passage and the lecture. Then answer the questions. Do NOT use the same wording as the sample response.

Handwriting practice area with 12 horizontal dashed lines.

Use your own response to answer the following guide questions.

1. Does the introduction mention the main idea from both the reading passage and the lecture?
 Yes No

2. Does each body paragraph compare the key points of the reading and the lecture?
 Yes No

3. Does the conclusion summarize the main points of both the reading passage and the lecture?
 Yes No

03

Criminology

► Step 1

Read the following passage. Then look at the note diagram and fill in the missing information.

Identity theft is one of the fastest growing crimes in developed nations. Every few seconds, another person's identity is stolen by thieves who can use this information to commit fraud. By using another person's name, address, and other information, criminals can take stolen information and use it for their own purposes, usually to the detriment of the victim. There are numerous reasons why identity theft is such a major problem today.

First, the amount of data being collected about individuals is more than it has ever been in human history. Gigantic databases, full of millions of people's personal information, are compiled by many companies worldwide. While the companies themselves rarely misuse this information, it is not secure and is frequently stolen.

The information that is stolen from company databases is usually vital information. It is exactly what thieves need to completely steal our identity. For instance, in most cases of identity theft, the criminal opens up a credit account in another person's name without that person knowing. The thief then charges a number of purchases to the account and leaves the debt for the unsuspecting victim. Although the person may not have made the purchases, he or she is still responsible for the debt—all because this important information was stolen.

Identity theft may also result in people's current savings, held in bank accounts, retirement funds, or other locations, to be removed without their knowledge. Armed with a person's information, thieves can remove money that a person has saved. Once the money has been removed, there is little that a person can do to recover it. Identity theft poses a significant threat to many people's financial well-being.

developed:

having a large number of technological advances

detriment:

a state of being harmed

database:

a large collection of information

secure:

free from threat or harm

vital:

very important or necessary

retirement:

the period of time after a person has left his or her career

pose:

to present

Main idea: Identity theft _____

Key point 1: _____

_____ where thieves can steal from.

Key point 2: Thieves steal _____ information and can use it to _____

Key point 3: Thieves can use stolen information _____

► Step 2

Now listen to a lecture related to the topic in Step 1. Fill in the blanks of the note diagram below. **Track 242**

Main idea:	Identity theft _____	misperception: a view or opinion that is not true
Key point 1:	Identity theft _____ because the information stolen from databases is _____	media: news outlets that are a primary source of information for a group
Key point 2:	Much of the information that is stolen from databases _____	literally: without exaggeration
Key point 3:	Most companies that deal with money _____	negligible: not significant enough to be worth considering
		minor: lesser in importance or significance
		safeguard: measure taken to prevent something undesirable
		overblown: exaggerated; not as significant as it is made to seem

► Step 3

Read the sample response below. Then answer the questions. Finally, revise the sample response.

The lecture and the passage talk about identity theft. The professor feels that identity theft is not that much of a problem.

The passage says that there is a large amount of information that companies gather. This information is then stolen by identity thieves. Therefore, identity theft is a major problem in today's world.

Then in his lecture, the professor argues that much of the stolen information is useless. There is not enough information to open an account under another person's name.

Finally, the passage explains that thieves can use another person's information to empty that person's savings account. The professor disagrees and says that many companies have safety policies to keep this from happening. For example, people have to sign something before they can empty their accounts.

Although the passage feels that identity theft is a problem, the professor says that this type of fraud is not much of a concern. He feels that identity theft is being made to sound worse than it really is. I agree with the professor's opinion.

Evaluate the sample response by answering the following guide questions.

1. Does the introduction clearly explain the author's point of view? Does it explain the speaker's?

Yes No

2. Does the response clearly explain the information presented in the reading and the lecture?

Yes No

3. Does the conclusion include any unnecessary information or personal opinion?

Yes No

Revise the sample response by correcting the problems you noted in Step 3.

► Step 4

Now write your own response to the reading passage and the lecture. Then answer the questions. Do NOT use the same wording as the sample response.

Handwriting practice area with ten horizontal dashed lines.

Use your own response to answer the following guide questions.

- 1. Does the introduction clearly explain the author's point of view? Does it explain the speaker's?
 Yes No
- 2. Does the response clearly explain the information presented in the reading and the lecture?
 Yes No
- 3. Does the conclusion include any unnecessary information or personal opinion?
 Yes No

► Step 1

Read the following passage. Then look at the note diagram and fill in the missing information.

The minimum wage is set by the government and is the lowest hourly wage a business can pay an employee. For example, if the minimum wage of a country is \$5.25 per hour, then businesses cannot pay their employees any less than this. However, because of the many disadvantages that the minimum wage has caused for businesses and workers, minimum wage laws should be abolished.

First, the minimum wage makes workers too expensive for some businesses, especially smaller businesses. If the minimum wage is set at \$5.25 and a small business owner can only afford to hire someone at \$5.00 an hour, both are at a disadvantage because of the minimum wage. The business owner cannot hire as many workers as he or she likes. Also, potential workers for that business remain unemployed. For this reason, minimum wages can raise unemployment rates.

In addition, the minimum wage encourages larger businesses to move their production out of one country and into another. Since some foreign countries may not have minimum wage laws, labor in these countries can cost much less than labor in a country with such laws in place. This can ultimately hurt the parent country because many larger businesses choose to relocate to a foreign country, removing a number of jobs in the process.

Finally, the minimum wage encourages companies to purchase machine technology that can replace workers. If it is less expensive for a company to purchase an automated machine to do a task than it is to pay an employee to do the same job, the business will undoubtedly purchase the machine. If the cost of labor remains low, however, companies are less likely to replace workers with automated machine systems.

abolish:

to remove or destroy

foreign:

in a country other than one's own

unemployment:

the state of not having a job

labor:

the process of working

ultimately:

finally, in the end

automated:

a system that works by itself without human interaction

undoubtedly:

certainly, unquestionably

Main idea: _____

Key point 1: _____

Key point 2: _____

Key point 3: _____

► Step 2

Now listen to a lecture related to the topic in Step 1. Fill in the blanks of the note diagram below. **Track 243**

Main idea:	_____	intervention: the process of getting involved in a situation address: to deal with analyze: to study or examine something in detail steady: regular, firmly fixed cost of living: the average cost of basic necessities for life likelihood: the chance that something might happen outweigh: to be more important or useful than something else

Key point 1:	_____	

Key point 2:	_____	

Key point 3:	_____	

► Step 3

Read the sample response below. Then answer the questions. Finally, revise the sample response.

The passage and the professor discuss getting rid of the minimum wage. The passage claims that the minimum wage should be abolished, but the professor says the minimum wage should be kept because arguments against it are not accurate.

Firstly, the minimum wage means that small businesses cannot hire workers, which raises unemployment levels. Yet the professor says that the minimum wage does not affect employment levels.

Secondly, the minimum wage causes large businesses to move jobs to other countries. This way, they will not have to pay so much for labor. The professor argues against this point as well.

Thirdly, the minimum wage causes businesses to replace workers with machines. The professor disagrees with this point. He says that it is always less costly to replace workers with machines that can do the same job. It has nothing to do with the minimum wage laws.

The reading concludes by saying the minimum wage should be abolished. The professor has a different opinion.

Evaluate the sample response by answering the following guide questions.

1. Does the introduction clearly explain the author's point of view? Does it explain the speaker's?

Yes No

2. Does the response contain a proper balance of ideas from the reading and the lecture?

Yes No

3. Does the conclusion summarize the main points of both the reading passage and the lecture?

Yes No

Revise the sample response by correcting the problems you noted in Step 3.

A large rectangular box containing ten horizontal dashed lines for writing a revised response.

▶ Step 4

Now write your own response to the reading passage and the lecture. Then answer the questions. Do NOT use the same wording as the sample response.

A large rectangular box containing ten horizontal dashed lines for writing a response.

Use your own response to answer the following guide questions.

1. Does the introduction clearly explain the author's point of view? Does it explain the speaker's?
 Yes No
2. Does the response contain a proper balance of ideas from the reading and the lecture?
 Yes No
3. Does the conclusion summarize the main points of both the reading passage and the lecture?
 Yes No

Vocabulary Review 1

Instructions: Choose the best word or phrase to complete each sentence.

1. If I'm tired in the afternoon, I really like to take a _____.
(A) bed
(B) nap
(C) dam
(D) debt
2. _____ are scientists who study dinosaur fossils.
(A) consumers
(B) graduates
(C) paleontologists
(D) sloths
3. She decided to _____ us to the movies after all.
(A) restore
(B) deprive
(C) comprehend
(D) accompany
4. There are _____ 800 graduating students from the university this year.
(A) approximately
(B) effortlessly
(C) adequately
(D) conventionally
5. Kathy admitted there was no _____ for the way she acted last night.
(A) insulation
(B) extinction
(C) justification
(D) adaptation

6. The city decided there wasn't enough _____ to build a new convention center.
(A) funding
(B) reservoir
(C) punishment
(D) habitat
7. Nowadays, many people use _____ sweeteners instead of real sugar in their coffee.
(A) initial
(B) artificial
(C) conventional
(D) essential
8. My mother _____ the table from her mother, and someday she will give it to me.
(A) eroded
(B) administered
(C) discarded
(D) acquired

Instructions: Choose the word closest in meaning to the underlined word or phrase.

9. Most cars still run on gasoline, but some run on other kinds of fuel.
(A) waste
(B) reservoir
(C) petroleum
(D) landfill
10. There wasn't enough money for the students to take a class trip.
(A) adequate
(B) extreme
(C) rational
(D) fertile

11. For both adults and children, getting enough sleep is necessary to staying healthy.

- (A) compelling
- (B) conventional
- (C) essential
- (D) numerous

12. The news said there was enough information to arrest the man for robbing the bank.

- (A) procedure
- (B) burden
- (C) punishment
- (D) evidence

13. I had trouble opening the jar, but he was able to open it easily.

- (A) approximately
- (B) effortlessly
- (C) rationally
- (D) psychologically

14. Jack could not understand what Shelley was trying to say, so I had to explain it to him instead.

- (A) emerge
- (B) conduct
- (C) stabilize
- (D) comprehend

15. Many scientists believe that an asteroid wiped out the dinosaurs, but some aren't sure.

- (A) recovered
- (B) ensured
- (C) eliminated
- (D) associated

Instructions: Write the missing words. Use the words below to fill in the blanks.

punishment numerous association
reasonable disciplinary

In ancient Greece, myths were used to give 16. _____ explanations for why something happened. For example, because of the god Poseidon's 17. _____ with the sea, people believed that when the waters were rough, it meant he was angry. There are also 18. _____ myths that show what 19. _____ actions could be handed down from the gods for bad behavior. In one myth, a woman named Myrmex claimed she invented the plough, when the goddess Athena had really invented it. As a 20. _____, Athena turned Myrmex into an ant.

Instructions: Match the words that are opposites.

- | | |
|-------------------|---------------|
| 21. discard | (A) unseen |
| 22. predator | (B) primitive |
| 23. focus | (C) prey |
| 24. noticeable | (D) retain |
| 25. sophisticated | (E) distract |

Vocabulary Review 2

Instructions: Choose the best word or phrase to complete each sentence.

- Petroleum is highly _____, even the smallest spark from a cell phone could ignite it.
(A) negligible
(B) flammable
(C) abundant
(D) automated
- Karen is hoping to study abroad in a _____ country her senior year of college.
(A) extreme
(B) minor
(C) foreign
(D) steady
- Time spent studying _____ time spent watching television.
(A) analyzes
(B) safeguards
(C) poses
(D) outweighs
- Blue collar workers usually perform _____ outdoors or in factories.
(A) labor
(B) procedure
(C) intervention
(D) transportation
- My grandmother is expected to make a full _____ from her illness.
(A) purification
(B) recovery
(C) misperception
(D) unemployment
- Since the hotel was already booked, we had to make _____ plans.
(A) vital
(B) extreme
(C) detached
(D) alternative
- Many people begin saving for their _____ as soon as they begin working.
(A) retirement
(B) procedure
(C) competition
(D) database
- A _____ visited our class today and told us about the different kinds of rocks on Earth.
(A) speculator
(B) geologist
(C) transporter
(D) competitor

Instructions: Choose the word closest in meaning to the underlined word or phrase.

- The new regulations will present significant challenges to the company.
(A) pose
(B) accompany
(C) safeguard
(D) abolish
- You should always be on the alert for cars when you are crossing the street.
(A) comparison
(B) competition
(C) lookout
(D) evidence

11. My mother says that a good education is very important for success in today's world.

- (A) developed
- (B) stacked
- (C) minor
- (D) vital

12. The parking garage is separated from the building, so we have to cross the street.

- (A) extreme
- (B) detached
- (C) ideal
- (D) negligible

13. The president spoke to the media at a press conference this morning.

- (A) addressed
- (B) abolished
- (C) speculated
- (D) retired

14. She examined the report carefully for any mistakes before she turned it in.

- (A) outweighed
- (B) administered
- (C) analyzed
- (D) accompanied

15. The students' first reaction to the announcement was surprise, but now they have gotten used to the new policy.

- (A) ideal
- (B) initial
- (C) minor
- (D) extreme

Instructions: Write the missing words. Use the words below to fill in the blanks.

media safeguard abundance
ultimately approximately

The Cave of Lascaux is located in southwestern France and features a(n) **16.** _____ of paintings on its walls. The cave contains

17. _____ 2,000 figures which were created about 15,000 years ago. Lascaux was found by four teenagers in 1940 and the **18.** _____

soon spread the news about its discovery. By the mid-1940s, over 1,200 tourists were visiting the caves each day. In 1955, it was observed that the paintings were becoming damaged. **19.** _____, the cause was determined to be high levels of carbon dioxide being exhaled by the many visitors. In order to **20.** _____ the ancient site, the cave was closed to visitors in 1963.

Instructions: Choose one word in each group that does not belong.

- | | |
|-----------------------|------------|
| 21. ideal | perfect |
| sophisticated | supreme |
| 22. harm | detriment |
| intervention | damage |
| 23. great | excessive |
| extreme | corrective |
| 24. negligible | minor |
| stacked | small |
| 25. exactly | ideally |
| accurately | literally |

Part 2

Independent Writing

- Chapter 4 Brainstorming
- Chapter 5 Writing Thesis Statements and Topic Sentences
- Chapter 6 Making Ideas Flow
- Vocabulary Review 3
- Vocabulary Review 4

Chapter 4 Brainstorming

Necessary Skills

- Describing a personal experience
- Expressing an opinion on an issue and supporting it with concrete examples and details
- Organizing ideas in an effective way

Process	Strategy
Read the prompt and understand the task.	Be sure that you understand the prompt and what it requires you to do.
Brainstorm.	Try to take less than five minutes to brainstorm. Write down all the ideas you can think of to support your opinion. Think of ways to express those ideas in English. Do not try to organize these points. You will select major ideas and organize them in the next step.
Organize the ideas.	Select major ideas that can be developed into topics to support the thesis. Do NOT include ideas that are unconnected to the task or topics. Organize so that minor ideas act to support the major ideas. Select examples that clearly support the topics.

- Your organization may look like this:

Introduction

Restatement of the question
Thesis statement

Body

Supporting idea 1 + examples
Supporting idea 2 + examples
Supporting idea 3 + examples

Conclusion

Restatement of
the thesis

▶ Step 1

Read the prompt and think about your own experience. List some ideas about your experiences in the blanks.

Some people like to work in teams. Others prefer to work alone. Which do you prefer? Give specific reasons and examples to support your answer.

Working in teams:

- encourages productivity
- members work off of each other's strengths
- forms relationships

Working alone:

- jobs get done faster
- everyone does their own work
- more flexible work schedule

▶ Step 2

Read the sample response below. Identify the thesis by drawing a box around it, and then underline the key supporting ideas for the thesis.

Although some people prefer to work alone, I believe it is much better to work in teams. The benefits of working with a team vastly exceed the convenience of working alone. In my opinion, there are three main advantages to working in teams over working alone.

First, I prefer working in teams because I feel that it encourages productivity. Teams require each person to be responsible for a portion of the work. A person's failure to do his or her work affects the entire team. Within this kind of situation, team members feel a personal responsibility to ensure that their work is done well and in a timely fashion. If a single member of the team does not fulfill his or her duty, the entire team is affected. This sense of social obligation to others is lost when working alone. Working in teams inspires people to do good work.

Additionally, working in a team allows each person to work off of one another's strengths. If, for instance, some people in a work team are bad at designing products but are good at building them, they can find someone else to do the design work while they focus on the building process. This allows each member of the team to do what he or she is skilled at doing, which results in productive work. For example, the last time I did a group project, we were required to film a short video. I am not comfortable in

productivity:

the effectiveness of an effort to create something, usually in an industry

ensure:

to make certain that something will be the case

timely:

occurring in an ideal amount of time

obligation:

something that you must do

design:

to decide upon the look and function of a particular object when creating it

outlook:

point of view

efficient:

working in an organized and mindful way

front of cameras, but I was interested in filming and editing. My partner enjoyed being filmed and did a great job of presenting it. Because we each focused on our strengths, we did well on our group project.

Finally, I think that working in a team allows people to form important relationships with others. After working with others for a period of time, it is likely that friendships will be formed within the team. These relationships improve communication. For instance, I met a student who is now a good friend through a class project we did together. We worked well together and remained friends after the semester ended. Working alone does not create friendship and, as such, one's motivation is lost when one chooses to work alone.

In my experience, I feel that teams produce the best work possible. Teams make people both happier and more efficient.

► Step 3

In complete sentences, answer the following questions about the thesis and topic of the response in Step 2.

1. What is the thesis statement of the essay?

2. What is the topic sentence of body paragraph 1?

3. What is the topic sentence of body paragraph 2?

4. What is the topic sentence of body paragraph 3?

► Step 4

In complete sentences, answer the following questions about the organization of the response in Step 2.

1. Which "side" of the prompt does this essay take?

2. How does the writer support the thesis statement?

3. Does the writer present a comment or idea from the other side in the conclusion? If so, what is the comment or idea?

4. What is the main idea of the conclusion?

Read the sample response presenting another possible answer to the prompt from Step 1.

Even though many people like working in teams, I prefer to work on projects by myself. Since working alone has so many advantages, it is obvious to me that working alone is a better way to complete a project.

First, I believe that working alone allows a person to finish a job more quickly. Team projects take a long time to complete because teams require each person to be responsible for only a small part of the entire project. As a result, individual members of a team must often wait for other people before they can complete their work. This makes working in teams a lot slower and less efficient than working alone.

Additionally, requiring people to work alone helps the person in charge to ensure that everyone is doing his or her job. With group work, it is easy for team members to come up with an excuse when they fail to do the necessary work. This has happened to me many times when I was put into teams. Usually, I was the one forced to do most of the work. Yet

obvious:
easily understood;
self-explanatory

entire:
whole; no part left out

excuse:
a reason you give to explain
why you have not done
something or why you have
done something badly

discern:
to see or recognize
something

flexibility:
being easily modified or
altered to specific conditions

schedule:
a plan; a timetable for one's
day-to-day activities

since people who work alone are the only ones responsible for completing their work, it is easier to discern who is and is not completing their work on time.

preference:
a greater liking for one thing over another

Working alone also tends to give us far more flexibility in our work schedules. We all have different work preferences. Some people find that if they do work earlier in the morning, they are more productive. Others prefer to do work later in the day. People who work alone do not have to work around the schedules of others and can choose to work at a time that best suits them.

In conclusion, I feel that working alone is the best method to get work done. People should choose to work alone whenever possible.

► **Step 5**

After studying the two sample responses, give your own opinion on the prompt. Brainstorm your own ideas below. Then, write or type your essay.

Handwriting practice area with 12 horizontal lines.

02

Experience

► Step 1

Read the prompt and think about your own experience. List some ideas about your experiences in the blanks.

Do you feel that people gain better knowledge in school or outside of school? Why do you feel this way? Use specific reasons and examples to support your answer.

Outside of school:

- more practical knowledge
- appealing to employers
- students choose what to learn

In school:

- experts available to guide students
- meet others with similar interests
- exposed to many different views

► Step 2

Read the sample response below. Identify the thesis by drawing a box around it, and then underline the key supporting ideas for the thesis.

Many people believe that the best way to gain knowledge is through school. However, I disagree with this belief. In my opinion, a person will learn much more useful knowledge by pursuing options outside of a school environment.

The first reason why I think this is that experiences outside of school are more likely to give a person practical knowledge. The knowledge one tends to receive in school is not very practical. School involves learning about things like theories and experiments. In my experience, none of these has taught me anything about how the world actually works. Getting a job, traveling, and simply talking to ordinary people can produce knowledge that is more relevant than anything one will learn in school.

In addition, the knowledge one acquires outside of school can be more appealing to potential employers. A growing number of big business owners have explained that they would prefer to hire someone with "real world" experience instead of someone with a college degree. Someone who has started their own business, for instance, is likely to know more about business than someone with a degree in it.

Finally, gaining knowledge outside of school allows us to choose what we want to learn. Rather than having to obey the requirements of

option:
something that one can choose

practical:
involving real situations or events

theory:
one or more ideas that explain how something works

relevant:
important to what is being discussed

acquire:
to get something

curriculum:
a program of study

appealing:
attractive or interesting

a. standard college curriculum, learning outside of school allows us to study precisely what we want. This makes us more likely to remember what we have learned than if we had been forced to learn it in school. It also allows us to avoid wasting time studying subjects that we do not find appealing.

Not only is the knowledge outside of school more relevant, but it also may be more helpful to someone looking to get a job. For these reasons, life outside of school is likely to be far more rewarding to someone hoping to gain knowledge.

► Step 3

In complete sentences, answer the following questions about the thesis and topic of the response in Step 2.

1. What is the thesis statement of the essay?

2. What is the topic sentence of body paragraph 1?

3. What is the topic sentence of body paragraph 2?

4. What is the topic sentence of body paragraph 3?

► Step 4

In complete sentences, answer the following questions about the organization of the response in Step 2.

1. Which "side" of the prompt does this essay take?

2. How does the writer support the thesis statement?

3. Does the writer present a comment or idea from the opposing argument in the conclusion? If so, what is the comment or idea?

4. What is the main idea of the conclusion?

Read the sample response presenting another possible answer to the prompt from Step 1.

Even though some people feel like they learn more outside of school, most of the knowledge that I have acquired in my life has been through school. I firmly believe that attending school is the best way for a person to become educated.

The most obvious benefit of attending school is that there are many experts in various fields that can guide a student. Outside of school, it is difficult to find people as knowledgeable as the teachers you can find within schools. This lack of experts makes learning about anything outside of school difficult. The advantages of having teachers really become obvious when students begin to study subjects at advanced levels. For learning anything extensively, teachers are absolutely necessary.

Going to school also allows students to come into contact with others that have interests similar to their own. Having a group of peers that are

various:
assorted

knowledgeable:
knowing a lot about a subject or subjects

advanced:
more highly developed

peer:
a person of equal standing with another

structured:
organized in a clear way

expose:
to make something known

comprehensive:
including many details and aspects

studying the same topics can be an incredible resource for knowledge. For instance, these peers can provide the necessary help and support when a student has trouble learning about a difficult subject. I have had many experiences in school where my peers have helped me to understand a difficult concept.

Finally, going to school provides a structured environment where a person is exposed to a number of different viewpoints and subjects. Since students are required to take many different courses, they acquire a much broader understanding of a field. Those who choose to learn outside of a school are less likely to encounter views that differ from their own or to be exposed to new schools of thought.

For all of these reasons, I feel that going to school is really the best way to acquire knowledge. Ultimately, going to school offers a student a broader and more comprehensive knowledge of any given field.

► Step 5

After studying the two sample responses, give your own opinion on the prompt. Brainstorm your ideas below. Then, write or type your essay.

03

Experience

► Step 1

Read the prompt and think about your own experience. List some ideas about your experiences in the blanks.

Some people believe that cities should spend more money to construct public transportation systems. Others believe that public transportation systems are inconvenient and should not be constructed in cities. Which do you believe? Give specific reasons and examples to support your opinion.

For public transportation:

- better for the environment
- reduces petroleum
- automobile accidents decrease

Against public transportation:

- disruptive construction process
- only available in the cities
- overcrowded

► Step 2

Read the sample response below. Identify the thesis by drawing a box around it, and then underline the key supporting ideas for the thesis.

With concerns about pollution and oil shortages, many cities have begun to construct public transportation systems. However, I believe that cities that do not have public transportation systems should avoid constructing them. Constructing public transportation systems in large cities usually creates more problems than it solves.

My main reason for wanting to avoid constructing public transportation systems is because of all the disruption they cause. The construction of subways or train systems requires lots of money and the closing of central roads. It creates constant noise in surrounding areas. Plus, building these systems can take several years. Overall, they upset the flow of traffic and cause major delays in daily business.

Additionally, public transportation systems rarely cover the outskirts of cities. Lots of people today are buying homes outside of major cities. Yet, since most public transportation systems only run within city limits, many of the people that could use these systems never get to use them. As suburbs are becoming more popular, it is unclear how useful public transportation will be to the number of people that do not live in the city

construct:

to build something

disruption:

a problem that prevents something from continuing

subway:

a passenger railroad system that goes underground

flow:

a continuous movement in a stream

traffic:

the vehicles which are traveling in an area at a certain time

outskirts:

the outer parts of a city or town

suburb:

a district of a city located outside of its center

center.

Finally, public transportation systems around the world often suffer from overcrowding during peak hours. While they are often held up as a solution to congestion and the stress of traffic, the crowded environment of a public transportation system can be just as stressful as dealing with street traffic. For most people, traffic is preferred over being packed into a subway car with hundreds of other people.

Public transportation systems are not worth the effort. For this reason, large cities without a public transportation system would be wise to avoid building one. I feel that the money would be better spent improving roads and the way traffic moves in a city.

congestion:

the state of being blocked up or too full of something

► Step 3

In complete sentences, answer the following questions about the thesis and topic of the response in Step 2.

1. What is the thesis statement of the essay?

2. What is the topic sentence of body paragraph 1?

3. What is the topic sentence of body paragraph 2?

4. What is the topic sentence of body paragraph 3?

► Step 4

In complete sentences, answer the following questions about the organization of the response in Step 2.

1. Which "side" of the prompt does this essay take?

2. How does the writer support the thesis statement?

3. Does the writer present a comment or idea from the opposing argument in the conclusion? If so, what is the comment or idea?

4. What is the main idea of the conclusion?

Read the sample response presenting another possible answer to the prompt from Step 1.

Public transportation systems have been a part of many European cities for over a hundred years. However, despite the benefits that Europe has received from its public transportation systems, many cities do not have these systems in place. I feel that it would be beneficial for all major cities to construct better mass public transportation systems.

First, studies show that public transportation systems are much better for the environment than automobiles. Individual cars produce a large amount of pollution within a city. This decreases the quality of the air and hurts public health. Public transportation helps reduce pollution because fewer vehicles are transporting more people. In fact, public transportation systems have actually been linked with improving the health of people that live in the city.

Furthermore, public transportation systems would decrease our use of

link:

to connect or associate something with another

shortage:

a lack of something

potential:

something that is possible or likely to occur

crisis:

an urgent or dangerous situation

minimize:

to reduce

injure:

to harm or damage

fatal:

causing death

petroleum. Many major cities will face a petroleum shortage in upcoming years. Soon it may not be financially possible for the average person to drive to work every day of the week. Constructing mass public transportation systems now, before a potential crisis occurs, can help minimize the impact that an oil shortage would have on our economy. This will increase the amount of time before severe shortages occur.

measure:
a plan or course of action with a specific purpose in mind

Moreover, public transportation systems help reduce the number of automobile accidents. Large numbers of people are injured or killed in automobile accidents each year. Public transportation systems are extremely safe compared to automobiles, since fatal accidents are incredibly uncommon in public transports. As such, public transportation can actually make citizens of a city safer.

All of these reasons support the creation of better mass public transportation systems in major cities. As a result, I believe that cities should take every measure possible to begin constructing them.

► Step 5

After studying the two sample responses, give your own opinion on the prompt. Brainstorm your ideas below. Then, write or type your essay.

Blank writing area with horizontal lines for brainstorming and writing an essay.

04 Experience

► Step 1

Read the prompt and think about your own experience. List some ideas about your experiences in the blanks.

Do you agree or disagree with the following statement? Schools should focus more on science and mathematics than on humanities courses. Give specific reasons and examples to support your answer.

More focus on math and sciences:

- useful for many purposes
- easier to find a job
- better prepared for adult world

Same amount of focus on humanities:

- valuable for society
- attractive to many businesses
- students more involved with community

► Step 2

Read the sample response below. Identify the thesis by drawing a box around it, and then underline the key supporting ideas for the thesis.

In this changing world, math and science are becoming increasingly important. As a result, I think it is a good idea for schools to shift their attention away from the humanities and begin to concentrate more on math and science. There are a number of reasons why schools should encourage this change.

First, math and science are disciplines that can be used for a number of purposes. Unlike subjects such as philosophy, which are focused on abstract arguments and rarely have any effect on reality, science and math clearly benefit the society immediately around us. Math and science are necessary to build bridges, create new sources of energy, and invent new devices. They play a key role in nearly all parts of our day-to-day lives.

Students that are educated in math and science are also more likely to find jobs than students who have studied the humanities. There are countless jobs which involve math, research, and science principles. Thus, there are many job opportunities for students who have studied math and science. The number of jobs in the humanities, on the other hand, is relatively small. By focusing on math and science, a school can help its students find employment after graduation.

shift:

to change the emphasis or direction

discipline:

a subject that people study

abstract:

existing as an idea, but not existing physically

key:

important

employment:

the condition of being paid for work

finances:

the management of money

yield :

to produce or provide something

Moreover, students educated in math and science tend to be better able to deal with the adult world. An understanding of math, for instance, prepares a person for the real world by giving them the tools needed to understand and handle their finances. The humanities, by and large, do not yield knowledge that is immediately useful in everyday activities.

A shift away from the humanities and toward math and science will not only help students, but the society around them as well. These reasons provide a compelling argument for schools to begin shifting their attention away from the humanities.

► Step 3

In complete sentences, answer the following questions about the thesis and topic of the response in Step 2.

1. What is the thesis statement of the essay?

2. What is the topic sentence of body paragraph 1?

3. What is the topic sentence of body paragraph 2?

4. What is the topic sentence of body paragraph 3?

► Step 4

In complete sentences, answer the following questions about the organization of the response in Step 2.

1. Which "side" of the prompt does this essay take?

2. How does the writer support the thesis statement?

3. Does the writer present a comment or idea from the opposing argument in the conclusion? If so, what is the comment or idea?

4. What is the main idea of the conclusion?

Read the sample response presenting another possible answer to the prompt from Step 1.

Recently, there has been talk of shifting our schools' focus from humanities to the disciplines of math and science. However, I disagree with the idea that schools should shift away from studying the humanities. I feel that there are benefits to studying the humanities which should not be overlooked.

Firstly, the study of humanities can be incredibly valuable to a society. The humanities provide insight into cultural trends, which can actually be quite practical. The study of history, for instance, can help world leaders understand the reasons behind conflicts between nations. This historical understanding is absolutely necessary in solving conflicts and creating peace. This is just one example of where an understanding in the humanities is important.

Secondly, in the past several years, many businesses have had a renewed interest in people who study the humanities. Those who learn

humanities:

subjects such as history, literature, and philosophy; subjects that are based on the study of human culture

insight:

the capacity to gain a strong understanding of something

conflict:

serious disagreement or fight between two or more groups

renew:

to happen again after a pause, and with more enthusiasm than before

behavior:

the way in which a person acts

about the humanities have made the study of humans and human behavior a central part of their understanding of the world. Math and science simply focus on memorizing basic rules on how the physical world works. Yet the humanities pay special attention to how people think and behave. This can be an important part of running a successful business.

Finally, students who study humanities are more likely to be involved with their community. In my experience, I have found that students who study the humanities are more likely to vote and volunteer because they understand the way society and culture works.

By encouraging a focus on humanities, colleges can help produce responsible citizens.

memorize:
to remember something
civic:
of or relating to a
community or group

► Step 5

After studying the two sample responses, give your own opinion on the prompt. Brainstorm your ideas below. Then, write or type your essay.

Lined writing area for brainstorming and essay writing.

Chapter 5

Writing Thesis Statements and Topic Sentences

Necessary Skills

- Stating your opinion or thesis clearly
- Stating clear and strong topic sentences that support the thesis

Strategies

- Make your thesis statement clear and concise.
- For your thesis, do not write, "I agree with this opinion." Restate the question when giving your opinion, such as "I agree that when people reach a certain age, they should no longer be able to drive."
- Make your topic sentence a summary of all the points you will cover in the paragraph.
- Write clear topic sentences that will naturally lead into the rest of the information in the paragraph.

Example:

Weak topic sentence → I think cows are more useful than horses.

Strong topic sentence → Cows are more useful than horses for two main reasons.

Thesis Statements

► Step 1

Read the following prompts and sample thesis statements. Underline words in the thesis statements that are also used in the prompts.

Prompt 1:

Some people feel that celebrities are overpaid. Other people think they deserve the money they earn. Which is your opinion? Give specific reasons and examples to support your answer.

Thesis Statement 1:

Despite the popularity of certain celebrities, I feel that celebrities earn much more money than they deserve for several reasons.

Prompt 2:

If some tourists wanted to travel to one city in your nation, which city would you recommend for them to visit? Give specific reasons and examples to support your answer.

Thesis Statement 2:

If tourists were to ask my opinion on which city in my nation to visit, I would suggest that they visit Los Angeles because of three major attractions that can be found there.

Prompt 3:

What are some qualities that you think a good role model should have? Give specific reasons and examples to support your answer.

Thesis Statement 3:

In my opinion, good role models are people who are caring, likable, and above all, ethical.

Prompt 4:

Do you agree or disagree with the following statement? Employees should always try to seek advancement at their jobs. Why do you feel this way? Give specific reasons and examples to support your answer.

Thesis Statement 4:

I agree that employees should always try to seek advancement at their jobs because of all the benefits that job advancement can offer.

▶ Step 2

Read the following prompts. Decide if each prompt asks you for your experience or your opinion. Then write a thesis statement in response to each prompt.

Prompt 1:

How have your parents formed you into the person you are today? Give specific reasons and examples to support your answer.

Does this question ask you to explain your opinion or your experience? Select one.

opinion experience

Thesis statement: _____

Prompt 2:

Do you feel that students should be required to participate in physical education in schools? Give specific reasons and examples to support your answer.

Does this question ask you to explain your opinion or your experience? Select one.

opinion experience

Thesis statement: _____

Prompt 3:

Some people prefer to take notes using a computer. Others prefer to write out notes by hand. Which do you think is better? Give specific reasons and examples to support your answer.

Does this question ask you to explain your opinion or your experience? Select one.

opinion experience

Thesis statement: _____

Prompt 4:

What was the most memorable place you have ever visited? Based on your experiences, would you recommend this place to others? Give specific reasons and examples to support your answer.

Does this question ask you to explain your opinion or your experience? Select one.

opinion experience

Thesis statement: _____

02 Topic Sentences

READING

LISTENING

SPEAKING

WRITING

PRACTICE TEST

► Step 1

Read the prompts and three sentences that could be used in a response to each prompt. One sentence is a thesis statement. Another is the topic sentence of a body paragraph. The last sentence is a reason, example, or detail used in a body paragraph. Number the sentences as follows:

- Thesis statement (1)
- Topic sentence (2)
- Reason, example, or detail (3)

Prompt 1:

Do you believe that followers are just as important as leaders? Give specific reasons and examples to support your answer.

- () For instance, the whole office of the president would be useless if there were not any people around to follow the president's laws.
- () In my opinion, the leader needs his followers just as much as the followers need the leader.
- () First of all, followers are important because without them, leaders would not have any power.

Prompt 2:

Some people feel that humans should be able to dig for oil anywhere, as long as it benefits mankind. Others believe that certain areas of land should be reserved for animal use. Which do you think is better? Give specific reasons and examples to support your answer.

- () Imagine how many species we would lose if we dug for oil in important animal ecosystems.
- () First, we have a responsibility as humans to take care of our fellow creatures on the planet.
- () Though I realize that benefits are lost by reserving certain areas of land just for animal use, I feel that this is the best course of action for several reasons.

Prompt 3:

Do you feel that computer games are good entertainment, or do you think that they are a waste of time? Give specific reasons and examples to support your answer.

- () I know that computer games can be abused, but I still feel that the advantages of computer games are greater than the disadvantages.
- () Computer games provide a much needed escape from the hardships and stress of life's daily activities.
- () For example, whenever I had a bad day as a child, I could simply turn on a computer game and immediately feel better.

Prompt 4:

In your opinion, which do you think was the better invention: the automobile or the computer? Give specific reasons and examples to support your answer.

- () When the automobile was invented, people could travel long distances in a relatively short amount of time.
- () Today, while computers allow us to communicate with other people, the automobile actually lets us see them in person.
- () I believe that the automobile is definitely a better invention than the computer.

► Step 2

Read the following prompts. Complete the thesis statements. Then provide three reasons or examples that you would use to support each thesis in a response.

Prompt 1:

Do you believe that it is just as beneficial for children to lose at games as it is for them to win? Give specific reasons and examples to support your answer.

Thesis statement: It is my belief that losing at games _____.

Reason/Example 1: _____

Reason/Example 2: _____

Reason/Example 3: _____

Choose one of the ideas you listed above. Rewrite the idea as a full sentence that could be used as the topic sentence of a body paragraph.

Topic sentence: _____

Prompt 2:

Some people prefer to take multiple choice tests, while others prefer an essay writing format. Which do you prefer? Give specific reasons and examples to support your answer.

Thesis statement: I prefer to take tests that _____

Reason/Example 1: _____

Reason/Example 2: _____

Reason/Example 3: _____

Choose one of the ideas you listed above. Rewrite the idea as a full sentence that could be used as the topic sentence of a body paragraph.

Topic sentence: _____

Prompt 3:

The government has decided to donate some money for a construction project in your city. Would you prefer the money be used to create a park, or would you prefer it be used to build a mall? Give specific reasons and examples to support your answer.

Thesis statement: I would prefer the money _____

Reason/Example 1: _____

Reason/Example 2: _____

Reason/Example 3: _____

Choose one of the ideas you listed above. Rewrite the idea as a full sentence that could be used as the topic sentence of a body paragraph.

Topic sentence: _____

Prompt 4:

Do you feel it is better to study hard the night before a test, or do you feel that studying should be spread out over a period of time? Give specific reasons and examples to support your answer.

Thesis statement: I feel that it is better to study _____

Reason/Example 1: _____

Reason/Example 2: _____

Reason/Example 3: _____

Choose one of the ideas you listed above. Rewrite the idea as a full sentence that could be used as the topic sentence of a body paragraph.

Topic sentence: _____

Chapter 6 Making Ideas Flow

Strategies

- Do NOT try to say everything in the introduction; save details and examples for the body of your essay.
- Do NOT start with a statement that is too general; a more specific statement better sets up the information to follow.

Characteristics of a good introduction:

- one paragraph (three to five sentences)
- an introduction to the general topic of the essay
- includes the thesis statement and a restatement of the question
- includes points that will be discussed or elaborated on in the body

- Write an accurate and clear topic sentence for each body paragraph.
- Make sure there are logical connections between statements.

Characteristics of a good body paragraph:

- one to three paragraphs
- a topic sentence that states the main idea of that paragraph
- has specific examples, reasons, or other details
- includes other sentences that link ideas or show transitions between ideas

- Do NOT use the same words and expressions in your conclusion that you used in your introduction.
- Do NOT introduce new ideas or concepts that belong in a new body paragraph.

Characteristics of a good conclusion:

- one paragraph (three to five sentences)
- a restatement of your thesis in different words
- has a summary of your main points
- includes one or both of the following: a consideration of the opposite opinion and a recommendation

▶ Step 1

Read the prompt and think of ideas to list in the blanks.

Some people believe that it is important to know about one's heritage. Others feel that knowing about one's family history is unnecessary. Which do you believe? Give specific reasons and examples to support your answer.

Knowing heritage is important:

- provides greater sense of identity
 - generates appreciation for one's roots
 - creates closer bond with relatives
-
-

Knowing heritage is not important:

- not important for today's society
 - discourages unity among people
 - records not always available
-
-

▶ Step 2

Read the sample response. Think about the role of the sentences in each part of the essay. Look for any transitions that link the ideas and underline them. Then put the sentences in the right order.

Introduction:

- (A) Perhaps for this reason, less people are interested in knowing about their heritage.
- (B) In fact, my recent attempt to discover my own heritage has led to a greater sense of identity and a closer connection with my relatives.
- (C) Despite this thinking, I believe that it is very important for someone to know about his or her heritage.
- (D) In today's multicultural society, it is becoming harder to keep track of where we come from.

multicultural:

involving or consisting of people from different cultures

heritage:

the history and traditions of preceding generations

roots:

a person's family background

overlook:

to fail to notice something

relative:

a person that is related by blood or marriage

Body paragraph 1:

- (A) Since taking the time to explore these Russian roots, I have come to appreciate an aspect of the world of which I was previously unaware.
- (B) I discovered that my family had emigrated from Russia.
- (C) After this discovery, I took some time to explore Russian literature.
- (D) Two years ago, I attempted to discover my own heritage so I could better understand and appreciate where I came from.
- (E) I found many of the books to be interesting and significant to me.
- (F) Consequently, my new appreciation for my Russian heritage has allowed many interesting paths of knowledge and passion to open up for me.

origin:

the place or situation where someone or something comes from

Body paragraph 2:

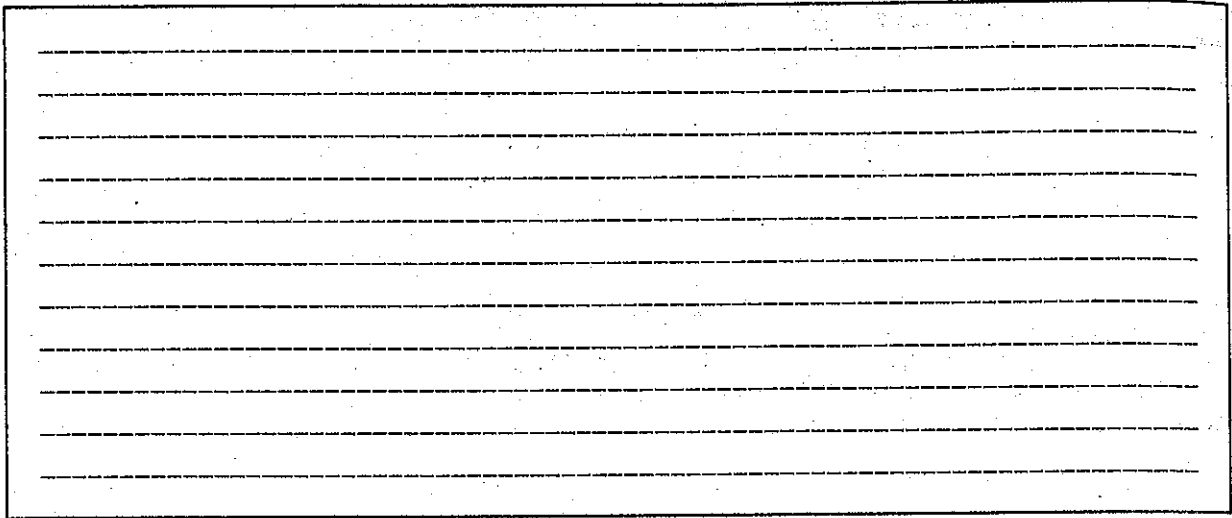
- (A) I also grew closer to many of my relatives and learned a number of interesting things from them.
- (B) These lessons helped me realize that coming to understand one's heritage creates special bonds between relatives.
- (C) I came away from these discussions with a greater knowledge of my own heritage.
- (D) We both have something—an origin—that is shared between us.
- (E) Inspired by my study of Russian literature, I took the time to sit down with some of my older relatives and discussed what they knew about our heritage.

Conclusion:

- (A) I continue to find meaning in the roots I discovered and explored.
- (B) It is a process that can be rewarding to all people if they are open to it.
- (C) Ultimately, learning about my heritage has been a truly interesting process.

► Step 3

Look back at the ideas you wrote in the blanks for Step 1. Write your own response to the prompt using one of your own ideas or another idea from Step 1.

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02 Opinion

► Step 1

Read the prompt and think of ideas to list in the blanks.

Companies usually offer their employees benefits in addition to their pay. What type of benefits would you prefer at your ideal job and why? Give specific reasons and examples to support your answer.

Paid time off from work:

- more time to spend with family
- able to take time off when sick
- chance to take long vacations

Other benefits:

- friendly work environment
- flexible work schedule
- able to take short vacations

► Step 2

Read the sample response. Think about the role of the sentences in each part of the essay. Look for any transitions that link the ideas and underline them. Then put the sentences in the right order.

Introduction:

- _____
- (A) Vacation time, sick leave, overtime—all of these are benefits that many companies provide in addition to pay.
 - (B) However, now companies are offering many other benefits to their workers.
 - (C) Yet in my opinion, the best benefits that a job can offer me are a friendly work environment and a flexible work schedule.
 - (D) It used to be that companies simply concentrated on how much to pay their employees.

overtime:

extra hours that people work at their jobs

value:

to consider something to be very important

essential:

absolutely necessary; extremely important

tendency:

an inclination to act in a particular way

environment:

the surroundings or conditions around a person

Body paragraph 1:

fundamental:
being centrally important

- (A) These good conversations make the time at work go by faster.
- (B) I realize that I will not always be able to have conversations with the nicest of employees, but I believe that companies can help make a place where employees can easily interact.
- (C) First, I think that companies need to create a friendly work environment for their employees.
- (D) This interaction between my coworkers and me is something that I value very much at a job.
- (E) I need this friendly work environment because I am the kind of person that enjoys having a good conversation with a person while working.

Body paragraph 2:

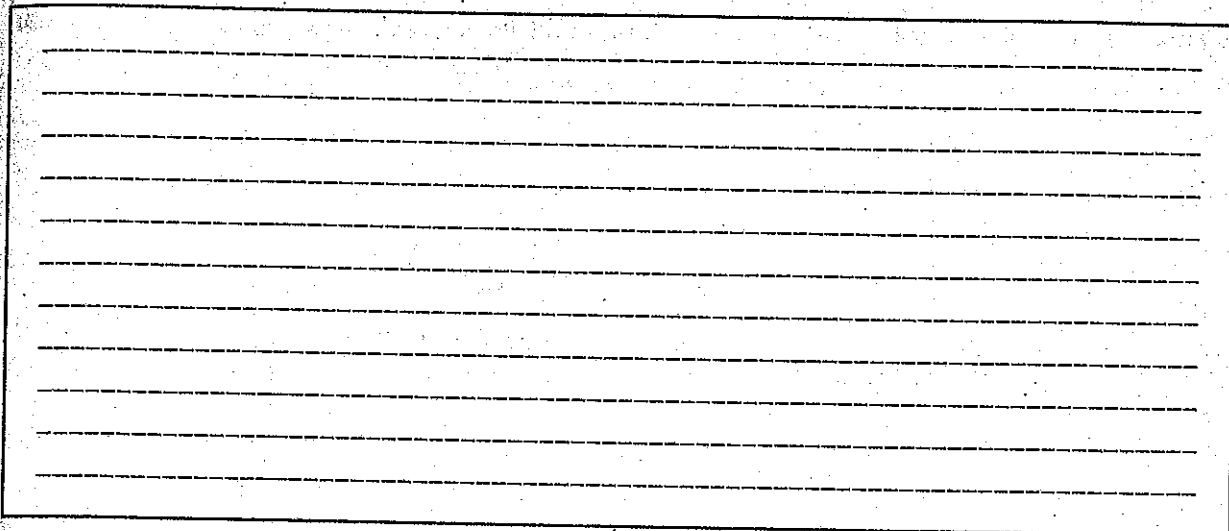
- (A) In my case, I enjoy going on short vacations on the weekends.
- (B) This typically requires that I have three days off of work.
- (C) Without this flexibility, I have a tendency to become unhappy with a job.
- (D) A flexible schedule allows employees to make unexpected changes to their plans without having to worry about formally taking time off from work.
- (E) In addition, I find that having a flexible schedule at my job is an essential part of enjoying the job.

Conclusion:

- (A) These two elements are a fundamental part of me enjoying any job that I have.
- (B) In conclusion, I know that my ideal job would be in a place with a friendly environment and a flexible schedule.
- (C) I hope to find both these benefits in the job that I choose as a career.

▶ Step 3

Look back at the ideas you wrote in the blanks for Step 1. Write your own response to the prompt using one of your own ideas or another idea from Step 1.



03

Opinion

► Step 1

Read the prompt and think of ideas to list in the blanks.

Should the government enforce a limited number of hours per week that each citizen can work? Give specific reasons and examples to support your answer.

For government law:

- limit corrupt business practices
 - help overworked employees
 - monitor companies more closely
-
-

Against government law:

- infringe on people's rights
 - have not worked in past
 - create unemployment
-
-

► Step 2

Read the sample response. Think about the role of the sentences in each part of the essay. Look for any transitions that link the ideas and underline them. Then put the sentences in the right order.

Introduction:

- (A) I strongly believe that it is not right for the government to regulate the number of hours a person can work.
- (B) In support of this view, I think it is important to recognize the rights of workers and businesses.
- (C) Additionally, I do not believe that we should give the government so much control over something that will not succeed.
- (D) It is important to recognize the boundaries of where the government should and should not be involved.

regulate:

to impose controls upon a behavior

boundary:

the limit of a subject

infringe:

to break a rule or agreement

favor:

in an attitude of approval

Body paragraph 1:

- (A) Moreover, people should not be limited in the number of hours they work because of a law.
- (B) First of all, allowing the government to control how much time an employee could work would infringe on the rights of both business owners and workers.
- (C) Given the nature of the employee/employer relationship, I don't believe there is need for government regulation.
- (D) If workers are not satisfied with the hours they are asked to work, they can always look for another job.
- (E) In my opinion, only business owners understand how much labor they need from their workers.

Body paragraph 2:

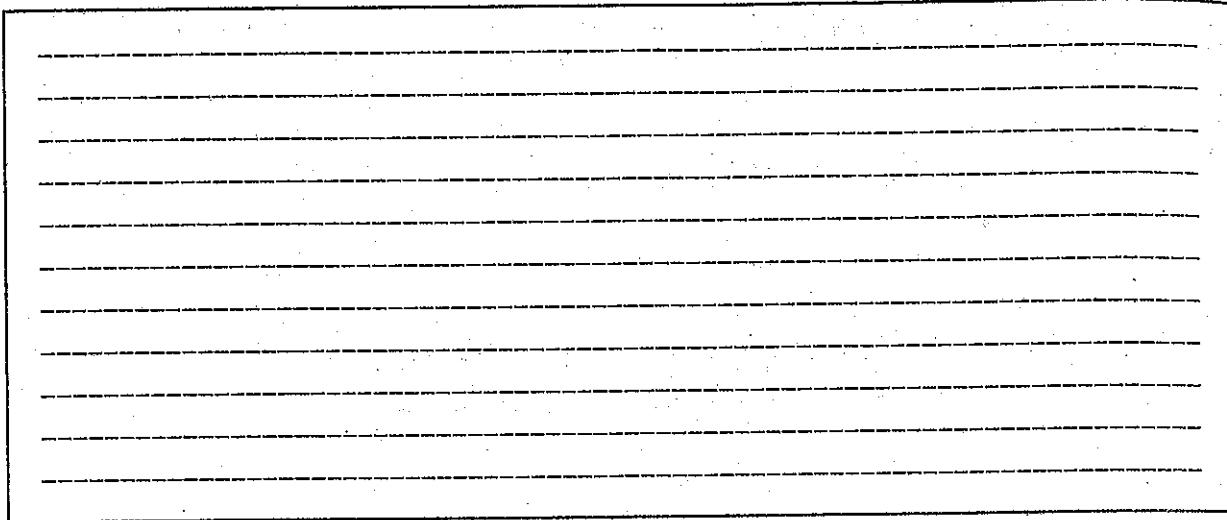
- (A) Unemployment rates in these countries are high, which seems to indicate that government intervention in this business practice is not working.
- (B) They did this in an attempt to help the workers, but this arrangement is achieving the opposite effect.
- (C) In addition, government regulation in this area is not beneficial to society.
- (D) For example, some European governments have already passed restrictions on how many hours each citizen can work.
- (E) Therefore, it seems reasonable to limit the government's power in this area.

Conclusion:

- (A) As a result, I am not in favor of the government passing such a law.
- (B) The law gives the government too much control.
- (C) In conclusion, I see very few reasons for a law controlling hours worked.

► Step 3

Look back at the ideas you wrote in the blanks for Step 1. Write your own response to the prompt using one of your own ideas or another idea from Step 1.

A large rectangular box with a solid black border, containing ten horizontal dashed lines for writing. The lines are evenly spaced and extend across most of the width of the box.

04 Opinion

READING

LISTENING

SPEAKING

WRITING

PRACTICE TEST

► Step 1

Read the following prompt.

What are some important qualities of a good friend? How have these qualities changed as you have gotten older? Give specific reasons and examples to support your answer.

Now read two ideas for possible responses to the prompt. Write one more idea of your own.

1. Good friends are people who listen to you.
2. My best friends are those who I can have long conversations with.

3. _____

► Step 2

Read the sample introduction below. Then, in the space provided, write body paragraphs for two of the ideas above. Try to write three to five sentences for each body paragraph. Then read the sample conclusion paragraph.

Introduction:

Good friends should have many qualities which show that they are trustworthy and true. They should be loyal, interesting, and enjoyable to be around. Yet I have realized that as I have gotten older, the qualities that I believe a good friend should have come down to two important features. I find that the friends who I value the most are those who are willing to listen to me and those who have something to teach me.

Body 1:

► Step 4

Now read the sample response below. What similarities and differences do you see with the paragraphs you wrote?

► Sample Response

Good friends should have many qualities which show that they are trustworthy and true. They should be loyal, interesting, and enjoyable to be around. Yet I have realized that as I have gotten older, the qualities that I believe a good friend should have come down to two important features. I find that the friends who I value the most are those who are willing to listen to me and those who have something to teach me.

Having a friend that can listen is, in my opinion, the most essential part of a good friendship. When I was younger, I rarely had long conversations with my friends. However, as I have gotten older, I enjoy having longer talks. As such, having a friend who is willing to listen to me is a core part of my idea of friendship. Without this willingness to listen, I have an incredibly hard time becoming close to someone. I am more inclined to feel closer to someone who will listen to me, and this is something I highly value in my current friends.

Additionally, I find myself particularly drawn toward people who are passionate about subjects that I myself know very little about. I enjoy discussing subjects with people more knowledgeable about them than I am. Moreover, I find that this is a key part of making someone a good friend. This process of sharing knowledge on subjects that we are passionate about is something I really appreciate. On the other hand, I have had friends in the past who seem to have no passion about anything. In these last few years, I have grown distant from them.

Overall, these two features are what I find most important in my friends. They might not have been as important to me when I was younger. However, they are now the foundation of nearly every friendship that I have.

core:

central; main

willingness:

the quality of being ready to do something

inclined:

feeling willing or drawn to act in a particular way

passionate:

enthusiastic; showing strong feelings

process:

a series of steps necessary to reach a particular goal

distant:

far away from in terms of a relationship

foundation:

the most basic or important part of something

05

Opinion

► Step 1

Read the following prompt.

Some people believe that artists are just as important to society as scientists are. Others feel that scientists contribute more to a society. Which opinion do you prefer? Give specific reasons and examples to support your answer.

Now look at the outline of a possible response to the prompt. Then write the thesis and the conclusion.

Thesis: _____

Key point 1: Artists are able to unite people within a society.

Key point 2: The work of artists captures the spirit of a particular time period.

Key point 3: Artists have a special connection with society that allows them to spot changes and give them meaning through their art.

Conclusion: _____

► Step 2

Now write an introduction and a conclusion for the prompt in Step 1. Use your thesis and conclusion from Step 1. Try to write three to five sentences for each paragraph.

Introduction:

Conclusion:

▶ **Step 3**

Write your own response to the prompt in Step 1. First, think of two or three ideas for body paragraphs. Then write a response using your ideas.

Body Paragraph 1:

Body Paragraph 2:

Body Paragraph 3:

► Step 4

Now read the sample response below. What similarities and differences do you see with the paragraphs you wrote?

Without a doubt, scientists are extremely important to a society. However, while I value the role of scientists in a society, I now believe that artists are just as important. I feel that artists bring three major contributions to society.

First, I think that artists play an important role in uniting people. Works of art can act as a common point of identity for all citizens within a society. It seems that nearly any nation in the world has at least one artistic work that its people can identify with. In the US, the Statue of Liberty is something that brings people together and creates a shared bond. I believe that art does a wonderful job of binding citizens together within a society.

Additionally, I feel that artists contribute to society by creating timeless works that capture the spirit of a particular time. For instance, my favorite painting of the 18th century French emperor Napoleon on his horse expresses the glory of the period. The figure of Napoleon dominates the painting and gives one an idea of French attitudes toward their ruler. In this way, artists create important pieces of art that help express the period in a way that history books cannot.

Finally, I think that artists have a special connection with the society around them. This connection allows artists to spot new changes in society and give them meaning. Many of the artists of the Renaissance, for example, expressed the changing attitudes and views long before scholars expressed these concepts. This cultural connection allows artists to play a key role in shaping public perceptions that may be changing in a society.

These connections to culture and society give artists an important role. While artists may not be curing diseases or creating new inventions, they are creating works of cultural expression that are important socially and historically.

unite:

to join together

Identify:

to associate closely with something else

bind:

to connect two or more things together

timeless:

unchanged by the passage of time

dominate:

to overpower

Renaissance:

the period in Europe between the 14th and 16th centuries when there was an increased interest in art and literature

scholar:

a specialist in a particular branch of study

perception:

a way of understanding or thinking about something

06 Opinion

▶ Step 1

Read the following prompt.

Some people believe that first impressions are very accurate. Others get to know someone before forming an opinion. Which do you think is better? Give specific reasons and examples to support your answer.

Now look at the outline of a possible response to the prompt. First, identify which side of the argument the responses support. Then write one more idea of your own that supports that side of the argument.

First impressions:

1. help us determine whether to talk to someone again in the future
2. establish how a person is viewed by others
3. _____

▶ Step 2

Read the sample introduction below. Then, in the space provided, try to write body paragraphs for two of the ideas above. Try to write three to five sentences for each body paragraph. Then read the sample conclusion paragraph.

Introduction:

I know that sometimes first impressions of people can be wrong. Yet I believe that it is important to rely on these first impressions. First impressions play a key role in future interactions and can be an important part of nearly all relationships.

Body 1:

► Step 4

Now read the sample response below. What similarities and differences do you see with the paragraphs you wrote?

► Sample Response

I know that sometimes first impressions of people can be wrong. Yet I believe that it is important to rely on these first impressions. First impressions play a **key** role in future interactions and can be an important part of nearly all relationships.

One reason why I believe that first impressions are important is that they usually determine whether you will interact with a person again. For example, if I get a **bad** first impression of someone I have just met, I am likely to avoid interacting with that person in the future. As a result, first impressions for me are what usually lead to any future encounters.

Even if two people interact after their first meeting, it is likely that the first impression will remain with them over the course of their relationship. In my own experience, I once met a person at a party who spoke negatively about a **friend**. This made me think that this person was not trustworthy. I have spoken with this individual several times since then, and I have never heard him say anything else that was negative. However, because of that first impression, I still cannot bring myself to trust him.

Also, first impressions of people are often used to describe them to others. This has happened with me many times. If, for instance, I meet a person and she is very quiet initially, I am likely to describe her as quiet to others. Even if the person later opens up and becomes quite talkative, I am still inclined to describe her as quiet because of my first impression of her.

Given the way a first impression affects my own perception of a person, I believe that it is very important. While I might talk with a person again many times after that first interaction, the first impression I had with that person always stays with me.

impression:

an idea, feeling, or opinion about someone

determine:

to decide something

interact:

to communicate with each other

negatively:

in a harmful or adverse way

trustworthy:

able to be trusted

individual:

one person

initially:

at first

talkative:

known to do a lot of talking

Vocabulary Review 3

Instructions: Choose the best word or phrase to complete each sentence.

1. Carolyn takes the _____ in the morning so she doesn't have to drive her car.
(A) obligation
(B) traffic
(C) subway
(D) congestion
2. My uncle has a gloomy _____ on life, but my aunt is a very positive person.
(A) option
(B) schedule
(C) discipline
(D) outlook
3. I've never been a fan of _____ art because I can never tell what the subject really is.
(A) abstract
(B) appealing
(C) comprehensive
(D) efficient
4. It's important for people to keep their _____ in order, so they know how much money they have.
(A) peers
(B) theories
(C) finances
(D) excuses
5. They found a great house in the _____ north of the city.
(A) crisis
(B) preferences
(C) traffic
(D) suburbs
6. My history professor is very _____ about ancient civilizations, so his lectures are very interesting.
(A) knowledgeable
(B) structured
(C) efficient
(D) practical
7. Steve is taking _____ chemistry this year, but he's always been good at science.
(A) linked
(B) renewed
(C) advanced
(D) structured
8. Usually when people catch colds, they have nasal _____, also known as a stuffy nose.
(A) obligation
(B) option
(C) congestion
(D) disruption
9. The school board is making changes to the _____ that will be taught next year.
(A) preference
(B) schedule
(C) productivity
(D) curriculum
10. Sometimes it is hard to _____ a person's true character right away.
(A) ensure
(B) flow
(C) discern
(D) shift

11. She has been looking for _____ for about four months now, but still hasn't found a job.
- (A) obligation
(B) peers
(C) shortage
(D) employment
12. Hank is very intelligent academically, but he doesn't make very _____ decisions.
- (A) structured
(B) practical
(C) comprehensive
(D) fatal
13. I didn't see how today's lecture was _____ to the reading that was assigned.
- (A) relevant
(B) disruptive
(C) efficient
(D) civic
14. In order to become a doctor, you have to _____ a lot of things about the human body.
- (A) yield
(B) memorize
(C) design
(D) minimize
15. Gas _____ in many places around the world are making it too expensive to drive vehicles.
- (A) outlooks
(B) theories
(C) shortages
(D) excuses

Instructions: Choose the word closest in meaning to the underlined word or phrase.

16. Not wearing a seat belt can increase the chances of a deadly injury occurring in a car accident.
- (A) fatal
(B) key
(C) comprehensive
(D) entire
17. There is something very attractive about a big slice of chocolate cake.
- (A) discerning
(B) relevant
(C) appealing
(D) productive
18. Strange weather patterns in the 18th century were related to a volcanic eruption.
- (A) acquired
(B) linked
(C) constructed
(D) exposed
19. He could not come to lunch with us today because he had a commitment at work.
- (A) obligation
(B) preference
(C) shortage
(D) insight
20. People usually take aspirin to reduce pain, but it is also good for preventing heart attacks.
- (A) renew
(B) congest
(C) minimize
(D) discern

21. Ice cream stores now have a lot of flavor choices to suit anyone's taste.
- (A) theories
 - (B) peers
 - (C) crises
 - (D) options
22. The whole family went on vacation this year to Hawaii, and they all had a good time.
- (A) entire
 - (B) potential
 - (C) various
 - (D) structured
23. The company decided to change their marketing strategy to make their products more appealing to customers.
- (A) flow
 - (B) shift
 - (C) acquire
 - (D) expose
24. There are different ways to prepare for a test, so it is good to find out what works best for you.
- (A) relevant
 - (B) appealing
 - (C) various
 - (D) disruptive
25. Farms produce the majority of fruits, vegetables, and other foods that we buy at the store.
- (A) yield
 - (B) injure
 - (C) memorize
 - (D) construct
26. I was able to get the latest video game console before the store sold out of them.
- (A) produce
 - (B) acquire
 - (C) oblige
 - (D) discern
27. She offered no reason for why she did not attend class the past two weeks.
- (A) schedule
 - (B) behavior
 - (C) shortage
 - (D) excuse
28. The coach thought it was easily understood what he expected from his players, but he was mistaken.
- (A) efficient
 - (B) obvious
 - (C) comprehensive
 - (D) key
29. When there are a lot of things going on at once, sometimes it is easier to make plans to stay on track.
- (A) appeals
 - (B) outskirts
 - (C) insights
 - (D) schedules
30. Molly revealed Susan's secret, so now Susan feels like her best friend has betrayed her.
- (A) ensured
 - (B) disrupted
 - (C) abstracted
 - (D) exposed

Vocabulary Review 4

Instructions: Choose the best word or phrase to complete each sentence.

1. She has a _____ to forget things, so she writes lists to remind herself of what she needs to do.
(A) origin
(B) tendency
(C) heritage
(D) perception
2. I haven't known him very long, so I don't really know how _____ he is.
(A) linked
(B) timeless
(C) multicultural
(D) trustworthy
3. Leonardo DaVinci is a famous artist and inventor who lived during the _____ era.
(A) Willingness
(B) Individual
(C) Renaissance
(D) Timeless
4. Aaron is going to visit his _____ in Italy this summer, and he's really excited about going.
(A) relatives
(B) impressions
(C) boundaries
(D) regulations
5. My sister always gets in trouble at school because she's so _____. She just can't stay quiet during class.
(A) binding
(B) essential
(C) talkative
(D) scholarly
6. Sometimes when you are in a hurry, it is easy to _____ small details.
(A) overlook
(B) identify
(C) dominate
(D) infringe
7. Recently, a lot of people are interested in tracing their family trees and discovering their _____.
(A) scholars
(B) processes
(C) favors
(D) roots
8. Carol's boss asked her to work _____ tomorrow, so she won't be able to go to the movies with us.
(A) overtime
(B) individual
(C) distance
(D) origin
9. Many countries place a lot of emphasis on preserving their cultural _____.
(A) scholars
(B) heritage
(C) essentials
(D) boundary
10. When taking a multiple choice test, sometimes it is hard to _____ the correct answers.
(A) unite
(B) infringe
(C) interact
(D) determine

11. Peter is very _____ about acting. He wants to attend a performing arts school next year.
- (A) timeless
(B) multicultural
(C) passionate
(D) trustworthy
12. I like being around my friends and family, but I also _____ the time I get to spend alone.
- (A) value
(B) overlook
(C) process
(D) identify
13. The most popular classic literature usually has _____ themes, which anyone can relate to.
- (A) distant
(B) willing
(C) timeless
(D) negative
14. The _____ of fortune cookies was in California, not in China like many westerners think.
- (A) perception
(B) core
(C) origin
(D) favor
15. Many countries nowadays are _____, which I think makes visiting places more interesting.
- (A) perceptive
(B) multicultural
(C) essential
(D) original

Instructions: Choose the word closest in meaning to the underlined word or phrase.

16. The government controls what kind of business practices are legal in order to protect consumers.
- (A) interacts
(B) unites
(C) infringes
(D) regulates
17. We must start taking care of our surroundings before it is too late to undo the damage.
- (A) environment
(B) boundaries
(C) foundations
(D) heritage
18. My first thought when I saw the painting was that I didn't like it, but it's really not that bad.
- (A) passion
(B) impression
(C) process
(D) domination
19. Melanie does not really support one team or the other because she doesn't care for football.
- (A) favor
(B) regulate
(C) perceive
(D) trust
20. It is very important that students arrive on time when taking the college entrance exam.
- (A) negative
(B) timeless
(C) essential
(D) original

21. My younger brother often pushes the limits of my patience, but I love him anyway.
- (A) cores
 - (B) scholars
 - (C) individuals
 - (D) boundaries
22. They were not willing to loan Mark any more money because he never pays them back.
- (A) united
 - (B) favored
 - (C) inclined
 - (D) valued
23. At first, I didn't want to go to the party, but once I was there I had a really good time.
- (A) initially
 - (B) essentially
 - (C) regularly
 - (D) distantly
24. Schools have begun to teach children about central values to help them become good citizens.
- (A) impressible
 - (B) talkative
 - (C) negative
 - (D) core
25. My roommate says she feels like she has become emotionally far away from her old friends.
- (A) united
 - (B) distant
 - (C) fundamental
 - (D) willing
26. In the past, the basics of learning were considered to be reading, writing, and math.
- (A) foundations
 - (B) scholars
 - (C) relatives
 - (D) origins
27. Each person needs to submit an application to be considered for the position of manager.
- (A) inclination
 - (B) tendency
 - (C) individual
 - (D) perception
28. A person is considered an academic in a field of study when he or she specializes in that subject.
- (A) processor
 - (B) environmentalist
 - (C) relation
 - (D) scholar
29. When learning anything new, it is important to get the basics down before moving on to the next level.
- (A) interactions
 - (B) heritages
 - (C) fundamentals
 - (D) origins
30. When asked to recognize who he had seen at the scene of the crime, Bryan was no longer sure what the man looked like.
- (A) identify
 - (B) infringe
 - (C) bind
 - (D) impress

Instructions: Write the missing words. Use the words below to fill in the blanks.

- | | |
|-------------|------------|
| initially | passionate |
| interacted | relatives |
| inclined | negatively |
| Renaissance | individual |
| scholars | valued |

Isabella d' Este was one of the most famous women during the Italian **31.** _____ era. Her official title was Marchesa of Mantua, but due to her noble **32.** _____ she was related to nearly every ruler in Italy at the time. Isabella was well educated and **33.** _____ learning. Due to her influence, many artists, **34.** _____ and musicians came to Mantua. She **35.** _____ with Renaissance figures such as Raphael, Da Vinci, and Titan. It is said that she was a **36.** _____ collector of ancient coins and Roman sculptures. Isabella was also **37.** _____ toward politics. In fact, she ruled Mantua in her husband's absence while he was being held hostage in Venice. **38.** _____, upon his return, he acted **39.** _____ toward her for being a better ruler than he. Isabella was such a remarkable **40.** _____ that she is sometimes called the First Lady of the Renaissance.

Instructions: Choose one word in each group that does not belong.

- | | |
|----------------------|-------------|
| 41. readiness | eagerness |
| trustworthiness | willingness |
| 42. infringe | unite |
| violate | breach |
| 43. connect | attach |
| interact | bind |
| 44. view | perception |
| opinion | identify |
| 45. process | method |
| regulation | procedure |

Instructions: Match the words that are opposites.

- | | |
|----------------------|--------------|
| 46. overlook | (A) separate |
| 47. unite | (B) silent |
| 48. timeless | (C) dislike |
| 49. favor | (D) dated |
| 50. talkative | (E) notice |

Part 3

Writing and Grammar

- Chapter 7 Verb Forms
- Chapter 8 Sentence Formation

Chapter 7

Verb Forms

Tips

A clear and understandable essay should include the following:

- Coherent organization
- A broad range of grammar and sentence structures to avoid monotony
- Transitional expressions to clarify organization and flow
- Appropriate and precise vocabulary

Strategies

When writing an essay:

- Check for errors in tense in all clauses of a sentence
- Use appropriate modal verbs
- Use the present participle (-ing) and the past participle (-ed) correctly
- Avoid sentence fragments and run-ons
- Use noun phrases and noun clauses correctly
- Ensure sentences are connected by appropriate conjunctions and adverbs

Verb Forms

Verb Tense

When reviewing your essay, consider the following:

- The verb should agree with its subject.

Example: Computer programs is available that can teach certain subjects. (X)

The couple decide that jogging is the best way to get exercise. (X)

- Be verbs are used as helping verbs only in the passive voice and the continuous tense.

Example: Their next door neighbor was known for his grumpiness. (passive)

They have been working on their research report for hours. (continuous)

- Auxiliaries and modals should reflect the correct tense/voice of the sentence.

Example: The boy had eaten his food by the time his mother arrived. (past perfect)

If he decides to volunteer, he will have to come to orientation. (conditional)

He preferred that the girl wash her hands before coming to the table. (subjunctive)

- The summary of the lecture or reading should be written in the present tense.

Example: The speaker supports the idea of mandatory school uniforms.

The speaker supported the idea of mandatory school uniforms. (X)

- The same modal verbs can have their own past forms and "have (has) + past participle" depending on how they are used.

Example: The woman must use her red umbrella. The woman had to use her red umbrella.

Those cannot be the correct results. Those cannot have been the correct results.

► Exercise 1

Each of the following paragraphs has eight errors in verb forms. Find the errors and correct them.

- The reading passage describes NAFTA, or the North American Free Trade Agreement. NAFTA are an agreement between North American countries regarding issues of trade. It changes many policies between the North American countries involved. For example, the author says that NAFTA removed tariffs, which she defined as a type of tax, on goods traded between the US, Mexico, and Canada. The author also mention that NAFTA removed a lot of restrictions on different categories of items traded. She explains that these changes has helped increase trade and industry between the countries. However, she also cited some problems with NAFTA. Critics argue that the incomes of some people, like farmers, is decreasing as a result of NAFTA. These people have recommended that NAFTA revised some of its policies to make it more fair for certain people.

2. If I could choose between watching a serious movie and watch an entertaining movie, I choose to watch the entertaining movie. Although I know many people who likes to watch serious movies that teach them something, I believe that the primary purpose of movies is to entertain us, not to teach us. I think we learned more from educational books or from teachers, not from movies. This do not mean that movies have never taught me anything. Some of the best lessons I was learned in life have come from movies. However, I simply felt that movie producers should spend more time creating entertaining movies than serious ones. After all, life is often serious enough as it is. Amusing movies give people the chance recovering from some of the seriousness of life.

► Exercise 2

Write the correct form of each verb.

1. The reading passage describes nonverbal communication between people. It (1) _____ (explain) that nonverbal communication is communication that is not spoken. It then says that much of what we know about people come from their movements and gestures, not so much by what they (2) _____ (say). In the lecture, the professor (3) _____ (reinforce) how important nonverbal communication is by (4) _____ (describe) how it can be used in a business setting. In the US, when a businessman is trying to sell a product and he does not look his client in the eye, it is (5) _____ (consider) to be a sign of insecurity or deception. Therefore, nonverbal communication (6) _____ (be) an important skill to have.

2. If I (1) _____ (can) learn any musical instrument in the entire world, I would learn how to play the guitar. Although my life is currently too busy for me to take guitar lessons, I (2) _____ (plan) to learn how to play the guitar in the future. Music has always been an important part of my life. When I was younger, my mother (3) _____ (make) me take piano lessons. I liked taking piano lessons, but I would have liked guitar lessons better. I believe that (4) _____ (learn) how to play the guitar is worthwhile because the guitar has been (5) _____ (use) so often in music. People (6) _____ (has) been playing early forms of guitars for thousands of years. In my opinion, the guitar is the best instrument for a person to learn.

Word Forms and Uses

It is helpful to know word endings in order to use the correct word form. Some words have the same form for different parts of speech.

Noun	-cy, -ness, -ism, -ion, -ity, -ment, -ure, -al
Adjective	-able, -al, -ant, -ful, -ic, -ish, -ive, -less, -ing, -ed
Verb	-ate, -en, -ify, -ize

Same Form: practice (v=n), appeal (v=n), comment (v=n), cause (v=n), complete (v=adj), individual (n=adj), potential (n=adj)

Other Examples

It is helpful to know word endings in order to use the correct word form. Some words have the same form for different parts of speech.

division / divisive / divide	affection / affected / affect	retirement / retiring / retire
validity / valid / validate	exposure / exposed / expose	offense / offensive / offend
failure / failed / fail	threat / threatening / threaten	benefit / beneficial / benefit
efficiency / efficient	disposal / disposable / dispose	responsibility / responsible

It is also helpful to know the position in which each part of speech can be used. Nouns cannot be used in the position of verbs. Adjectives are placed before the nouns that they modify or after a linking verb such as *be*, *become*, or *seem*.

► Exercise 1

Choose the correct form of the word.

- Joe was not sure which beverage would _____ his extreme thirst.
(A) satisfy (B) satisfactory (C) satisfaction
- The student did not know what the _____ would be from mixing vinegar and baking soda together.
(A) affect (B) effective (C) effect
- Drinking coffee is not a _____ method to wake oneself up in the morning.
(A) suffice (B) sufficient (C) sufficiency

4. The sunbather made sure to wear sunscreen as _____ against the hot sun.
(A) protect (B) protector (C) protection
5. One way for a baby-sitter to control the excitement of _____ children is to give them lots of activities to do.
(A) energize (B) energetic (C) energy
6. The boy thought that broccoli was _____, but he could not bear onions.
(A) tolerate (B) tolerable (C) toleration
7. The college graduate was not certain how he could _____ the goals that he had planned out for himself.
(A) attain (B) attainable (C) attainment
8. The _____ team was very hard for the high school basketball team to beat.
(A) oppose (B) opposing (C) opposition
9. Ms. Smith was not sure what type of _____ would best suit her, but she knew she had to choose something.
(A) educate (B) educating (C) education
10. She tried to ignore the temptation, but she could not _____ eating a piece of cake.
(A) resist (B) resistible (C) resistance
11. The police officer wanted to _____ the suspect, but he had to wait for the man's lawyer.
(A) interrogate (B) interrogative (C) interrogation
12. Daniel was not sure what his friend's _____ was for candy, so he bought two different boxes.
(A) prefer (B) preferred (C) preference
13. John was such an _____ person that nobody liked to be around him.
(A) irritate (B) irritating (C) irritation
14. Some students _____ so much over their grades that it affects their health.
(A) obsess (B) obsessive (C) obsession
15. The woman's _____ was so great that she was easily elected for prom queen.
(A) beautify (B) beautiful (C) beauty
16. The fact that he could work his own hours was the _____ factor in Bill's choice to open up his own business.
(A) decide (B) deciding (C) decision

► Exercise 2

Each of the following paragraphs has five incorrect words. Find the errors and correct them. There can be more than one incorrect word within a sentence.

1. Both the reading and the lecture discuss the accurate of the Critical Period Hypothesis. The Critical Period Hypothesis states that children can only learn language during a certain period of their childhood. According to the reading, if children do not learn language before the critic age of twelve, then they will never learn to speak. In the lecture, the professor describes a young girl found in the 1970s, who was thirteen years old and had never learned to speak. The girl was able to learn basic speak even though she was past the critical age. However, the girl was never able to learn any advanced language skills. The professor conclusion by saying that although the Critical Period Hypothesis is not true all the time, its basic logical still seems to apply.
2. The invention of email has allowed communicate between people to become much easier. However, I believe that although email has many advantages, it has many disadvantages as well. For instance, email has greatly replaced face-to-face communication, which I feel isolation people from one another. Instead of talking to each other personal, people now sit in front of their computers sending emails. They do not receive the social interaction that humans so often require. Also, emails have made writing communication less formal. Many people send off emails without even double-checking for any errors. This gives the impress that they are careless and that they do not value the other person's time. I believe that we as a society need to be more careful of how we use email.

Chapter 8

Sentence Formation

Tips

A clear and understandable essay should include the following:

- Coherence
- Transitional expressions to clarify the flow of ideas
- Appropriate vocabulary to express ideas precisely
- A range of grammar and structures.

Strategies

When writing an essay:

- Avoid sentence fragments and run-ons
- Check that noun phrases and noun clauses are used correctly
- Make sure sentences are connected using the appropriate conjunctions and adverbs

Sentence Formation

Adjective Clauses

An adjective clause modifies a noun or pronoun. Adjective clauses are led by relative pronouns such as *who*, *which*, and *that*. For a noun of time or place, *when* or *where* can be used instead of *which*.

When using adjective clauses, consider these common mistakes:

- When the subject noun is modified by an adjective clause, make sure the main verb of the independent clause agrees with the subject that comes before the adjective clause.

Example: A person who works part-time usually receives no benefits.

People who work part-time usually receive no benefits.

- Use commas before and after an adjective clause if the noun it describes is a specific person or thing, for example, a proper noun.

Example: Rachel Kingsley, who writes mystery novels, is signing books at the bookstore.

The writer who is signing books at the bookstore is Rachel Kingsley.

- If the noun is general, you may substitute *that* for *who* and *which*. Do not use commas if the adjective clause begins with *that*.

Example: The ticket that I needed in order to get onto the plane was not in the packet.

The ticket, that I needed in order to get onto the plane, was not in the packet. (X)

- If the relative pronoun follows a preposition, the preposition can be in two positions: before the relative pronoun or at the end of the adjective clause.

Example: The speed at which the wheel turns is measured in revolutions per second.

The speed that the wheel turns at is measured in revolutions per second.

- *Which* can refer to the whole previous clause.

Example: He tried to apologize, which made her even angrier.

- Participle phrases can be formed by reducing adjective clauses.

Example: Adjective clause → The audience, which was listening intently to the music, failed to notice the commotion that grew louder and louder in the theater's lobby.

Reduced adjective clause → The audience, listening intently to the music, failed to notice the commotion growing louder and louder in the theater's lobby.

► Exercise 1

For each sentence below, underline the incorrect part or parts of the sentence.

1. The principal of Ridgecrest High School, which had worked there for over ten years, finally decided to retire.
2. He waited until it was 6:00, when I was almost ready to leave for the day, before he told me what the printer needed to be fixed.
3. Each line of clothing were so sophisticated that the girl did not know which to select.
4. The wedding, that I went to with my sister, was for my two best friends.
5. Much to everyone's surprise, the racecar, that was bright red, won the race by a large margin.
6. I am so excited to hear a speech given by my favorite author, who should be given at the end of the banquet.
7. It is a proven fact that children who is home-schooled often do better than children who attend public school.
8. Some scientists believe that there could be hundreds of beetle species of we do not know about living on the same tree.
9. The zoo downtown, which houses a range of different animals from all over the world, are temporarily closed for renovation.
10. The astronomy class, that requires all students to perform a research project, is difficult for many students to pass.
11. The meeting is scheduled for tomorrow will require all staff members to be there.
12. The park, which the young girl held her birthday party, was demolished to make room for an extended parking lot.

► Exercise 2

Combine each pair of simple sentences to make a complex sentence containing an adjective clause. Add commas if necessary. Then put parentheses around the relative pronoun and the verb IF they can be omitted.

1. The dog was taken to the animal shelter. The dog was discovered next to a busy highway.
2. Colleges are raising tuition costs. These colleges are experiencing a decline in student enrollment.
3. The ancient Romans created great arenas called coliseums. There were gladiator fights held in these coliseums.
4. The children are playing a board game. They completely lost track of time.
5. The notebook was written by me during my childhood years. It is hidden in a safe place.
6. A student forgets to do his homework. He usually comes to class with an excuse ready.
7. Clara Winterbourne is a popular television actress. She just won an award for best picture.
8. The woman works in an office. The office is located on the fifth floor.
9. The statue resembles a past American president. It was built over five years ago.
10. The professor recently received a job at a university. He still cannot decide what courses he would like to teach.
11. The parent tried to explain the problem by using an example from his childhood. His example made the child feel even more confused.
12. The play will be held in the theater by the recreation center. It involves a love story.

Combining Sentences with Different Connectors

When writing sentences that are closely related, the writer must use certain techniques to combine sentences. Various methods can be used to present the same meaning.

- Time:** I did my best, but it was not good enough. (coordinating conjunction)
 I did my best; however, it was not good enough. (coordinating adverb)
 Although I did my best, it was not good enough. (subordinating conjunction)
 Since arriving, we have visited many places. (participle phrase)

When connecting sentences and ideas, consider these common mistakes:

Sentence fragments:

We went home. And watched TV. (no subject)

→ We went home and watched TV.

They were happy with the program. But not the board. (no subject or verb)

→ They were happy with the program, but the board was not.

They agreed. Because it was more urgent. (dependent clause used independently)

→ They agreed because it was more urgent.

Run-on sentences:

They are happy with the program it is user friendly. (no connecting word or punctuation mark)

→ They are happy with the program because it is user friendly.

Punctuation is also important. Look at the differences in punctuation in these sentences.

I was often late because I had to help her. (subordinating conjunction)

Because I had to help her, I was often late. (subordinating conjunction + comma)

I had to help her, so I was often late. (comma + coordinating conjunction)

I had to help her. Therefore, I was often late. (coordinating adverb + comma)

I had to help her; therefore, I was often late. (semicolon + coordinating adverb + comma)

NOTE: I had to help her. So, I was often late. (informal, so best avoided in an essay)

► Exercise 1

Indicate whether each sentence is correct (C) or incorrect (IC). Then correct the incorrect sentences.

- _____ 1. Although shark attacks get lots of media attention, such incidents are extremely rare.
- _____ 2. Many Westerners think that Buddha came from China. But he actually came from India.
- _____ 3. Jane Austen was a famous English novelist during a time when writing was thought to be purely man's work.
- _____ 4. A new law is being passed that will fine drivers if they get caught talking on their cell phones while driving.
- _____ 5. Those with anxiety disorders experience extreme anxiety during certain situations nevertheless they can control their anxiety through several helpful relaxation techniques.
- _____ 6. Since American students are becoming increasingly overweight some schools have decided to prohibit sodas at lunchtime.
- _____ 7. In order to attract more customers, the company placed all of its clothing on a sale.
- _____ 8. The raven was generally thought to be an ill omen, at the same time, some Northwestern Native American tribes saw the raven as a creator spirit.
- _____ 9. Some people do not need alarm clocks to wake up. Instead, they have internal clocks that wake them up at a specific time each day.
- _____ 10. Cloning is a controversial subject. Mainly because many people see it as an ethical issue.
- _____ 11. Benjamin Franklin was a famous American politician but he was also a major inventor during the 18th century.
- _____ 12. Recent driving restrictions have made it harder for teenagers to get their licenses; therefore, many are now waiting until they are eighteen before getting their licenses.

► Exercise 2

Combine the sentences in two different ways using the words in parentheses. The combinations may be one or two sentences.

1. One researcher says that a little bit of chocolate is healthy for you. Another researcher maintains that the healthiest diet is one free of chocolate. (while, but)
 - a. _____
 - b. _____

2. Leonardo da Vinci painted the famous portrait *Mona Lisa*. He is known for creating the steam cannon. (and, also)
 - a. _____
 - b. _____

3. Fifty years ago, it was common for women to stay at home while their husbands worked. It is much more common now for women to have jobs of their own. (although, however).
 - a. _____
 - b. _____

4. The river was home to an endangered species of fish. The government passed a law that forbids extensive fishing. (as, so)
 - a. _____
 - b. _____

5. The professor loves novels that were written during the past century. He highly dislikes the 20th-century works of Ernest Hemingway. (but, except)
 - a. _____
 - b. _____

6. Doctors will usually face at least one lawsuit during their careers. They should make certain to purchase insurance when they first start to practice. (so, therefore)
 - a. _____
 - b. _____

► Exercise 3

Reduce the adverbial clause into a participle phrase.

Example: As they were too young to be left alone, the orphaned birds were taken from the nest and transported to a care facility.

Being too young to be left alone, the orphaned birds were taken from the nest and transported to a care facility.

1. Before you revise your research paper, it is a good idea to put an extra copy of your rough draft somewhere safe.

2. Since the house has already been built, it will be donated to a charity for homeless people.

3. While you are listening to the professor's lecture, would you mind taking some notes for me?

4. I would rather do all my work early in the morning than later in the afternoon because I am more of a morning person.

5. As she felt sick after the amusement park ride, the girl decided to go straight home.

Parallel Structure

In order to make a sentence clear and balanced, it is important to use parallel structures in all parts of the sentence. When words or phrases are connected, those words or phrases should be parallel in terms of their form, tense, and parts of speech. When using conjunctions, make sure the parts of the sentence are balanced or parallel.

- **Forms** → The bed is too small and too hard.
- **Tense** → They meet customers and take orders.
- **Parts of speech** → Some plants grew over the walls and some went into the buildings.

► Exercise 1

Indicate whether the sentence parts display parallel structure (P) or not (NP). Underline the parts that are or should be parallel.

- _____ 1. If asked about my job qualifications, I would say that my most important qualifications are my dedication to the job and my ability to get work done quickly.
- _____ 2. One lesson that I learned from my friend is that it is more difficult for many people to listen than speaking.
- _____ 3. A new law passed by the government will provide health care, welfare, and free tuition for people who live below the poverty level.
- _____ 4. Most of the people in my hometown would prefer to attend the local college over the state college.
- _____ 5. The main bookstore in my hometown is raising the prices of its books and has given coupons out as well.
- _____ 6. The business will donate some money to fund an upcoming art exhibition and to construct an extra building for a nearby school.
- _____ 7. Memorizing the vocabulary words in Spanish was easy for me to do, but to pronounce the words took me a bit longer.
- _____ 8. The family is the most important part of a child's life because it helps the child to develop social skills that are appropriate and respectful of other people.

► Exercise 2

Underline each phrase that is not parallel to the rest of the sentence. Then change the phrase to make it parallel.

1. I feel that entertainment is just as necessary for adults as children.

2. Instead of listing pay as the most important part of their jobs, many employees are now listing benefits and to have friendly coworkers as equally important.

3. For people who want to eat healthier, fish, walnuts, and an egg are all good sources of nutritious fatty acids.

4. The children in my summer camp learned how to be polite, cooperate with others, and how to perform certain activities.

5. Chores, maintaining a curfew, and watching younger siblings are responsibilities that most teenagers say they dislike the most.

6. Writers who have become popular with the public are usually adept at creating interesting plots and good character development.

7. High school students who want to receive academic scholarships will have to work hard and need a high grade point average.

8. Since college freshmen often do not know what field they want to go into, many take their time and are waiting until their junior years before they make any major decisions.

► Exercise 3

Read the following paragraphs. Find four mistakes in each paragraph and correct them.

1. Both the reading and the lecture discuss the health status of people in this country. The reading says that people today are unhealthier than people twenty years ago. High blood pressure, having a loss of energy, and obesity are common among people in today's society. The reading recommends eating healthy, exercising regularly, and a full night's sleep as ways to increase our overall health. The professor agrees with the reading's views. But she adds that certain vitamins should be increased in our diets to provide us with more energy. She also believes that stress is one reason why people today is unhealthy, so she advises us to avoid situations that are overly stressful.
2. It is my belief that school tests do not provide an accurate assessment of a student's knowledge. Many factors can influence how students perform on tests that has nothing to do with what they know. For instance, some students are simply bad at taking tests. They feel so much pressure over the test, which they perform poorly on it, even if they happen to know the material. Tests are also inefficient because all they measure is a student's ability to memorizing facts and figures. Once the test is over, there has been no reasoning for the students to retain this knowledge. For these reasons, I think tests should be eliminated from schools.

Mastering Skills for the TOEFL® iBT

READING / LISTENING / SPEAKING / WRITING

Practice Test

Practice Test

Section

Reading

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Section Exit

Time

00:20:00

Directions

Continue

Tools

Reading Section

Directions

In this section, you will read five passages and then answer reading comprehension questions about each passage. Most questions are worth one point, but the last question in each set is worth more than one point. The directions indicate how many points you may receive.

You will have 100 minutes to read all of the passages and answer the questions. Some passages include a word or phrase that is underlined in purple. For those words, you will see a definition or an explanation below the passage.

You can skip questions and go back to them later as long as there is time remaining.

When you are ready to continue, press **Continue** to go to the next page.

01 Psychology

Track 244

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Reading	1 of 12	00:20:00

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Forgetful Brains

Humans have always had trouble remembering certain details. One person has the unique experience of recalling in almost exact detail a memory from his childhood, but he cannot remember what he ate for lunch yesterday. Another cannot recall names of people she met five minutes ago, but she remembers the names of people she met from an hour before. Psychologists have searched for answers to the memory phenomenon to better understand how the brain functions and what triggers memory or causes forgetfulness. After extensive research over the past century, they have come up with some basic theories to help explain memory loss.

There are times when an individual loses all recollection of an event. ■ **A)** This is referred to as the decay theory, which states that if memories are not recalled from time to time, they fade and then gradually drop from a person's memory. Decay is proven to occur with sensory memories, or short-term memories, if they are not recalled or rehearsed. Decay of long-term memory is harder to explain because these memories last through the passage of time. ■ **B)** In fact, some knowledge can be accessed many years after it is first learned. ■ **C)** Research on students who took Spanish courses in high school revealed that they still remembered a great deal of Spanish fifty years later, even though they had hardly used the language. While some memories tend to decay, others remain burned into the recesses of the brain, causing psychologists to further ponder the workings of memory. ■ **D)**

Another explanation made by researchers concerning memory loss is known as interference. Under this theory, an individual forgets a memory when similar information enters the mind and interferes with the original memory in either the storage or retrieval area of the brain. The information is somewhere in the person's memory, but it gets confused with other details. This occurs in both short-term and long-term memory and is most common when a person tries to recall isolated facts. For instance, a woman goes to a party and meets a man named Joe at the front door. Half an hour later, she is introduced to Jason. When she sees Joe again, she accidentally calls him Jason. This is retroactive interference. The newest information input replaces the old information, causing the woman to mistakenly call the first man by the wrong name. Additionally, people may suffer from proactive interference. A new student meets his first professor, Dr. Mack, in his English class. When he has History, he meets Dr. Miller. However, he frequently calls both teachers Dr. Mack, since that is the first name he had learned. Remembering the

first set of information and not remembering the next is proactive interference. The old information interfered with the student's ability to recall the newer information.

When a person needs to remember something, he frequently relies on cues, or reminders, to help him retrieve a specific memory. When he lacks the cue to recall the memory, the person suffers from cue-dependent forgetting. This may be the most common type of forgetfulness. Psychologist Willem Wagenaar did a year-long study during which he recorded events from his life daily. After a year's time, he could not remember twenty percent of the critical details, and after five years, he had forgotten sixty percent. However, he compiled cues from ten witnesses to some events in his past that he believed he had forgotten, and he was able to recall pieces of information about all ten. Thus, when he had cues to help him retrieve his memories, he could remember his experiences, illustrating that he was somewhat cue-dependent. Cognitive psychologists believe that these specific cues help direct a person to the area of the brain where the memory is stored or they match up with information linked to the actual memory the person is seeking.

Whether forgetfulness is from years of decay, replacement of old memories, or lack of cues, researchers continue working to locate the source of people's forgetfulness. The answers are becoming clearer with each additional study. As brain research advances, psychologists are sure to connect many different factors that link people back to their memories.

1. The word **triggers** in the passage is closest in meaning to
 - (A) closes
 - (B) cues
 - (C) reviews
 - (D) erases

2. According to paragraph 2, decay of short-term memories can be avoided by
 - (A) remembering associations
 - (B) removing immediate distractions
 - (C) recollecting information often
 - (D) taking time to acquire input

3. What can be inferred about the decay theory from paragraph 2?
 - (A) Memories from big events always remain in the mind.
 - (B) Memory decay arises from specific circumstances.
 - (C) Recalling old memories prevent their decay.
 - (D) Most people suffer from some degree of memory decay.

4. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

However, the age of the memory does not enable psychologists to predict which memories will disappear and which will remain.

Where would the sentence best fit?
 - (A) First square
 - (B) Second square
 - (C) Third square
 - (D) Fourth square

5. The word **ponder** in the passage is closest in meaning to
 - (A) consider
 - (B) explain
 - (C) forget
 - (D) understand

6. All of the following are mentioned in paragraph 3 as interference EXCEPT:
 - (A) Confusing newly learned facts with other details
 - (B) Confusing old memories with current situations
 - (C) Remembering the first information but forgetting the second set
 - (D) Recalling the last information acquired but losing the first

7. In paragraph 3, the author discusses remembering and forgetting names in order to
 - (A) demonstrate memory interference
 - (B) refute proactive and retroactive interference
 - (C) advocate acquiring new memories
 - (D) reveal the workings of forgetfulness

8. The word **it** in the passage refers to
 - (A) retrieval area
 - (B) information
 - (C) storage area
 - (D) memory

9. The word isolated in the passage is closest in meaning to

- (A) complex
- (B) angry
- (C) remote
- (D) ignored

10. According to paragraph 4, cue-dependent forgetting is defined as

- (A) not being able to remember details or events when clues are present
- (B) not being able to remember details or events unless clues are present
- (C) not being able to forget clues about details or events
- (D) not being able to remember details or events without assistance from other people

11. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.

- (A) Cues about an event lead a person back to the part of the brain storing the memory.
- (B) Psychologists are able to link cues to areas of a person's brain when he or she is forgetful.
- (C) Information stored within the brain cannot be linked to specific memories after time.
- (D) A person can find specific memories by using context cues about an experience.

12. **Directions:** Complete the table by matching the phrases below. Select the appropriate phrases from the answer choices and match them to the type of forgetting to which they relate. TWO of the answer choices will NOT be used. **This question is worth 4 points.**

Type	Statements
Decay	• •
Interference	• • •
Cue-Dependent	• •

Answer Choices

- (A) Is characterized by either proactive or retroactive memories
- (B) Indicates an absence of the necessary cues to retrieve memories
- (C) Is signified by a complete loss of certain memories
- (D) Occurs when trying to locate specific, isolated events
- (E) Relies on cues to replace old memories
- (F) Can be aided by reminders of past experiences
- (G) Can be reversed once memory deterioration has begun
- (H) Is proven to occur when experiences are not recalled over time
- (I) Happens in the storage or retrieval area of the mind

02 Art History

Track 245

Section Reading	Question 1 of 13	Time 00:20:00	Tools Review Back Next Help
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The Change in Art after World War II

In the 1930s, before the onset of war, rationing, and army drafts, art reflected the somewhat serene lives of the people. Mundane scenes such as factory workers or office settings were routinely painted to depict the era. They were reminiscent of the people living a routine life in middle-class, ordinary settings. Yet in 1939, fighting spread throughout the world. War and the subsequent struggles for power, existence, and peace brought great unrest for countries around the world following World War II. With the changes wrought by war, many countries felt the need to convey a new, postwar image. It was from this need that abstract expressionism evolved as a modern and recognized art form.

Abstract artist Jackson Pollock gave a clear picture of the emergence of abstract art when he said, "The modern painter cannot express this age—the airplane, the atom bomb, the radio—in the old forms of the Renaissance or of any other past culture. Each finds its own technique." It was the art of this revolutionary painter that helped define the abstract movement. Postwar artists like Pollock developed free-form aesthetics by abandoning conventions of past styles while maintaining focused, self-reflexive qualities and the feelings of each individual artist. The method for creating abstract art involved paintings free of religious, political, and popular subjects. The paintings were instead comprised of bright colors and shapes, characterized by personal expression rather than the development of a predictable art style. Much personal empowerment grew out of this profound freedom of expression.

After World War II and during the uncertainty of the Cold War, the world tottered back and forth between stability and instability. People felt great anxiety amidst their growing prosperity. They viewed the modern art of the time as bold, triumphant, and self-assured. Although the work seemed to exude postwar confidence, artists portrayed profound unease and viewed their work much differently. Their images were the expression of desperation in the midst of a tough reality inspired by unrest and contrasted with material growth. The psychology of the abstract art form emerged from this altered mindset that was at once strong and vulnerable, confident and subdued. Consequently, artists at the time had the need to feel their experiences in ways that were intense, immediate, direct, subtle, unified, and vivid. "Painting is a state of being . . . painting is self-discovery. Every good artist paints what he is," stated Pollock. Abstract expressionism, as the new art style became known, was a way to embody the artist's yearning for stability in an unstable world as well as a way to emphasize his own personal ideas and use those as expression.

Pollock's chief ambition in his art was to incorporate opposition. He did this by pairing order with chaos, reason with passion, and modernism with primitivism. Similar to other abstract artists, he preferred to portray notions of the subconscious, giving free reign to forgotten personal memories and psychic impulses. George Tooker, another artist of the time, painted *The Subway*, which illustrated postwar expectations of individuality and conformity. The affluence of the nation's newfound economic success combined with anxiety over political instability to form a dual consciousness that is said to haunt America's identity still. Each had a set of signature styles that expressed personal and societal isolation of the artist in abstract ways.

During this time, modern art became identified widely as "American" art, having its focal point primarily on the nation. The Museum of Modern Art in New York began to ship abstract expressionistic works to be displayed in places like Milan, Madrid, Berlin, Amsterdam, Paris, and London. ■ **A)** Some critics overseas were dismayed, stating that this type of abstract art was not new. ■ **B)** As this art was practiced elsewhere, they continued by saying it was not good quality painting and was not purely American. ■ **C)** One writer hailed typical American abstract art as "heir of the pioneer and immigrant." ■ **D)** Another saw the artists as heroic rebels, comparing them to movie stars of the same caliber as James Dean and Marlon Brando or teen idols such as Elvis Presley.

As the US was celebrating a highly contradictory mix of freedom and individuality, abstract expressionism became a political pawn of sorts. The art reflected the ambiguity of the world at the time as war-ravaged countries worked to recover their economy and people worked to achieve a normal state of life. The artists of abstract expressionism effectively captured the emotion of the nation as it emerged from a time of stress and tried to form an updated image.

▶ **aesthetics**

the study of beauty, emotion, or sensation

▶ **psychic**

relating to the mind and its workings

1. The author discusses art from the 1930s in order to
 - (A) demonstrate the drastic change in art
 - (B) explain the change in America's culture
 - (C) describe the hardships of the people
 - (D) list the events that transpired

2. The word conventions in the passage is closest in meaning to
 - (A) perceptions
 - (B) agreements
 - (C) situations
 - (D) traditions

3. Which of the following can be inferred from paragraph 2 about the change in art?
 - (A) Artists sought ways to distinguish their art from previous artists.
 - (B) The painters used traditional design elements in whole new ways.
 - (C) Consistency in art overpowered the need for originality.
 - (D) Artwork reflected the personal empowerment of the artist.

4. The word exude in the passage is closest in meaning to
 - (A) discourage
 - (B) portray
 - (C) replace
 - (D) instruct

5. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
 - (A) Abstract expressionism represented both the artist's desires for certainty and the artist's own personal expressions.
 - (B) This new art form revealed the artist's personal style and confidence of expression.
 - (C) The Abstract expressionist artist used bold strategies in his art to reveal inner feelings and personal expressions.
 - (D) This new style showed the artist's determination in life along with his desire for personal freedom.

6. According to paragraph 3, although the work of abstract artists appeared confident, it was in fact
 - (A) identical to the nation's certainty
 - (B) representative of the country's wealth
 - (C) reflective of the anxiety of the era
 - (D) expressive of the artists' low self-esteem

7. The word affluence in the passage is the closest in meaning to
 - (A) wealth
 - (B) learning
 - (C) position
 - (D) stature

8. All of the following are mentioned in paragraph 4 as Pollock's techniques painting EXCEPT:
- (A) Stark displays of contrasts and opposition
 - (B) Feelings and impulses from within the mind
 - (C) Emotion mixed with ordinary scenes
 - (D) Intense emotions from personal experiences
9. The word each in the passage refers to
- (A) artist
 - (B) dual consciousness
 - (C) physic impulse
 - (D) notion of the unconscious
10. According to paragraph 5, abstract expressionism was critiqued for being
- (A) widely followed and admired
 - (B) labeled "American"
 - (C) exhibited worldwide
 - (D) claiming to be modern
11. The word its in the passage refers to
- (A) ambiguity
 - (B) nation
 - (C) modern art
 - (D) world

12. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

Nevertheless, the art persisted, demonstrating the authority of postwar American modernism.

Where would the sentence best fit?

- (A) First square
- (B) Second square
- (C) Third square
- (D) Fourth square

13. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. **This question is worth 2 points.**

Abstract expressionism displayed the people's need for empowerment and stability in the face of anxiety.

-
-
-

Answer Choices

- (A) By using art as expression, artists displayed feelings of anxiety paired with personal growth and confidence.
- (B) People of postwar countries gained reassurance from artists who sought to paint true emotion in their art.
- (C) Abstract artists gained acclaim similar to that of popular movie idols and music stars.
- (D) Pre-war experiences carried over into abstract portrayals of current time periods.
- (E) Pollock, who helped define abstract art, was revolutionary in his portrayal of opposites such as passion and reason.
- (F) Criticism from other countries helped shape the abstract movement, solidifying its place in the art world.

03 Astronomy

Track 246

Section
Reading

Question
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Tools

Neutron Stars

Scientists theorized as early as the 1930s that something like a neutron star could exist, though it was a while before they saw their theory materialize. The accidental discovery of a neutron star in 1967 by a graduate student proved this theory to be true. The student was scanning the sky, hoping to observe radio signals, when she saw an unknown object that blinked at regular intervals. The source, scientists later discovered, was a neutron star.

A neutron star is formed when a massive star explodes into a supernova. As the massive star explodes, the majority of the outer mass of the star is sent into space. Only a small remnant of the star remains intact at its core. As the core collapses from the explosion, the protons (the part of an atom with a positive charge) and electrons (the part of the atom with a negative charge) within the remnant combine to form neutrons (the part of an atom with no charge), thus giving neutron stars their name. Neutron stars are not actually stars in the sense that their nuclear reactions have ended forever. Scientists likely gave it the name of "star" because it is a stellar object that can sometimes be seen from Earth.

Neutron stars have several unique characteristics. First, they are some of the densest objects in space. One teaspoonful of material from a neutron star would weigh over ninety thousand kilograms. A neutron star has a mass of at least one-and-a-half times the mass of the sun. All of the mass is compacted into an area that is no more than ten to twenty kilometers in diameter. This is the same size as a large city on Earth or a small asteroid in space. Secondly, neutron stars have extremely strong magnetic fields. During the supernova when a neutron star is formed, the massive parent star's magnetic field is compressed. This means that the magnetic lines are squeezed close together, and this results in a neutron star with a magnetic field that is trillions of times stronger than the Earth's. Thirdly, the gravitational force on a neutron star is much stronger than the gravity on Earth. A seventy-kilogram person would weigh the equivalent of one billion kilograms on a neutron star. The gravitational pull on the neutron star would flatten a person thinner than a piece of paper.

Neutron stars are distinctive in yet another way. They rotate very rapidly, with rotations measuring just fractions of a second. By comparison, the massive star that exploded to form the neutron star might have only rotated once every two weeks. The neutron star spins so much faster because of its tiny diameter. Envision an ice skater spinning; as she draws her body in closer, making it smaller, she picks up speed in her rotations. The neutron

star is the same—as the remnant of the parent star takes a new, smaller form, it begins to rotate faster. ■ **A)** As the neutron star spins, it emits energy. ■ **B)** In reality, it sends a constant stream of light into the atmosphere, but the multiple rotations each second produce what seems to be pulsing light from the neutron stars. ■ **C)** Neutron stars that send out these seeming pulses of light are called pulsars. It was the blinking light sent out by these rotating neutron stars that led researchers to their discovery. ■ **D)**

There are several subtypes of stars within the category of neutron stars, all with their own distinctive characteristics. Most neutron stars emit energy or radiation and are classified as radio-emitting neutron stars. Pulsars are one such subtype. Binary pulsars are another type. These are pulsars that have a star alongside them in their orbit. A small number of neutron stars are considered to be radio-quiet, which means they seem to emit no radiation, though scientists hypothesize that these neutron stars simply do not pulse in our direction. Magnetars are a type of neutron star that have a magnetic field even stronger than that of any other neutron star.

The study of neutron stars is relatively new to scientists in the field of astronomy. Having been discovered less than fifty years ago, scientists still have much to learn about neutron stars. The information they have been able to gather has shown that neutron stars promise to provide complex behavior for researchers to study for years to come.

▶ **asteroid**

a small, irregular body that orbits the sun

▶ **supernova**

an exploding star that produces a very bright light

1. The word remnant in the passage is closest in meaning to
 - (A) center of a star
 - (B) remaining part of something
 - (C) severely damaged object
 - (D) small piece of rock

2. According to paragraph 2, which of the following is true about how neutron stars are formed?
 - (A) Neutron stars are created from the remainder of the supernova.
 - (B) Neutrons are the only matter left from a supernova.
 - (C) Matter from the supernova combines to form a new massive star.
 - (D) Many neutron stars can be formed from the remnants of one supernova.

3. Which of the following can be inferred from paragraph 2?
 - (A) A neutron star is more destructive than a supernova.
 - (B) Neutron stars are more complex than proton or electron stars.
 - (C) Most of the parent star remains unbroken.
 - (D) All actual stars have nuclear reactions at their core.

4. Which of the following is true about a neutron star's density?
 - (A) Neutron stars are nearly as dense as supernovas.
 - (B) They are greater than the sun in size but not mass.
 - (C) They are dense because they retain lots of energy from the supernova.
 - (D) A small amount of their matter would weigh thousands of kilograms on Earth.

5. The word this in paragraph 3 refers to
 - (A) density of a neutron star
 - (B) mass of a neutron star
 - (C) mass of the sun
 - (D) diameter of a neutron star

6. Which of the following is NOT true about the characteristics of a neutron star?
 - (A) Earth's gravitational pull is weak compared to a neutron star.
 - (B) The mass of a neutron star is greater than the sun's.
 - (C) Neutron stars undergo massive nuclear reactions.
 - (D) They rotate much faster than larger stars.

7. Which of the following best expresses the essential information in the highlighted sentence? Incorrect answer choices change the meaning in important ways or leave out essential information.
 - (A) A neutron star's magnetic field is stronger than Earth's since its magnetic lines are closer together.
 - (B) A neutron star is much more magnetic than the Earth because it is closer to the sun.
 - (C) The magnetic force of a neutron star draws the lines of Earth's magnetic field closer together.
 - (D) The magnetic lines squeeze together to give the Earth more magnetic effect that can be seen on the star.

8. The word distinctive in the passage is closest in meaning to
 - (A) separate
 - (B) bizarre
 - (C) unique
 - (D) great

9. Why did the author give the example of an ice skater in paragraph 4?
- To demonstrate the theory that explains how objects rotate
 - To provide a visual example of why neutron stars rotate faster
 - To demonstrate that rotation can occur in many different ways
 - To prove that energy is emitted as an object rotates
10. Look at the four squares [■] that indicate where the following sentence could be added to the passage.
- These rotations create the impression that neutron stars blink on and off.**
- Where would the sentence best fit?
- First square
 - Second square
 - Third square
 - Fourth square
11. The word it in paragraph 4 refers to
- a parent star
 - a remnant
 - a body
 - a smaller form
12. All of the following are true about neutron star subtypes EXCEPT:
- Some pulsars can have objects in their orbit.
 - Scientists believe that most subtypes produce radiation.
 - Radio-quiet neutron stars do not emit any sound.
 - One type has a stronger magnetic field than the others.

13. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some answer choices do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. ***This question is worth 2 points.***

This passage discusses the formation of neutron stars and the defining characteristics that make them unique.

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•
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Answer Choices

- Neutron stars are formed from the remnants of a supernova.
- Most neutron stars are radio-emitting stars, which means that they emit energy or radiation.
- The speed at which they rotate and the strength of their magnetic field set them apart from other objects in space.
- Though the light from a pulsar can be misleading, it is actually a steady beam of energy.
- Neutron stars are among the smaller objects in space, and they are also among the densest.
- The discovery of neutron stars helps to explain the process of stellar evolution.

04 Music

Track 247

Section

Reading

Question

5 of 13

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Help

Jazz

Jazz music is considered America's original art form. It began in the late 1700s and early 1800s among African Americans living in the southern states of Mississippi, Georgia, and Louisiana. Interestingly, its popularity over the ensuing centuries included people of different ethnic backgrounds and stations in life from places all over the United States and other countries. Jazz is characterized by its unique sound and improvised musical styling, which work together to evoke intense emotion. While it has continued to evolve since its inception, the decades from 1930 to 1950 represent the pinnacle of change between big-band-era jazz to more modern jazz.

Jazz in the thirties was known for its big band sound that focused on the use of brass instruments accompanied by the piano, saxophone, clarinet, and bass drum. This original sound was called swing. The swing style of music began in the 1920s, but rose in popularity in the 1930s. Swing bands featured a soloist, which is where improvisation played a key part. While the band followed a certain melody, the soloist played notes that stood out and displayed his or her unique musical talent. Swing was very popular because it was lively and people could easily dance to it. Dance halls saw a boom in attendance during this period. During the economic depression of the 1930s, many found solace and a positive outlook in the bright sound of jazz. The radio also helped to spread the fame of swing music with nightly coast-to-coast broadcasts of bands and artists such as Duke Ellington, Benny Goodman, Louis Armstrong, and Ella Fitzgerald.

While the thirties are known mainly for swing, a smaller movement termed Kansas City Jazz rose in popularity for a time. Kansas City Jazz was similar to swing in that it featured improvisational solos and similar instruments. Kansas City Jazz was often played in smaller venues located around Kansas City, Missouri, which was a stopover for traveling bands during the Depression Era. Its leaders encouraged the development of night clubs where improvisational musicians could exhibit their talent. It served as a type of bridge between the swing music of the late twenties and thirties and the newer sound that emerged in the 1940s. As the Kansas City Jazz movement grew, most of its performers migrated to New York and other big cities where they could have more exposure.

In the forties, jazz experienced a transition away from the mainstream, dance-style music played by big bands toward a more challenging type of sound for musicians. The new sound was called bebop. It was played by small groups of musicians who focused on harmony, tempo, and the art behind making the music. The popularity of the bebop

movement in the forties was due in part to musicians such as Charlie Parker and Dizzy Gillespie, who wanted to bring back the ideas of early jazz music that focused on dissonance and chromatic notes. Chromatic music uses minor keys, applying sharps and flats to create discord within the music that kindle strong emotion. As with all styles of jazz, improvisation played a huge part in making the music of the era come alive. Musicians used their creative freedom to stray far from the melody lines by using notes that clashed with the harmony before finally bringing the solo and harmony back together in a resolution of chords. Musicians during this time began using the ride cymbal and snare drum for a more explosive percussion style. ■ **A)** To the untrained ear, this type of jazz often sounded more like noise than music and had a tempo that was too fast for dancing. ■ **B)** This jazz had a fragmented, almost racing sound and was met with a negative response by many in that era who loved the organized, danceable sound of the previous two decades. ■ **C)** In spite of the disapproving reaction at the outset, bebop's influence stayed strong throughout the decade and many key jazz musicians of the time eventually experimented with it. ■ **D)** By the end of the forties, bebop was an accepted part of the jazz world and became the foundation for what is considered modern jazz.

Jazz music has evolved constantly since its birth over 200 years ago and has maintained its attractiveness to all kinds of people. Even through the changes, the basics of jazz have remained the same: unique melodies, interesting chords, and a focus on the art of music.

► **improvise**

to do something with no preparation

► **ride cymbal**

a cymbal that is used to keep rhythm rather than to accent certain parts of music

1. The word *its* in paragraph 1 refers to which of the following?
 - (A) jazz
 - (B) unique sound
 - (C) improvised musical styling
 - (D) intense emotion

2. The word *pinnacle* in the passage is closest in meaning to
 - (A) length
 - (B) peak
 - (C) symbol
 - (D) mark

3. According to paragraph 2, swing music
 - (A) contributed its growth to the development of dance halls
 - (B) featured musicians who did not stray from the written music
 - (C) began in the 1920s but became popular in the 1930s
 - (D) was a way for big bands to take part in the jazz movement

4. The author mentions the economic depression in paragraph 2 in order to
 - (A) demonstrate the state of the world during that era
 - (B) contrast jazz in the 1920s to jazz in the 1930s
 - (C) explain why swing was so popular in the 1930s
 - (D) illustrate the emotional effect that jazz had

5. The word *solace* in paragraph 2 is closest in meaning to
 - (A) understanding
 - (B) excitement
 - (C) comfort
 - (D) assistance

6. According to paragraph 3, what happened as Kansas City Jazz became more popular?
 - (A) More people began to travel to Missouri to hear jazz music.
 - (B) Musicians started to migrate to other cities for bigger audiences.
 - (C) It replaced swing as the preferred music in the thirties.
 - (D) Kansas City became known as the jazz capital of the era.

7. The word *dissonance* in the passage is closest in meaning to
 - (A) disagreeableness
 - (B) difference
 - (C) disruption
 - (D) disagreement

8. Which of the following best expresses the essential information in the highlighted sentence? Incorrect answer choices change the meaning in important ways or leave out essential information.
 - (A) The melody and harmony were kept simple so the improvised solos could really stand out.
 - (B) Performers could take liberty with the music, often making it sound different than intended.
 - (C) Notes that clashed with the music were considered to be more creative and more popular.
 - (D) Soloists could improvise more freely, using notes that did not go with the melody.

9. The phrase **this type** in the passage refers to
 (A) swing
 (B) bebop
 (C) chromatic
 (D) percussion style
10. Which of the following is NOT true about bebop's influence on jazz?
 (A) Bebop was almost immediately accepted by lovers of jazz.
 (B) It became the foundation for modern jazz.
 (C) It was a more artistic and abstract form of music.
 (D) It used improvisation in a different way than swing.

11. Look at the four squares [■] that indicate where the following sentence could be added to the passage.
However, those who viewed jazz as an art form welcomed bebop's more abstract, emotional style.
 Where would the sentence best fit?
 (A) First square
 (B) Second square
 (C) Third square
 (D) Fourth square

12. Which of the following can be inferred about bebop jazz music?
 (A) Jazz became the father of many more music types.
 (B) Bebop's influence led to a decline in jazz's popularity in later years.
 (C) Jazz reverted back to the more popular sound of swing after the 1950s.
 (D) Dizzy Gillespie's music was not as danceable as Kansas City Jazz.

13. **Directions:** Complete the table below to summarize information about the two eras of jazz discussed in the passage. Match the appropriate statements to the era with which they are associated. TWO of the answer choices will NOT be used. **This question is worth 2 points.**

Jazz Era	Statements
1930s	• •
1940s	• • •

Answer Choices

- (A) Music called swing was popular in dance halls and on the radio.
 (B) The sound of jazz was dominated by improvised piano solos.
 (C) A small group of musicians recognized this type of jazz as an emotional, abstract art form.
 (D) The harmony had a more minor-key sound.
 (E) People appreciated the distraction jazz gave from the Depression.
 (F) Brass instruments were vital to playing jazz music.
 (G) Bebop, the basis for modern jazz, developed.

05 Biology

Track 248

Section

Reading

Question

1 of 14

Time

00:20:00

Hide

Tools

Island Biogeography Model

Since the 1960s, scientists have been studying the composition and stability of island communities. Specifically, they have been interested in what it takes to maintain life in these isolated areas. As a result, they developed the island biogeography model, a model that not only provides information on island populations, but also provides insights into conservation.

The island biogeography model theorizes that the number of different species on an island will maintain equilibrium, or a state of balance, amid the fluid changes of immigration and extinction. In other words, the number of species on an island remains constant. In an experiment in the US state of Florida, islands of mangrove trees were found to house many different species of arthropods. Scientists documented the numbers and types of species. They then sprayed insect poison over the islands, destroying all of the arthropods there. They observed the islands over the next year, as species of arthropods from the area surrounding the mangrove islands moved onto the island and repopulated it. Within a year, the number of species of arthropods was almost identical to what it had been before spraying the poison. However, the scientists soon discovered that the individual species were not identical to the ones that had been there before. So, while the number of species was the same, the diversity of species was quite different. This study proves that although the species number remains constant, the types of species do not.

The island biogeography model can also apply in places that are not technically islands. In fact, the islands used in this research were man-made, isolated areas that had been created to meet an ever-increasing demand for land and natural resources. These islands form when humans clear out vast amounts of vegetation for arable land and living space. Their actions cut off small areas of land and forest from larger communities, such as when loggers separate a small parcel of forest area from the larger forest. Hence, these isolated pockets become "islands," or areas separated from their larger communities.

By reducing areas of land into islands, humans have a significant impact on wildlife. The island biogeography model states that the larger the island, the higher the rate of extinction.

A) This is due in part to a larger number of species coming to the island to colonize it. As new species immigrate, there begins a competition for resources on the island. B) Since there is a fixed amount of resources on any given island, some species will not survive in the struggle. C) On a smaller island, the rate of extinction would be lower, and so would the corresponding immigration of new species. D) The more isolated these small

islands are, the fewer species they are able to sustain. Certain species of birds and animals may only be found on these islands. If they lose the competition for resources, they will be gone forever. For example, the Bogor Botanical Garden in Indonesia was created fifty years ago, leaving an isolated woodland area where lush forest had once been. Twenty of the sixty-two original species of exotic birds have disappeared completely, and four species are severely endangered.

The model scientists developed has provided beneficial information regarding the conservation of these areas that are threatened by man's need for resources. While the demand for land and natural resources will continue, many feel that with planning and a concerted effort, life in these precious island ecosystems can be preserved to some degree. One solution suggests that a natural corridor be sustained between the isolated communities. For example, scientists in the Netherlands are looking at the possibility of leaving paths of trees and shrubs between these islands. They feel it will aid in maintaining the diversity of species there. The island biogeography model has inspired biologists to begin researching conservation methods. Such methods include the establishment of nature reserves and programs to help plan the use of land in a way that would protect the natural habitat as much as possible.

It is a harsh reality that much of the life on these islands cannot be sustained. Some species will inevitably become extinct. The island biogeography model first started as a way to explain life in the communities of these isolated ecosystems, but has developed into a catalyst that has sparked heavier conservation efforts on behalf of these endangered habitats. The model has served as a tool that has opened the eyes of many who hope to conserve as much tropical forest life as possible.

► **immigration**

the act of moving to a new area

1. The word **fluid** in the passage is closest in meaning to
 - (A) unpredictable
 - (B) unstable
 - (C) changing
 - (D) graceful

2. The word **they** in paragraph 2 refers to
 - (A) species
 - (B) arthropods
 - (C) mangrove trees
 - (D) scientists

3. Why does the author discuss the mangrove tree islands in Florida?
 - (A) To demonstrate the equilibrium hypothesis
 - (B) To contrast man-made and natural islands
 - (C) To explain the origin of the island biogeography model
 - (D) To confirm the research regarding immigration

4. According to paragraph 4, why is the extinction rate higher on larger islands?
 - (A) Larger islands house a larger number of predators.
 - (B) The rate of immigration is higher on larger islands.
 - (C) Newer species take over all the resources.
 - (D) They house a number of older species.

5. Which of the following is NOT true about the repopulation of islands?
 - (A) Nature tends to keep the islands in equilibrium.
 - (B) Immigration balances species extinction.
 - (C) The number of species usually remains constant.
 - (D) The diversity of the species stays the same.

6. The word **sustain** in paragraph 4 is closest in meaning to
 - (A) cultivate
 - (B) encounter
 - (C) feed
 - (D) support

7. The word **they** in paragraph 4 refers to
 - (A) species
 - (B) resources
 - (C) birds
 - (D) island places

8. Which of the following can be inferred from paragraph 4?
 - (A) Man's destruction of nature must come to a halt to preserve island life.
 - (B) Endangered species will be saved when humans stop creating isolated islands.
 - (C) Species will maintain equilibrium if these islands are left untouched.
 - (D) Most island extinctions are caused by human's need for resources.

9. Which of the following best expresses the essential information in the highlighted sentence? Incorrect answer choices change the meaning in important ways or leave out essential information.
 - (A) Life in isolated areas can be conserved despite the high demand for natural resources.
 - (B) With planning, substitutes for natural resources can be found and island life preserved.
 - (C) The number of islands can be reduced, so more species will survive the danger of extinction.
 - (D) The danger of extinction can be lessened if humans work to conserve natural energy and resources.

10. The word catalyst in the passage is closest in meaning to
- (A) means
 - (B) process
 - (C) awareness
 - (D) legislation

11. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

However, while many of the island's older inhabitants may lose out to newer species, the number of species on the island will stay the same.

Where would the sentence best fit?

- (A) First square
 - (B) Second square
 - (C) Third square
 - (D) Fourth square
12. All of the following are correct about the island biogeography model EXCEPT:
- (A) The model provided essential information regarding conservation.
 - (B) The equilibrium hypothesis was proved true on an island of arthropods.
 - (C) Scientists discovered ways to control the number of species becoming extinct.
 - (D) The research mainly studied islands created by man's need for resources.

13. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some answer choices do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. **This question is worth 2 points.**

This passage describes the island biogeography model with its equilibrium hypothesis in the preservation of endangered species in isolated areas.

<ul style="list-style-type: none">•••

Answer Choices

- (A) The experiment in Florida confirmed that the number of arthropods stayed the same upon repopulation.
- (B) The trial in the Netherlands should provide beneficial information for conservation efforts.
- (C) The study revealed that the number of species on an island stays in balance while the composition of species can vary greatly.
- (D) The model led to efforts to conserve as many habitats as possible through natural corridors and planned land use.
- (E) Unless steps are taken, more and more species will become endangered and extinct.
- (F) Scientists began with a study of the stability and makeup of island communities and made important discoveries.

Practice Test

Track 249

Section Listening	Options Pause Section Exit	Time 00 : 40 : 00	Directions Continue	Tools
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Listening Section**Directions**

In this section, you will listen to four lectures and two conversations. You will hear each lecture and conversation one time.

After each listening passage, you will answer some questions about it. Most questions are worth one point, but some questions are worth more than one point. The directions indicate how many points you may receive.

You will have 30 to 40 minutes to both listen and answer the questions. The questions ask about the main idea and supporting details. Some questions ask about a speaker's purpose or attitude.

You may take notes while you listen. You may use your notes to help you answer the questions. Your notes will not be scored.

In some questions, you will see this icon: . This means you will hear part of the lecture or conversation again.

When you are ready, press **Continue**.



01 Biology

Section Listening	Question 1/1	Time 00:40:00	Tools Back Forward Stop Play
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Listen to a lecture in a biology class.



1. What is the main topic of the lecture?
 - (A) Why sharks are probably solitary hunters
 - (B) How sharks send messages to each other
 - (C) The differences between male and female sharks
 - (D) The hunting patterns and behaviors of sharks

2. Listen again to part of the lecture. Then answer the question. 
What does the professor mean when he says this: 
 - (A) Sharks and wolves have many similar characteristics.
 - (B) Sharks may actually hunt more like wolves than leopards.
 - (C) Researchers found that sharks did not always hunt in packs.
 - (D) Scientists are starting to learn about solitary hunting behavior in sharks.

3. What is the professor's attitude toward the researchers who worked around Cocos Island?
 - (A) He admires them for their work.
 - (B) He does not understand why they did it.
 - (C) He thinks it was not worth the danger.
 - (D) He does not believe they actually did it.

4. According to the passage, why do old sharks let young sharks hunt first?
 - (A) To make sure they get enough to eat
 - (B) To allow them to gain experience
 - (C) To learn new techniques from them
 - (D) To get food remains from them

5. How does the professor organize the information about tracking sharks that he presents to the class?
 - (A) He gives information about the difficulties of tracking the sharks.
 - (B) He explains the process and the information scientists learn from it.
 - (C) He describes why it is important to track the sharks.
 - (D) He tells the students about his own experience tracking sharks.


6. What can be inferred about whales?
 - (A) They are not as intelligent as sharks.
 - (B) They tend to swim in unfamiliar areas.
 - (C) They cannot defend themselves against sharks.
 - (D) They are one type of sharks' prey.

02 History



Section	Question	Time	Tools
Listening	78/34	00:34:00	Volume Control Back Exit

Listen to a lecture in a history class. **Track 250**



7. What is the main topic of the lecture?
- (A) The influence of trade on the Venetian Republic
 - (B) How wars with the Genoese led to the decline of Venice
 - (C) The ways that Venice overcame problems with trade
 - (D) Why trade was unimportant in the Venetian Republic
8. Why does the professor mention Rome?
- (A) To introduce Venice's primary competitor
 - (B) To add that Rome was the strongest empire
 - (C) To emphasize the long history of Venice
 - (D) To compare the Roman Empire with that of Venice
9. How did the defeat of the Normans benefit the Venetians?
- (A) It provided Venice with additional territory.
 - (B) It resulted in an alliance with Byzantine.
 - (C) It gave Venice control of northern Italy.
 - (D) It helped Venice gain international respect.
10. What does the professor mean when she says this: 
- (A) She wants to give another reason why tensions grew between Byzantine and Venice.
 - (B) She thinks it was unfair that Venice grew antagonistic toward Byzantine.

- (C) She wants to remind the students that the Byzantine empire was unjust.
- (D) She is proposing that Venice became rich by repressing Byzantine empire.

11. Listen again to part of the lecture. Then answer the question. 
- Why does the professor say this: 
- (A) She wants the students to understand the effects of the Genoese influence.
 - (B) She wants to point out that the Byzantines took over the monopoly.
 - (C) She is explaining that the Venetians were not affected by the Genoa-Byzantine alliance.
 - (D) She is detailing how the Genoese brought the Venetian Republic down.

12. Based on information from the lecture, indicate whether or not each event occurred in the Venetian Republic. Place a checkmark in the correct box.

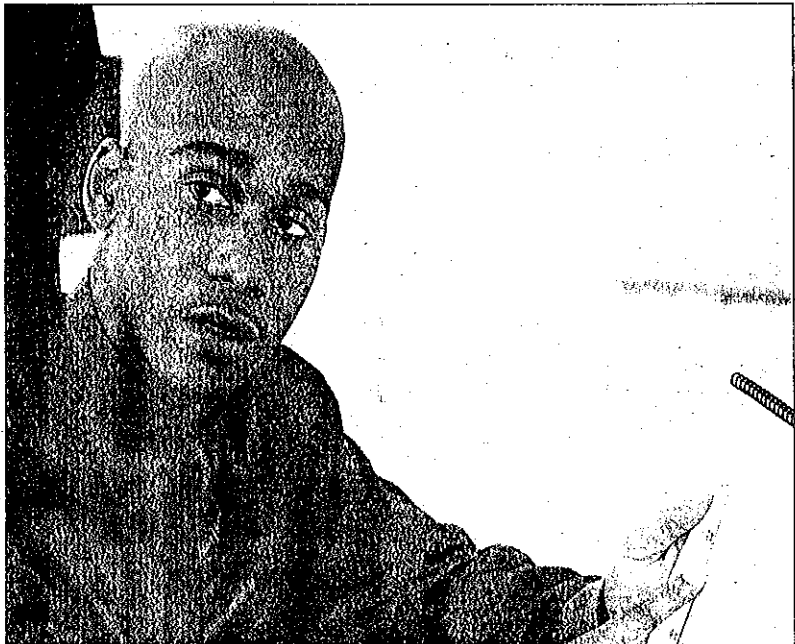
	Yes	No
The Venetian Republic was invaded by the Normans.		
The Venetian Republic became trade partners with the Genoese.		
The Venetian Republic defeated the Genoese in 1381.		
The Venetian Republic allied with Genoa against the Byzantine Empire.		



03 Service Encounter

Section	Question	Time	Tools
Listening	13 of 34	00:28:00	

Listen to a conversation between a student and a university employee.

Track 251

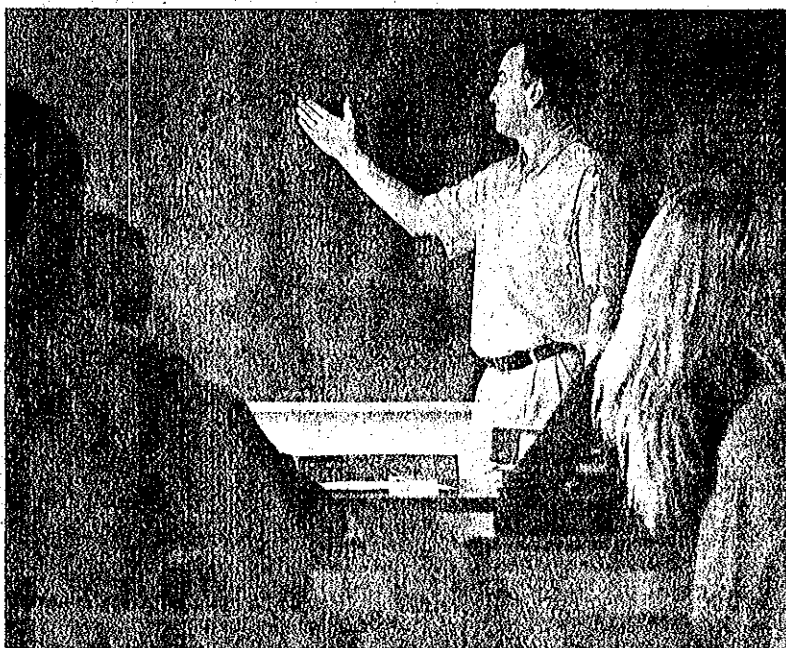




- 13.** What problem does the student have?
- (A) She needs to file a police report for her stolen laptop.
 - (B) She needs help in order to replace her computer.
 - (C) She wants a loan to pay for a computer program.
 - (D) She cannot figure out how to order a new laptop.
- 14.** What is the student's attitude toward her financial aid package?
- (A) She is satisfied with it.
 - (B) She thinks it is unfair.
 - (C) She thinks it is a mistake.
 - (D) She is confused by the amount.
- 15.** Listen again to part of the conversation. Then answer the question. 
Why does the man say this: 
- (A) He wants to find out what the problem is.
 - (B) He does not think the student has a reason to ask for aid.
 - (C) He is trying to figure out the mistake in the package.
 - (D) He is curious about the student life at the university.
- 16.** How can the Computer Purchase Program help the student?
- (A) She can get a job with the university to pay off her loan.
 - (B) She can order a brand new computer from any company.
 - (C) She can receive a discount on a new computer.
 - (D) She can get a new computer for free from the university.
- 17.** What can be inferred about the student's last computer?
- (A) It never worked properly.
 - (B) It was the first computer she ever owned.
 - (C) Her sister used it during college.
 - (D) She did not take care of it.

04 Philosophy

Section Listening	Question 18 of 34	Time 00:23:00	Tools
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Listen to a lecture in a philosophy class. **Track 252**



18. What is the lecture mainly about?
- (A) The different methodologies used by Socrates and Plato
 - (B) The significance of Socrates and Plato on the philosophy of ethics
 - (C) The ideas of Socrates and Plato regarding ethics
 - (D) The ways that Plato expanded Socrates's philosophies
19. Listen again to part of the lecture. Then answer the question. 
Why does the professor say this: 
- (A) He wants to test the students' knowledge.
 - (B) He is making sure the students have the background.
 - (C) He does not know what the Socratic Method is.
 - (D) He wants the students to pay close attention to the Socratic Method.
20. According to the lecture, what is the opposite of goodness?
- (A) Virtue
 - (B) Ignorance
 - (C) Evil
 - (D) Righteousness
21. What is the professor's attitude toward Socrates's treatment of ethics?
- (A) He feels it is too simplistic for today's world.
 - (B) He thinks it no longer applies to modern society.
 - (C) He finds that it explains why people do good and bad things.
 - (D) He thinks it is adequate in accounting for self-interest.

22. What can be inferred about Plato's philosophies?
- (A) They were repetitions of Socrates's beliefs.
 - (B) They were influenced by the work of Socrates.
 - (C) They dealt more with broader issues of ethics than are dealt with today.
 - (D) They were more popular than Socrates's philosophy.
23. Based on information from the lecture, to which philosopher does each statement relate? Place a checkmark in the correct box.





	Plato	Socrates	Both
When virtue is truly known, one is virtuous.			
Goodness is an objective form.			
The concept of self-interest was not treated.			
Written dialogues were used to teach philosophy.			

05 History

Section Listening	Question 2 of 36	Time 00:17:00	Tools
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Listen to a discussion in a history class. Track 253



24. What is the discussion mainly about?
- (A) The problems with Turner's frontier thesis
 - (B) Turner's ideas about American history and society
 - (C) Why Turner's thesis was controversial in Europe
 - (D) How Turner formulated his frontier thesis
25. According to the discussion, which are traits that Americans gained as a result of their frontier history? Choose 2 answers.
- (A) Democracy
 - (B) Aggression
 - (C) Inventiveness
 - (D) Materialism
26. Listen again to part of the discussion. Then answer the question. 
Why does the professor say this: 
- (A) To offer a different idea
 - (B) To criticize the European reaction
 - (C) To question the role of the USA in the world
 - (D) To support Turner's claims
27. Listen again to part of the discussion. Then answer the question. 
What does the professor mean when she says this: 
- (A) She thinks Turner's ideas are illegitimate.
 - (B) She does not agree with Turner's later thesis.
 - (C) She is amused by Turner's change of opinion.
 - (D) She finds Turner's ideas controversial.
28. How does the professor organize the information about Turner's later work?
- (A) She allows the students to give examples of how it was different.
 - (B) She describes an important essay that Turner published.
 - (C) She mentions the reasons why Turner's opinions changed.
 - (D) She asks the students to give modern examples of Turner's ideas.
29. What can be inferred about education during the mid-19th century?
- (A) It had become a strong social institution.
 - (B) It was not valued by the American public.
 - (C) It was only available to rich people.
 - (D) It was influenced by frontier universities.

06 Office Hours

Section Listening	Question 20 of 3	Time 00:11:00	Tools
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Listen to a conversation between a student and a professor. **Track 254**





30. What are the speakers mainly discussing?

- (A) Why the student submitted his paper late
- (B) How the student can improve his writing skills
- (C) The professor's grading policy on rough drafts
- (D) The things the student will have to do in order to pass

31. What is the student's attitude toward the professor's grading?

- (A) He understands how it works.
- (B) He thinks that it is fair.
- (C) He finds it biased.
- (D) He is confused about it.

32. Listen again to part of the conversation. Then answer the question. 

What does the professor mean when she says this: 

- (A) She is informing the student that his paper is well written.
- (B) She is congratulating the student on writing the right way.
- (C) She is letting the student know he acted correctly.
- (D) She is suggesting that student visit her again for additional help.

33. Why did the professor grade the drafts roughly?

- (A) Because they are not included in the final grade
- (B) To encourage students to work hard and ask questions
- (C) To motivate students to pay close attention in class
- (D) To finish grading as quickly as possible

34. What will the student probably do next?

- (A) Drop out of the course
- (B) Go to class
- (C) Apply the professor's revisions
- (D) Disregard the professor's comments

Practice Test 1

Track 255

Section Speaking	Options Pause Section	Directions Continue	Testing Tools
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Speaking Section

Directions

In this section of the test, you will demonstrate your ability to speak about a variety of topics. You will answer six questions by speaking into the microphone. Answer each question as completely as possible.

In questions one and two, you will speak about familiar topics. Your response will be scored on your ability to speak clearly and coherently about the topics.

In questions three and four, you will first read a short text. The text will disappear, and you will then listen to a talk on the same topic. You will be asked a question about what you have read and heard. You will need to combine appropriate information from the text and the talk to provide a complete answer to the question. Your response is scored on your ability to speak clearly and coherently and on your ability to accurately convey information about what you read and heard.

In questions five and six, you will listen to part of a conversation or a lecture. You will be asked a question about what you heard. Your response is scored on your ability to speak clearly and coherently and on your ability to accurately convey information about what you heard.

You may take notes while you read and while you listen to the conversations and lectures. You may use your notes to help prepare your responses.

Listen carefully to the directions for each question. The directions are not shown on the screen.

For each question, you will be given a short time to prepare your response. A clock will show how much preparation time is remaining. When the preparation time is up, you will be told to begin your response. A clock will show how much time is remaining. A message will appear on the screen when the response time has ended.

If you finish before the allotted time, press **Continue** to go to the next question.

Question 1 Track 256

Section
Speaking

Question
1 of 8

Tools

What is one goal that you would like to achieve in your life? Include specific reasons and examples to support your answer.

Preparation time

00 : 00 : 00

Preparation time: 30 seconds
Response time: 60 seconds

Question 2 **Track 257**

Section Speaking	Question 2 of 6	Tools
----------------------------	---------------------------	--------------

Do you feel that young people should volunteer for civic work or be paid for civic work?
Include specific reasons and examples to support your answer.

Preparation time

00 : 00 : 00

Preparation time: 30 seconds
Response time: 60 seconds

Question 3 Track 258

Section Speaking	Question 3 of 6	Tools
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A university is announcing the closure of a health-food restaurant on campus. Read the following announcement about the center. You will have 45 seconds to read the announcement. Begin reading now.


Reading time: 45 seconds

Announcement

At the end of this semester, City University will be closing the doors of the campus health-food restaurant, Green Acres. A number of considerations were taken into account when making the choice to close the restaurant. First, Green Acres did not receive enough customers as compared with other campus restaurants. Additionally, the cost of food at Green Acres is much higher than at other campus restaurants. Due to the lack of popularity for the restaurant and its high cost of food, officials have decided to replace Green Acres with a new establishment.

Section Speaking	Question 3 of 6	Tools
---------------------	--------------------	-------

Now listen to two students as they discuss the announcement.



Section

Question
1 of 6

Tools

The woman expresses an opinion regarding the closure of a health-food restaurant on campus. State her opinion and explain the reasons she gives for holding that opinion.

Preparation time

00 : 00 : 00

Preparation time: 30 seconds
Response time: 60 seconds

Question 4 Track 259Section
SpeakingQuestion
4 of 6

Tools

Now read a passage about vaccinations. You will have 45 seconds to read the passage. Begin reading now.

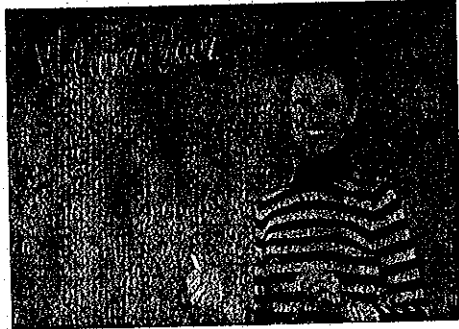
Reading time: 45 seconds

Vaccinations

Since 1796, humans have developed a unique way to resist diseases. During that year, Edward Jenner developed the first vaccination, a process that puts a weakened form of a disease into a person's body. Once this disease has entered the body, the immune system (or natural defense system) goes through two stages to develop a resistance. First, the body's immune system fights and destroys the disease. Second, the body stores natural defenses to fight similar diseases in the future. Through these two stages, vaccinations enable our bodies to develop an effective resistance against many dangerous diseases.

Section: Speaking
Question: 4 of 6
Tools

🎧 Now listen to part of a lecture on this topic in a medical science class. As you listen, be sure to take notes.



Section

Question

Tools

The professor discusses how vaccinations helped people become immune to smallpox. Explain how the smallpox vaccine caused the body to develop an effective resistance to the disease.

Preparation time**00 : 00 : 00**

Preparation time: 30 seconds

Response time: 60 seconds


Question 5 Track 260

Section

Question
5 of 6

Tools

🎧 Now listen to a conversation between two students.



Section
SpeakingQuestion
5 of 6

Tools


The students discuss two possible solutions to the woman's problem. Describe the problem. Then state which of the two solutions you prefer and explain why.


Preparation time**00 : 00 : 00**

Preparation time: 30 seconds
Response time: 60 seconds

Question 6 Track 261

Section: Speaking Question: 6 of 6 Tools

 Now listen to part of a lecture in a linguistics class.



Section: Speaking Question: 6 of 6 Tools

The professor discusses how different languages originated from one proto-language. Describe this process and explain the two stages a language undergoes to become multiple languages.

Preparation time
00 : 00 : 00

Preparation time: 30 seconds
Response time: 60 seconds

Practice Test 2

Track 262

Section
SpeakingOptions
Pause Section
ExitDirections
Continue

Testing Tools

Speaking Section**Directions**

In this section of the test, you will demonstrate your ability to speak about a variety of topics. You will answer six questions by speaking into the microphone. Answer each question as completely as possible.

In questions one and two, you will speak about familiar topics. Your response will be scored on your ability to speak clearly and coherently about the topics.

In questions three and four, you will first read a short text. The text will disappear, and you will then listen to a talk on the same topic. You will be asked a question about what you have read and heard. You will need to combine appropriate information from the text and the talk to provide a complete answer to the question. Your response is scored on your ability to speak clearly and coherently and on your ability to accurately convey information about what you read and heard.

In questions five and six, you will listen to part of a conversation or a lecture. You will be asked a question about what you heard. Your response is scored on your ability to speak clearly and coherently and on your ability to accurately convey information about what you heard.

You may take notes while you read and while you listen to the conversations and lectures. You may use your notes to help prepare your responses.

Listen carefully to the directions for each question. The directions are not shown on the screen.

For each question, you will be given a short time to prepare your response. A clock will show how much preparation time is remaining. When the preparation time is up, you will be told to begin your response. A clock will show how much time is remaining. A message will appear on the screen when the response time has ended.

If you finish before the allotted time, press **Continue** to go to the next question.

Question 1 **Track 263**

Section Speaking	Question 1 of 5	Tools
----------------------------	---------------------------	--------------

Describe a person from history whom you admire. Include specific reasons and examples to support your answer.

Preparation time

00 : 00 : 00

Preparation time: 30 seconds
Response time: 60 seconds

Question 2 Track 264

Section Speaking	Question 2 of 6	Tools
---------------------	--------------------	-------

Some people believe that professors should be limited in the amount of homework they can assign each night. Others believe that the amount of homework students are given each night should be left up to the professor. Which do you prefer? Include specific reasons and examples to support your answer.

Preparation time

00 : 00 : 00

Preparation time: 30 seconds
Response time: 60 seconds

Question 3 Track 265

Section
Speaking

Question
3 of 6

Tools

A university is announcing the cancellation of a publications class. Read the following notice about the cancellation. You will have 45 seconds to read the notice. Begin reading now.


Reading time: 45 seconds

Publications Class Cancelled

Please take notice that the Humanities Department will be canceling the publications class that was scheduled for this upcoming semester. A committee within the department chose to do so after careful consideration. The professor that normally teaches the class, Ian Thomson, is on extended personal leave, and no other teachers in the department are qualified to teach the course. Moreover, student interest in the course appears to be minimal. As a result, the department has chosen to cancel the class instead of going through the selection process necessary to find a suitable replacement to teach the material.

Section Question Tools

Now listen to two students as they discuss the announcement.



Section: Speaking Question: 3 of 6 Tools

The man expresses his opinion regarding the cancellation of the publications class. State his opinion and explain the reasons he gives for holding that opinion.

Preparation time
00 : 00 : 00

Preparation time: 30 seconds
Response time: 60 seconds

Question 4 Track 266

Section

Speaking

Question

4 of 5

Tools

Now read a passage about birdsong. You will have 45 seconds to read the passage. Begin reading now.

Reading time: 45 seconds


Birdsong

A songbird is a type of bird that produces what humans recognize as birdsong. It has long been known that different species of songbirds produce different varieties of songs. However, while birdsong varies according to species, it also varies according to gender. Male songbirds produce songs that are much more elaborate than those of female songbirds.

These distinctions arise because the song-producing mechanisms in the brains of male and female songbirds differ. Additionally, chemicals within the songbird brain create differences between a male and a female songbird's ability to produce birdsong.

Section: Speaking Question: 4 of 5 Tools

🎧 Now listen to part of a lecture on this topic in a zoology class.



Section
Speaking

Question
A of 6

Tools

The professor describes two physiological reasons to explain why male songbirds have more elaborate songs than female songbirds. Describe these differences.

Preparation time

00 : 00 : 00

Preparation time: 30 seconds

Response time: 60 seconds


Question 5 Track 267

Section
Speaking

Question
5 of 6

Tools

🔊 Now listen to a conversation between two students.



Section Speaking	Question 5 of 6	Tools
---------------------	--------------------	-------

The students discuss two possible solutions to the woman's problem. Describe the problem. Then state which of the two solutions you prefer and explain why.

Preparation time

00 : 00 : 00

Preparation time: 30 seconds
Response time: 60 seconds

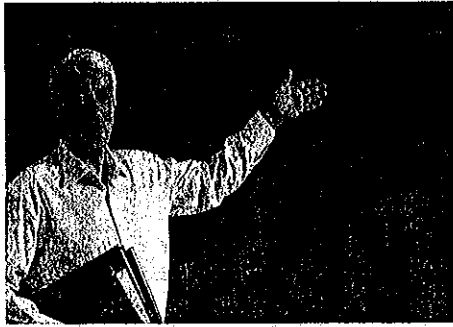
Question 6 Track 268

Section
Speaking

Question
6 of 6

Tools

🎧 Now listen to part of a lecture in a biology class.



Section SPEAKING	Question 6 of 7	Tools
---------------------	--------------------	-------

Using points and examples from the lecture, explain why carnivorous plants can only grow well under certain conditions.

Preparation time

00 : 00 : 00

Preparation time: 30 seconds
Response time: 60 seconds

Practice Test 1

Track 269

Section
WritingOptions
Pause Section
EXITDirections
GO HOMETesting Tools
HELP BACK FORWARD**Writing Section****Directions**

Be sure your headset is on.

This section measures your ability to write in an academic environment.

There are two tasks in this section. For the first task, there is a reading passage and a lecture. You will write a response to a prompt based on what you read and hear.

For the second task, you will write a response to a prompt based on your own knowledge and experience.

Now, listen to the directions for the first writing task.

READING

LISTENING

SPEAKING

WRITING

PRACTICE TEST

Section Writing	Options Pause Section Exit	Directions Continue	Testing Tools Back Next Help
--------------------	----------------------------------	------------------------	---------------------------------------

Integrated Writing Directions

For this task, you will have three minutes to read a passage about an academic topic. You may take notes while reading if you wish. The passage will then disappear, and you will hear a lecture about the same topic. While listening, you may also take notes.

You will then have 20 minutes to write a response to a prompt related to the relationship between the lecture and the reading passage. Answer the prompt as completely as possible using information from both the reading passage and the lecture. The prompt will not ask you to express a personal opinion. The reading passage will appear again when it is time for you to start writing. You may use your notes from the lecture and the reading to help you answer the prompt.

Typically, an effective response for this task will be 150 to 225 words long. Your response will be graded on the quality of your writing and on the completeness and accuracy of the information you include in your response. If you finish your response before your time has run out, you may click **Next** to go to the second writing task.

Now, you will see a reading passage for three minutes. Remember that the passage will be available to you again while you are writing. Immediately after the reading time ends, the lecture will begin. Be sure to keep your headset on until the lecture has ended.

Section Writing	Question 1 of 2	Time 00:20:00	Tools Volume Back Next Help
--------------------	--------------------	------------------	--------------------------------

Depression is a condition that affects millions of people worldwide, but specialists remain divided as to how to treat it. Individuals experiencing depression suffer from severely negative moods that impact their everyday life and affect their ability to function. In order to treat depression, many useful medications have been developed. Medication is currently the best way for patients to fight against depression.


First of all, medication helps treat the cause of depression. To function properly, the brain requires naturally occurring chemicals. The most common cause of depression is a chemical imbalance in the brain of the patient. Abnormal levels of specific chemicals can have a dramatic effect on a person's mood and can trigger depression in some cases. Treating these imbalances is the most important part of treating depression. The only known treatment for these imbalances is medication.

Moreover, the medication for depression has proven effective in numerous cases. A number of these medications have been successfully used to treat depression for several years and have been an essential part of helping patients move beyond their condition. With the help of medication, thousands of patients are now able to live fulfilling lives despite their depression. While other forms of treatment have been proposed to treat depression, none have yet proven as effective as medication has.

Additionally, medication is typically easier for the patient to deal with than other forms of treatment such as therapy. The medications are usually taken once or twice per day and do not disrupt the patient's day-to-day life. Maintaining a person's regular schedule is an important part of dealing with depression. Patients that have to undergo disruptive treatments are less likely to recover from their depression in a timely manner.

Word Count	0	Hide	Undo	Cut	Paste
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Section Writing	Question of 2	Time 00:20:00 HHS	Tools Back Next Home Help
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 Now listen to part of a lecture on the topic you just read about. **Track 271**



Section Writing	Question 1 of 2	Time 00:20:00	Tools Volume Back Next Print
--------------------	--------------------	------------------	---------------------------------

You have 20 minutes to plan and write your response. Your response will be judged on the basis of the quality of your writing and on how well your response presents the points in the lecture and their relationship to the reading passage. Typically, an effective response will be 150 to 225 words long.

Prompt: Summarize the points made in the lecture you just heard, explaining how they cast doubt on points made in the reading.

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Word Count	0	Hide	Undo	Cut	Paste
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Section Writing	Question 2 of 2	Time 00 : 30 : 00	Tools
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Independent Writing Directions

For this task, you will write a response to a question that asks you to present, explain, and support your opinion on an issue. You will have 30 minutes to write your response to the prompt.

Typically, an effective response for this task will be about 300 words long. Your response will be graded on the quality of your writing. Graders will consider various aspects of the response such as the development of your ideas, the organization of the content, and the quality and accuracy of the language used to express ideas.

If you finish your response before your time has run out, you may click **Next** to end this section.

When you are ready to begin, click on the **Dismiss Directions** icon.

Section Writing	Question 2 of 2	Time 00:30:00	Tools Volume, Back, Forward, Print
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Read the prompt below. You have 30 minutes to plan, write, and revise your essay. Typically, an effective response will contain a minimum of 300 words.

Do you agree or disagree with the following statement? Success is based more on luck than on hard work. Use specific reasons and examples to support your answer.

Word Count	0	Hide	Undo	Cut	Paste
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Practice Test 2

Track 272

READING

LISTENING

SPEAKING

WRITING

PRACTICE TEST

Section

Writing

Options

Pause

Section

Exit

Directions

Continue

Testing Tools

Writing Section**Directions**

Be sure your headset is on.

This section measures your ability to write in an academic environment.

There are two tasks in this section. For the first task, there is a reading passage and a lecture. You will write a response to a prompt based on what you read and hear.

For the second task, you will write a response to a prompt based on your own knowledge and experience.

Now, listen to the directions for the first writing task.

Section Writing	Options Pause Section EXIT	Directions Continue	Testing Tools
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Integrated Writing Directions

For this task, you will have three minutes to read a passage about an academic topic. You may take notes while reading if you wish. The passage will then disappear, and you will hear a lecture about the same topic. While listening, you may also take notes.

You will then have 20 minutes to write a response to a prompt related to the relationship between the lecture and the reading passage. Answer the prompt as completely as possible using information from both the reading passage and the lecture. The prompt will not ask you to express a personal opinion. The reading passage will appear again when it is time for you to start writing. You may use your notes from the lecture and the reading to help you answer the prompt.

Typically, an effective response for this task will be 150 to 225 words long. Your response will be graded on the quality of your writing and on the completeness and accuracy of the information you include in your response. If you finish your response before your time has run out, you may click **Next** to go to the second writing task.

Now, you will see a reading passage for three minutes. Remember that the passage will be available to you again while you are writing. Immediately after the reading time ends, the lecture will begin. Be sure to keep your headset on until the lecture has ended.

Section Writing	Question 1 of 2	Time 00:20:00	Tools Volume Back Next Stop
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In the past decade, concerns regarding the safety of traditionally grown produce have arisen. Many chemicals are being used to control pests on crops, which have prompted some consumers to begin purchasing "organic" produce—fruits and vegetables that are grown without the aid of man-made chemicals. In the past several years, organic produce has become widely popular as it is healthier than traditionally grown produce for humans and for the environment.

Most consumers who purchase organic fruits and vegetables do it for their own personal health. They know that when they purchase organic produce, they do not run the risk of ingesting any of the potentially harmful chemicals used with traditionally grown produce. Many people feel safer feeding their families produce that has been grown without these man-made chemicals.

There are environmental reasons to buy organic produce as well. Farms that grow organic produce tend to pose less of a risk to the water sources near the farm than traditional farms do. Traditional farms use chemicals that can run off of the plants and make their way into nearby sources of water, which can cause water pollution. Since organic farms do not use these chemicals, they pose little risk to nearby sources of water.

Also, organic farms tend to impact their surrounding ecosystems less than traditional farms do. The chemicals used on plants can hurt the populations of vegetation and animals near traditional farms, creating imbalances and disturbances in the surrounding ecosystem. On the other hand, the lack of chemicals on organic farms results in far less negative impact on nearby ecosystems. For people concerned about their own safety and the well-being of the environment, organic produce is the obvious choice.

Word Count 0


Hide

Undo

Cut

Paste

Section Writing	Question 1872	Time 00:20:00	Tools
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 Now listen to part of a lecture on the topic you just read about. Track 274



Section Writing	Question 1572	Time 00:20:00	Tools Volume Back Next Help
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You have 20 minutes to plan and write your response. Your response will be judged on the basis of the quality of your writing and on how well your response presents the points in the lecture and their relationship to the reading passage. Typically, an effective response will be 150 to 225 words long.

Prompt: Summarize the points made in the lecture you just heard, explaining how they cast doubt on points made in the reading.

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Word Count	0	Hide	Undo	Cut	Paste
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Section	Question	Time	Tools
Writing	2 of 2	00:30:00	

Independent Writing Directions

For this task, you will write a response to a question that asks you to present, explain, and support your opinion on an issue. You will have 30 minutes to write your response to the prompt.

Typically, an effective response for this task will be about 300 words long. Your response will be graded on the quality of your writing. Graders will consider various aspects of the response such as the development of your ideas, the organization of the content, and the quality and accuracy of the language used to express ideas.

If you finish your response before your time has run out, you may click **Next** to end this section.

When you are ready to begin, click on the **Dismiss Directions** icon.

Section
WritingQuestion
2 of 2Time
00:30:00Tools
List Volume Back Next Home

Read the prompt below. You have 30 minutes to plan, write, and revise your essay. Typically, an effective response will contain a minimum of 300 words.

Some college instructors require their students to attend class. Others choose not to take attendance. Do you feel that college instructors should have the right to require classroom attendance? Use specific reasons and examples to support your answer.

Word Count 0

Hide

Undo

Cut

Paste

Mastering Skills for the TOEFL® iBT

LISTENING / SPEAKING / WRITING

Transcripts

Listening

Note: Highlighting indicates a repeated listening sample.

Preview Test

01 Psychology

M: How many of you know what pseudopsychology is? OK, well, to put it simply, pseudo means false, or, uh, not genuine. So, pseudopsychology is basically a system of beliefs that sort of resembles psychology. However, it is completely unfounded, like astrology, or palmistry . . . you know, looking at a person's palm and suggesting that the lines there have some sort of meaning. Things like reading your horoscope, or getting your palm read—those are examples of pseudopsychologies.

Anyway, when we talk about pseudopsychology, you probably wonder why so many people believe it. Are they just gullible? Actually, scientists think that one of the reasons people believe in pseudopsychology is due to the Barnum Effect. What's the Barnum Effect? Well, it describes the tendency to believe personality profiles or horoscopes when they are worded ambiguously. Pseudopsychology got its name from Phineas Taylor Barnum. If the name sounds familiar, you probably recognize him as the famous circus master who believed that a grand circus is one that has "a little something for everybody." In the same way, a typical reading will have something about one's love life, at least one declaration of future financial prospects, and always something about personality.

Here's the thing . . . In pseudopsychology, providing something for everyone means telling people what they want to hear. For example, a typical description contains two extremes of one's personality, such as "Sometimes you are extroverted and sociable, while at other times you are introverted and aloof." Do you all see what I'm getting at here? The person can identify with at least one part of the reading because it is ambiguously worded and represents two extremes. A description like this makes it easy for the person to confirm that it's true!

So, what proof do we have that the Barnum Effect even exists? Well, in 1949, a man named B.R. Forer began to investigate the existence of the

Barnum Effect. What he did was give thirty-nine undergraduate psychology students a personality test. Without them—I mean the students—without them knowing, they were all given the exact same result: an open-ended reading of their personality strengths and weaknesses. Next, Forer had them rate the reading on a scale of zero to five, with zero meaning the reading didn't accurately portray their personality at all, and five signifying that it was extremely accurate. The average rating the students gave was a 4.3, meaning that most students actually believed the ambiguous, open-ended personality descriptions. Just to see if the results could be replicated, Forer went on to try the experiment on others and, lo and behold, he came up with the same results time and time again. So, clearly, it doesn't matter that we're talking about an educated group of subjects here—an invalid personality assessment tool can be easily mistaken as being compellingly legitimate by anybody if it's vague enough. Does anybody have any questions about Forer's experiment? If not, we can move on.

Another important investigation took place at Lawrence University under the direction of Peter Glick, another psychologist. Glick wanted to find out how the content of readings might affect the way they're interpreted. So first, he separated his students into two groups based on whether they considered themselves skeptics or believers of horoscopes. Next, he gave each group some horoscopes, which were *all* the same, except that they were worded differently, so um, the same meaning but different words. When given their horoscopes, only the "believers" group confirmed that the negatively worded horoscopes were accurate. But here's the funny part: people from both groups rated their readings as accurate when the horoscopes were presented in a positive light. This shows that while the cynical participants wouldn't believe the negative readings, they were willing to accept the positive ones, because, as we all know, everybody wants to hear good things about themselves.

02 Art History

W: Hello, class. This week, we've spent some time talking about art in China. We covered the history of art in Chinese society and went over the Chinese um . . . aesthetic tradition. Anyway as an extension of those topics, for today's discussion, I thought it could be helpful to talk about some common themes and symbols in Chinese art. Who can start us off?

M: Well, if you don't mind me kind of dodging your question, something that really caught my eye is the lack of certain themes that are so prevalent in a lot of Western art. I mean, like, war or death is almost never depicted in Chinese art. I thought that was interesting.

W: Good observation. Other themes that would never find their way into Chinese art are violence, nudity, or martyrdom. All big topics in Western art. Why don't we examine these themes, themes that *would not* be featured on a Chinese canvas, and explore *why* they're excluded. What do you think?

M: I would imagine it has to do with the way that the Chinese considered art. It wasn't the same as in Rome or Athens. For the Chinese, art had to have some kind of function, whether it be moral, social, or whatever. They wouldn't just paint anything. It had to make the artist and the viewer *better people* somehow.

W: That's absolutely right. So, in a broader sense, what is it about themes like war or death that made them unsuitable for Chinese artists?

M: I think the biggest problem is that it doesn't really give the artist room for symbolic representation. I guess I just mean that most Chinese art is symbolic. It seems to me that depicting a war doesn't afford the artist with the opportunity to paint symbols that represent some kind of bigger understanding about life, or death, or anything really. Does that make sense?

W: I think that's a good point. It has to do with the way the Chinese conceive art, and you really hit it right on the head when you mentioned symbolism. See, you might have also noticed that Chinese artists don't really preoccupy themselves with aesthetic notions like perspective or shading. For example, if you look at any early Chinese painting, you'll see that they couldn't have cared less about painting realistic-looking

scenes. The reason for this is because they were primarily concerned with expressing harmony. This is why Chinese art looked so different from Western art. Are we all still on the same page?

M: So . . . what was the function of using so many symbols again?

W: Well, think of it this way: in using a lot of symbols, the artist depicts his or her more complete understanding of something that isn't really obvious and can't really be explained. And yet, they are completely aware of it. It's that intuitive aspect of using symbols that leaves no room for outright, realistic depictions.

M: It's true. You can even see that aspect in their portraits. You'd expect a portrait to be a realistic rendition of the person who paid to have it made, and yet, Chinese artists would always portray more than a person. They would show the person's social ranking or even their personality somehow. I think that the intuitive symbolism in Chinese art is precisely what makes it so expressive, and yet so difficult to interpret at times.

W: That's right. And now to get back to our original question, can you give some examples of themes or symbols that *are* frequently used in Chinese art?

M: I noticed that human relationships seem to be a pretty common theme. Chinese artists seem to enjoy depicting how people relate, or the reactions between them in different situations.

W: Good, that's absolutely right. And how about symbols?

M: They use a lot of symbols over and over again. Like bamboo shows up a lot, and that's supposed to be related to the spirit of the scholar.

03 Service Encounter

M: What can I do for you today?

W: Well, today is the deadline for seniors to change their major . . .

M: Let me guess. You're a senior, you would like to change your major, and you haven't done so yet?

W: Well, yes . . . It's just that it's, well, a daunting task. I honestly don't know what to do.

M: Let me help you. What field of study did you initially take interest in?

W: Well, when I got into college, I thought I would study psychology, but I ended up choosing biology as my major. Not only that, but I'm now also interested in things like astronomy, public health, and ancient art history. Now, I'm not so sure.

M: OK then, have you ever thought about combining your studies?

W: I've considered the possibility of linking health sciences with psychology and majoring in both, but it seems like too much of a commitment. Especially when I'm not even sure I'd like to do it.

M: Well, what is the appeal of these two areas of study?

W: What I like is that I could attend a class in health, and then attend a psychology class that discusses mental illness, and then later, as I think over what I've learned, I can make connections between the two. That's the only time I truly feel like I'm learning.

M: So why health? And why psychology?

W: I guess they're both practical. I like studying health because I'm interested in how the body functions and psychology because, well, I can learn about how the mind functions. But if I were to study just one, I would feel that my studies would be incomplete.

M: Well, then, it looks as though you're onto something: health and psychology. You can certainly do a lot with that.

W: Yes, but I'm also interested in so many other things. I feel so overwhelmed.

M: So, when was the last time you felt really intrigued by a subject?

W: Since the beginning of the semester. I'm currently taking an ancient art history class, and I love it.

M: There are two things you should consider. First, do you see yourself studying art history on a long-term basis? Also, think about how long you've been interested in both health sciences and psychology.

W: No, I suppose I don't see myself studying art history long term. As for health and psychology, I've been thinking about both for a long time, actually. But I hadn't really considered majoring in both until now.

M: Well, let me remind you that what you decide today doesn't determine your future forever. Although you'd have to go through all the paperwork again, you do still have the option of changing your major a second time.

W: That's reassuring. I guess I will do both health and psychology. Something about it feels right. Thanks so much for the advice.

Chapter 1 Main Idea Questions

01 Astronomy

W: We should move on now from our discussion on Mars and speak a bit about Mercury and the moon. There are a lot of features that we can compare between the two . . . that's probably the best way to understand them.

The second—I mean, the first thing I want to talk about today is a comparison between the, uh, the composition of—wait, not the composition—I mean the surfaces of the two bodies, in terms of some of the easily perceivable physical features. We'll start with the moon. Many of you have probably viewed the moon through a telescope. You'd have seen large dark areas that appear in many places on the surface. These were previously thought to be oceans—like our oceans. They were even given the name *maria*, which is Latin for seas. They're actually not oceans at all. They're flat areas that were caused by lava flow long ago in the moon's history.

Now, on the other hand, Mercury doesn't really have any of these *maria* to speak of. So what does this suggest? Well—and this is more of a side note—um, it suggests that lava flow wasn't really very routine in Mercury's history . . . at least not to the extent that we see it on the moon. Any questions about that? OK, now moving on to a similarity, well, this is again something you've probably noticed about the moon: craters—craters being the big circular marks . . . the holes on the surface of the moon. At first glance, Mercury and the moon are very similar in this sense. Both surfaces are simply covered in craters. But why? Well, it all has to do with the lack of an atmosphere.

Um, I really don't want to get into too much depth on this, but here on Earth, if a meteorite enters our atmosphere, it usually burns up before it can collide with the surface. Well, Mercury and the moon don't have atmospheres like the Earth does. So, well, there's really nothing

to stop the meteorite from slamming into the surface. Don't worry too much about that—it's a different discussion. Just remember that Mercury and the moon look quite similar because of their craters.

Earlier, I mentioned the *maria* on the surface of the moon that you don't really see on Mercury. Well, to be fair to poor Mercury, we should mention something that it has that the moon doesn't. One such feature is something called a scarp. You can think of a scarp as a cliff—uh, maybe a raised area is a better way to put it—well, OK, the best way to understand it is to think of a wrinkle on your skin. That's what these look like. And, well, the moon doesn't really have anything analogous to that. So, why would these form on Mercury? Well, scientists don't know for certain, but they suggest that after Mercury formed, the cooling process the planet undergo, I mean, underwent, caused the surface to shrink. This shrinking caused these wrinkles to form . . . just like loose skin, actually.

02 History

M: Good morning everyone. I was disappointed that we didn't have enough time to finish our discussion yesterday . . . and well, I'm not sure we're going to really have time for it, but I really want to return to Rome . . . not literally, of course. But I do want to speak more on the public baths in ancient Rome. It's such an interesting topic to me because they played such a big and surprising role in the culture of ancient Rome that . . . well, let me just get right into it then. I guess it wouldn't hurt to talk for a moment about exactly what these public baths were. Well, the history of these baths is actually quite interesting. The public baths were privately owned. They were basically just a business like any other. The owners of the bathhouse would charge a fee for entrance. However, once the Roman government saw that the bathhouses were so popular and beneficial, they opened large ones all across the city. They weren't just for cleaning one's self, they were places for conversation, relaxation, uh, and even enjoying art. Any questions so far?

Moving on, the role of public baths is quite interesting. They actually formed a very large part of Roman culture. Today, uh, you know, bathing is just something that we do for the sake of our hygiene, and while the advent of public baths did lead to the, uh, to better Roman hygiene, it also became an essential part of the daily lives of the citizens. But, well, the hygiene thing is important, but it's kind of obvious, so I don't want to talk too much about it.

More importantly, people would spend all day socializing at the baths. So, really, the baths were much more of an entertainment activity than anything. And the people really loved it. There's an old story that says that when a Roman was asked by a foreigner why he bathed once a day, he responded by saying, "because I don't have time to bathe twice a day." So the baths were, well, just a part of daily Roman life.

The baths also included areas that the Romans called *palaestrae*, which were large fitness areas. They were very much like modern gyms. Some of the largest *palaestrae* would have areas for running, for playing ball games, for wrestling, for lifting weights . . . um and even larger pools for swimming. Now, this was another great source of entertainment for the Romans and gave them yet another reason to spend all day in these baths. It also contributed to better health among the citizens and helped make them more physically fit.

Last, and perhaps most interestingly, the baths served an important political role. Because they were so widely frequented, politicians hoping to gain support would often visit the baths and share their ideas with the population. Groups of politicians would meet in the baths to discuss laws, policies, or possible ways to improve Roman society. Politicians hoping to gain support often paid the admission for an entire day at a bath in order to gain political support from the visitors. Commoners would discuss politics as well. They might discuss the candidates for an election, or debate laws . . . or even use the baths to plot against a politician.

03 Office Hours

- W:** Excuse me, Professor Johnston? Are you ready to meet with me?
- M:** Sure Sarah, come on in. I was just finishing up with an outline for today's lecture. What was it you wanted to discuss?
- W:** Well, I'm actually planning to go on a trip this summer with my archaeology class.
- M:** Wait, I didn't know you were studying archaeology. I thought your major was computer science.
- W:** No, actually that's just my minor. One of them, at least. Anyway, I've been planning and everything, and I started thinking that, uh, that I wanted to create a computer program to help me out on the trip. We're going to be visiting a dig site that opened recently, and a lot of new artifacts will likely be found there. I thought it would look really impressive if I wrote a computer program that would help us all keep track of and, uh, classify the artifacts that we find.
- M:** That sounds great. And I agree; I think that would look really impressive to the group, and to any graduate schools or jobs that you might apply to in the future. So, did you need help writing the program?
- W:** No, actually, I already have all of that planned out. But, uh, I was thinking, it would be really nice if I could get some sort of credit for the work I'm going to do writing the program. Since I have a major and two minors, I'm starting to feel like I'm falling behind in my studies, so I'd like to catch up.
- M:** So, uh, you mean you'd like to do an independent study?
- W:** Would that work? I mean, I'm not really familiar with how the university does independent study credit. What would I have to do? And, I guess the big question is whether it would even be feasible or not.
- M:** Well, when it comes to independent study, the important thing is getting a professor that will sponsor the project. I've actually sponsored a lot of independent studies in the past, and I would certainly be willing to work with you on this one. Um, the department head also has to approve the project for you to get credit, but I don't really foresee that being a problem.
- W:** Great, that's good to hear. So, what should I do now?

- M:** Well, first off, I would want to see a proposal. Basically, just write down what you told me in here. It all sounded fantastic. After that, uh, I think there are some forms to fill out. Those are probably online. I know the university has an online checklist of all the necessary stuff, so check that out and we can go over everything after you've given me your proposal.
- W:** Thanks. I really appreciate your help with this.

04 Service Encounter

- M:** Excuse me, are you an RA here at the residence hall?
- W:** No, sorry, I just work at the front desk. Did you need help with something?
- M:** Well, yeah, actually. Maybe you can help me out. This is kind of embarrassing. I went to take a shower, and when I got back to my room, my roommate had left and locked the door behind him. Well, I didn't take my keys with me, so now I have no way to get back into my room. This has never happened to us before. You know, usually he's in there when I'm getting ready to go to class. He must have had to run off early for some reason this morning. Would have been nice of him to tell me . . . Anyway, is there anything you can do to help me out?
- W:** OK, well, we have a key back here that we can use to get you into your room. Do you have your student ID with you by any chance?
- M:** No, I don't . . . it's in my room, along with everything else.
- W:** OK. I don't think that's a big problem. I'm sure we can just take a look at it once we let you in. Just let me go grab the key . . . Oh, you know what? I just remembered that one of the RAs has the key right now. He checked it out just a few minutes ago. I think he said someone was locked out of their room, just like you.
- M:** Do you have any idea when he's going to be back? I really need to get my stuff from my room.
- W:** I'm not sure when he'll be back.
- M:** I have a midterm to get to in, like, twenty minutes. I have to be able to get into my room and get my backpack and my—
- W:** Well, I can tell you who has the key. Let me take a look here. OK, the list says that Keith has it. Maybe you could try to track him down. As long as he has the key, he'd be able to let you in.

M: OK, I guess I could try that. There's no other way? I'm really in a hurry and this place is pretty big. I doubt I'll be able to find him in time.

W: Well, the only other person I can think of that might have a key would be someone on the custodial staff. They have keys to pretty much everything, and they'd definitely have a key for all of the rooms. I don't know if there are any custodians around, but you could try that. Then you could just have me come with you so I can check your ID and everything.

M: And you're not sure where a custodian might be right now?

W: I have no idea. Sorry.

M: That's all right. I'll try to track one of them down. Thanks for your help.

05 Business

M: Today I want to focus on outdoor advertising. Now, the definition should be pretty clear: any advertising that happens outdoors. But to give examples . . . uh, billboards—like the big signs you see on the side of roads—and then transit advertising, meaning signs on busses, the subway, or on the side of a truck. OK, I think you get the idea. Anyway, you might be surprised to hear that outdoor advertising only accounts for about two percent of most firms' advertising budgets. However, there are some things about outdoor advertising that can be really attractive to a company, . . . and there are, of course, things that are not attractive. So, let's go ahead and discuss the good and bad points of outdoor advertising.

First, outdoor advertising obviously has the ability to reach a vast number of people. I mean, think of just any ordinary billboard on the side of a major road. How many people do you think go by that billboard on their way to work, or school? Well, quite a lot, depending on the road, of course. But if a company manages to get a large billboard off of the highway, well, then it's a definite way to make sure people see your ad. One particular outdoor campaign for a beverage company helped increase the company's revenue forty-four percent over the summer. That's a huge revenue increase! And, really, all they did was put up nice-looking

pictures of their beverages. So exposure is a definite advantage, but this exposure isn't always what you want. So much of advertising is targeted toward specific people, but you'll have a lot of people viewing the ad that you don't necessarily need or want—they aren't part of the target audience. Therefore, you get what's called waste coverage. This means that you're actually wasting money by advertising to people that aren't interested. So, on TV, there are channels designed for specific age groups, right? Well, if a product is meant for young people, you can put an ad on a channel meant for young people. However, with billboards, you can't do something like that so easily.

OK, well moving on, there has been an increasing amount of creativity lately in terms of outdoor advertising, and consumers tend to like creative ads and, thus, pay more attention to them. So the ability to create very creative ads is the next advantage. Now, with TV you can be creative, sure, but you have to stick to the strict format of a message in video and voice.

With outdoor advertising, you can have billboards, blimps, flyers, clothing, or even the side of a truck or a bus. Um, for example, think of an advertisement on the side of a bus. Usually boring, right? Well, a recent TV network put a huge image of a shark on the side of a bus, and when the doors of the bus closed, the shark's jaw closed, making it look like the shark had just eaten whoever walked on to the bus. How's that for an attention grabber? This is just one example of some of the new advertising that's happening outdoors. You would definitely take note of an ad like that. Now, there's also a downside to that, too. Often, the most creative ads are extremely expensive to do. The really popular locations for ads are quite expensive, and you generally have to pay monthly to keep that signage. You want an ad in Times Square in New York City? You'd be looking to pay as much as two hundred thousand dollars per month. Add that to the cost of making a creative ad and you're looking at a lot of money.

06 Film Studies

- M:** OK everyone. We have a big animation project coming up soon. Before we get too far today, does anyone have any questions about the project?
- W:** Actually, I was looking at the assignment sheet last night, and I'm not sure I understand what we're able to use for the project. I mean, in terms of animation techniques. Does it have to be computer-based? Or can we do hand-drawn animation?
- M:** Well, if you'd like to give yourself extra work, feel free to do it all by hand. Otherwise, I'd recommend using the software on the lab computers. It's really easy to learn. OK, any other questions about that? Great. Today we're going to talk about early animation . . . not like cartoon animation. I mean, er, photographs forming what appears to be fluid movement. You all know what I mean, I hope.
- W:** You just mean early movies, right?
- M:** Yes, right. OK, so what I want to do today is talk about three of the earliest machines that helped bring these static pictures to life. They weren't movies by any means, but they helped set the stage for movies. Does anyone know what the first one was?
- W:** The Kinematoscope, right?
- M:** Not quite. That was actually the second . . . which we'll get to in a minute. The first was called the Phenakistoscope. Let me give you a second to write that down. OK, now the technology of these can be a little hard to understand, so I'll go slowly. Stop me at any time with questions. Now, with the Phenakistoscope, the animator started with a disc. Different pictures were drawn all around the disc, which would correspond to the frames in the animation. Good so far? OK, after all of the frames were drawn, the disc was put in a, um, basically in housing with a handle. The viewer would rotate the handle, and the disc would spin. In the housing for the disc was a series of slits through which the viewer could look. As the disc passed the slits, one frame showed up at a time. When the disc spun quickly, it would appear that there was just one moving image. However, it didn't look great . . . It was small, and the image was really jerky. OK, that was a lot of information. Are there any questions?

- W:** Just to clarify, it's, um, it's basically like the movies where they show one frame at a time, but they're shown so fast that the image looks like it's moving?
- M:** That's right. That's the basic idea behind all animation, so keep that in mind and the next two won't be too hard to understand. So the next device is called the Kinematoscope. Really, this was just a more sophisticated version of the Phenakistoscope. It kept the same basic idea: still images on a wheel that rotated. But here, the viewer would look at the inside of a cabinet. The pictures were mounted to plates of glass, and the plates were moved by a chain connected to a crank that the viewer would turn. So, the image was bigger and a little clearer . . . but still jerky.
- W:** How well did these things work? I mean, it sounds like they're kind of difficult to operate.
- M:** You would be right about that. They, uh, they really didn't work too well. Imagine trying to keep a steady pace turning a crank, all while trying to watch the picture. And it didn't really allow the animators to make anything particularly complex, since there could be only a few frames in any animation. OK, I want to leave enough time to talk about the Praxinoscope. It took the same ideas and changed them significantly to make a better product. Basically, instead of a wheel, the Praxinoscope used a circular drum, in which the pictures were on a long roll on the inside. It also used mirrors instead of slits to help keep the picture steady. Well, the picture was much steadier—by that I mean it appeared to be one picture staying in place, rather than shifting back and forth. Anyway, this was the last animation technique before film began to be used for moving pictures, and was the closest anyone got to good animation without the use of film. We'll discuss that more tomorrow.

07 Office Hours

- M:** Hey, Professor Jamison, can I talk to you for a moment?
- W:** Sure, come on in. I don't have all of the tests graded yet . . . Sorry about that. I think I do have yours graded, though. I can look up your grade in the book, if you'd like.

- M:** Oh, actually, that's not why I'm here. I'll just wait to get the test back. I came in to talk about my final paper.
- W:** Oh, OK. Um, remind me of the topic you submitted in your proposal.
- M:** I'm going to be talking about the influences of various types of art in Chilean literature in the early 20th century.
- W:** That's right . . . how could I forget? I remember reading your proposal and being very engaged. I took a class that had a very similar goal to what it seems like you want to do in your paper. So, how is your research going?
- M:** Well, it's actually going really well, I think, but I do have a couple of things I want to ask. I've found a lot of really interesting information that I can use in my paper, but some of it is on videos and CDs. Basically, I want to know if I can use stuff like that in my paper.
- W:** You mean to say that you want to use videos and CDs in a paper? I'm not sure I understand what you mean.
- M:** Oh, well, what I mean is . . . would it be all right if I used some of the information from those sources in my paper?
- W:** OK, I think I'm starting to understand. Can you give me an example?
- M:** Sure. Let me think . . . well, I actually found a CD of some music that was referenced in one of the novels we read this semester. After listening to the lyrics, I think I could prove a point about the author's influences if I can use those lyrics . . . and maybe describe the song a little bit . . . maybe something about how the melody makes you think of sadness and hopefulness at the same time.
- W:** I'd certainly be open to you using the lyrics. You could definitely allude to the lyrics within your paper . . . or you could quote them directly just as if you were providing part of the body of a poem. As for the musical stuff . . . I'll leave that one open to you. You don't want to spend too much time on it, but if you can mention it briefly and make it relevant to what you're discussing, I'd say that it should be fine. So I suppose with the videos you're talking about very much the same thing.
- M:** Well . . . I wish it was that simple. Actually, the video I found is of a popular Chilean dance. Now, the video basically shows the exact

dance that one of the authors used in her novel. I really wish I could somehow use the video itself, because I know that if I just try to describe it, I don't think I could do it justice with words. It's really something that needs to be seen.

- W:** I see. With something like that, I would tend to agree. However, perhaps the novel did a pretty good job of describing it. Maybe you could just quote from the novel?
- M:** Well, that's what I thought before seeing the video. But the video shows the dance with so much . . . so much intensity. It really shows exactly what she was talking about in her novel. It shows the cultural importance of the dance in a way that I don't think even the author herself pulled off.
- W:** Wow! Let me think here . . . I can allow you to do a short presentation along with your paper. The only thing is . . . I can't really offer you any extra credit for it, since that would be unfair to the other students. So, it's really your choice here.
- M:** I'll think about that. I could probably come up with a short presentation without too much trouble. Yeah, I'll think about that and let you know before the due date. Thanks for your help.

08 Service Encounter

- M:** Hi, I was hoping you could help me out with something.
- W:** Sure, what do you need?
- M:** Well, OK, I really need to get into the library. I have this really big test tomorrow, and everything I need for the test is in there, and if I don't get to study then I'm probably going to fail.
- W:** Um, I'm sorry, I really can't let you into the library after hours. It's already, um, it's already past one a.m. We can't let students study in there when it's closed.
- M:** But if I don't get my stuff, I can't study, and if I don't study, I'll fail. It'll only take, like, five seconds, I promise.
- W:** Wait, what do you mean, "get your stuff"?
- M:** Oh, sorry . . . I'm a little panicked, as I'm sure you can see. Let me slow down. I was studying in the library earlier tonight . . . before the library closed. I realized it was getting late and I hadn't had anything to eat since lunch, so I decided to go to the café and grab some food.

Well, once I got back, the library had already closed, and I left my backpack in there, along with my notes, my textbook, all of that stuff.

W: Oh, OK, that makes a lot more sense now. Actually, I bet one of our guards already brought your stuff here. We do a meticulous inspection of every building nightly to check for lost items, and we bring them here to the Lost and Found. Let me check. Oh, I guess it would help to ask you what your backpack looks like. Was there anything else you left?

M: No, I packed everything in there before I left. And it's dark blue . . . the straps are black . . . or brown.

W: Let me check in the back. No, it doesn't look like we have it here. The only bag we have came from the science building, and it's pink.

M: So do you think it might still be in the library?

W: Well, I doubt it. Our security guards are usually really good about finding things at night. Where in the library did you leave it?

M: Just next to one of the tables. It was in a pretty obvious place. Can I just take a look in there for a few minutes? I know exactly where I left it. I'll be in and out in two minutes.

W: I really can't let you do that. Maybe one of our officers is on the way back here with it. You could hang around for a while to see if one of them comes back with it. I think we still have two or three guards doing their nightly rounds. They'll be back within . . . oh, maybe thirty minutes.

M: I really don't think I can wait that long. It's already late, and my test is at eight.

W: Well, let me see if I can radio any of the guards to ask if they've picked it up and are on their way back. One second. Well, none of them has seen it. I'm not really sure what to tell you. Are you sure you left it in the library?

M: Yeah, I'm positive. There's nowhere else it could be.

W: OK, well, the only idea I have is to see if one of the guards would be willing to take another look in the library. I think one of our guards should still be in the area. I'll radio him and ask him if he'd be able to look again. Where did you say you left the backpack?

M: Um, it's by a table, it's over in the north wing, by the reference section. Kind of to the left—uh, west of the computers there.

W: Let me contact one of the officers and see what I can find out. Hey, I have good news. The officer checking the library was actually still in there, and he found your backpack right away. He said he'd get here as soon as possible with it.

M: Oh, phew. When do you think he'll be back?

W: Hard to say for sure, but I doubt it will be more than a few minutes. You can feel free to have a seat over there if you'd like to.

M: OK, great. Thanks so much for your help.

09 Sociology

W: We had started yesterday with a lot of theories, I know, and before we get into anything new today, I wanted to ask you all if there was anything that you were unclear about? Anything you wanted me to expand upon? Anything?

M: Well, I don't want to derail the discussion or anything, but I found a theory in our book last night that we didn't go over. I don't know if it's really all that pertinent, but I thought it was kind of interesting. It was called the *Principles of Stratification*.

W: Ah, yes, Davis and Moore's *Principles of Stratification*. You know, I had actually taken that out of the syllabus at the last minute because I didn't think we would have enough time for it. I actually really like the theory, too. So, as long as we have time for it today, let's discuss it briefly. Since you were the one to bring it up, Brad, do you want to define the theory for us?

M: Um . . . sure. I'm trying to remember what I read. Basically, Davis and Moore were trying to figure out how—uh, why there's inequality in the distribution of wealth in society, right?

W: Yes, and to clarify for those who didn't read it, Davis and Moore wanted to know why some jobs have more prestige and why those jobs have higher salaries associated with them. Now, the main function of stratification is to place and motivate people within our social structure. Some positions have more importance placed on them, and so people in these positions get paid more.

An example would be a doctor. Doctors usually earn quite a lot of money. But why? Why should doctors get paid a lot and not, say, teachers?

Hint, hint. Well, the theory that Davis and Moore came up with in their article *Principles of Stratification* says that some jobs have a higher salary associated with them because it encourages people to do the jobs that are the most difficult to do. Now, difficult can mean different things, right? Well, let me go ahead and give you some examples of this theory in work—uh, how it might work. And I'll let you all make your own decisions about whether this theory is viable or not.

Let's return to our example of the doctor. Is anyone here studying medicine? OK, well if you were, you would know what a commitment it is. Becoming a doctor is not easy. It requires significant financial investment, hours upon hours of training . . . You get the idea. So, if that job didn't pay well, why would anyone do it? We need doctors, right? So, the Davis and Moore theory would say that because we need doctors so pressing, and because it is so difficult to become a doctor, doctors will receive higher salaries. It's kind of a reward system. You'll get rewarded for all your hard work training with a high salary when you become a doctor. Does that all make sense to you?

M: Well, I mean, your explanation makes perfect sense, but the theory doesn't. You said yourself that teachers don't get paid a lot, and where would we be without teachers?

W: That's a good point, and it'll serve as a good second example. Why would anyone want to become a teacher, then? It also has a lot of training associated with it . . . I mean, I went to school for what feels like half of my life, but teachers don't get paid nearly as much as doctors. Davis and Moore explain this by saying that teaching jobs are not hard to fill, and therefore they don't need to get paid as much. So, in essence, they mean that there are enough people who want to be a teacher for its own sake—not for the money involved—that teachers will always be easy to find. Considering that's why I became a teacher, I'd have to say they're right. I knew I wouldn't get a doctor's salary, but I did it anyway. There's still a reward, but in this case, it's the job itself. Now, many people think that being a doctor isn't also a reward in itself, so here we might begin to see some of the failings of the theory.

10 Biology

W: It looks like we're already halfway through class, so I want to move on now and speak about a pretty difficult concept. Are you all up for it? Of course you are. Well, then, let me get started. What I want to talk about now is a scientist from the late 19th and early 20th century named Robert Koch. More, uh, more exactly, I want to talk about his theory of disease, which is sometimes called the Germ Theory of Disease. Now, the reason I'm going to describe the theory itself is—well, not to make you think the theory itself isn't important—but the way that Koch applied the theory to tuberculosis changed our understanding of the disease forever. So, well, let me just tell you about the theory now.

To understand the theory, um, I'll—I mean, you'll need to understand Koch's Postulates. Now, this is just the larger part of his overall Germ Theory, which basically states that microorganisms can cause disease. We know this now, but it was only speculation until 1876, when Koch finally proved it. Anyway, let's talk about the four postulates, uh, meaning requirements, which Koch said were needed to prove that a specific microorganism caused a disease. Are you all ready to write? OK.

The first postulate said that the germ being studied must *always* be present in a sick subject, and *never* present in a healthy animal. This basically just assures that no oversights were allowed. Pretty simple, right?

The second requirement is that the culture—uh, culture here meaning a sample of the microorganism—the culture must be grown separately from the animal and from other microorganisms. This stresses the importance of isolation, just meaning that, to get accurate results, you don't want any other germs in there that could affect the results.

OK, moving on to number three. Postulate three says that the pure culture—the one in which the suspected organism is the only one present—the pure culture must cause the disease in a healthy animal. So, in doing the experiments, they would infect an animal that they know is healthy. Then, after infection, they would see whether the disease becomes present in the animal—whether the animal has become infected. OK, ready for the last one?

The fourth postulate said that, after the animal has been infected, a sample should be taken from the infected animal—a blood sample, usually. Then, the germ must be found to be the same one as the germ from the culture. This just assures that it wasn't actually a different disease—or even a combination of diseases—that ended up infecting the animal. That was a lot of information . . . any questions?

OK, so how did this apply to tuberculosis, and why was it so revolutionary? Well, we don't think as much about tuberculosis anymore, but in 1881, one in seven deaths was caused by it. Tuberculosis is an infectious disease that often affects the lungs. What Koch wanted to do was use the postulates he created to identify the organism that caused it. Here's how he did it. Basically, the problem with identifying the tubercle bacillus—um, that's the organism that causes tuberculosis . . . um, it was hard to identify because previous techniques to view the organism using staining didn't work. Before, staining processes couldn't successfully color organisms with large amounts of lipid on their surfaces. Koch, however, used a new brown stain to successfully identify the tubercle bacillus. However, he had to follow all of his own postulates in order to prove that it really was *that* organism that caused the disease . . . rather than something else. Uh, so he went through all of his postulates, and they all checked out. He used guinea pigs as subjects . . . and after a lot of research, finally proved that tubercle bacillus caused the disease. So, why was this such a big deal? Well, identifying the cause of tuberculosis led to measures to prevent and treat the deadly disease. Without the discovery, we might all hear much more today about tuberculosis, but luckily, it's not nearly as common as it used to be.

Chapter 2 Detail Questions

01 Art History

W: Today we're going to talk about the time in American history when photographs were first used to document an era. I'm talking about the Great Depression. The Great Depression had a major effect on the development of photography. I mean, if you look at pictures of people before this time, what do you see? Emotionless portraits of people dressed in their best clothes staring directly at the camera. That all changed during the Depression.

Before we begin, let's highlight some key points. The Great Depression was the period of massive unemployment from 1929 to around World War II, which was, for the US, around 1941. All America was affected, but um, rural people were the hardest hit. At the same time the Depression was happening, farmers in the West were getting hit by a bunch of terrible dust storms that destroyed their crops. Many were forced to sell everything they had and migrate to California to start a new life.

So, that's that. And, um, how did this era affect photography? Well, one important change was that the government began to get directly involved in art. See, at the time, the government was trying to create programs that would help farmers. A government program called the Farm Security Administration began to hire photographers to take pictures of what was happening across the nation. Many photographers decided to take pictures of the migrants as they traveled to California.

Also for the first time, we see photographers taking pictures of people wearing normal clothes and experiencing emotions. In other words, we start seeing photos of real people going through real situations. These photos of homeless migrants gave the rest of the nation a glimpse into the difficulties they faced during their arduous journey to California.

The photos would go on to become a lasting icon of the Depression. Let me give you an example: let's see if I can get Dorothea Lange's famous photo entitled *Migrant Mother* up on the overhead . . . There it is. As you can see, the photo shows a migrant mother and her two children on their journey from their farm to California.

Her children lean on her for support as she looks at a point off-camera. Notice how her ragged appearance and simple dress give this photo a strong sense of realism. The anxiety about her family is written all over her face. She is a perfect representation of the despair migrant farmers felt as they faced a troubled and uncertain future.

OK, touching photo, but what did it and thousands of others like it really do? They alerted Americans to the harsh reality people like this woman underwent daily during the Depression. Never before had photography been able to depict the reality of people and events as well as in these photos. Americans from all over the nation could identify with these people through photographs, initiating support for programs that would provide aid to farmers. These photographs would act as a model for documentary photographs produced in future generations.

02. Business

M: OK, students. Yesterday, we started to talk about conflict in organizations. Organizational conflicts happen all the time in business, and, uh, often disrupt employee satisfaction and workflow. So, if we're managing a business, and we encounter a conflict, what would our natural tendency be? Either suppress the conflict or try to solve it, right? After all, isn't conflict a bad thing? Well, it depends on what viewpoint you take. Today, we're going to discuss the opposing viewpoints of Frederick Taylor's traditional view of conflict versus the interactionist view of conflict proposed by Stephen P. Robbins.

In order to understand Taylor's views, we need to take a closer look at his contribution to scientific management. In the late 19th century, Frederick Taylor began searching for ways to make workers more productive. He began to break job tasks down into their components and spent his time measuring how long it would take for a worker to complete each part. He then set specific standards for performing each job. Uh, he called his method scientific management. Under his system, workers who were fast and efficient got paid more money, while workers who were slower and could not meet his standards were paid less or laid off. In other words, managers

could get rid of slow workers until the workforce consisted of the best, most productive workers. Of course, by making his workers follow a set standard of production, he regarded them as little more than emotionless robots that could all produce at the same rate.

So, how does this relate to organizational conflict? When Taylor first applied scientific management to a company in 1893, he was able to get thirty-five people to do the work once performed by 120! Wages were increased for those workers by eighty to one hundred percent! He thought his theory was a success and decided to apply it to conflict management. Taylor was so confident in scientific management that he believed managers who applied his technique correctly could eliminate all conflict in the workplace. See, Taylor thought that conflict in organizations was *always* harmful because it hindered productivity. He believed that organizational conflict was unnecessary and could be avoided.

However, as time passed, views of conflict began to change. During the 1970s, a man named Stephen P. Robbins suggested an alternative position toward conflict called the interactionist view. The interactionist view states that conflict is not only unavoidable, but necessary for an organization to function properly. Like Taylor, Robbins did acknowledge that conflict could be harmful to an organization. Yet Robbins also felt that some conflicts actually result in the search for new ideas and solutions. Therefore, a certain level of conflict was desirable for a company to expand. Robbins believed the best way for managers to handle conflict was to manage it in such a way as to reduce its harmful features and increase its beneficial features. This would raise production to its highest possible level. As you can see, Robbins's interactionist view differs greatly from Taylor's traditional approach.

03 Office Hours

M: Professor Johnson, can I talk to you for a minute?

W: Of course, Sam. What can I do for you?

M: Well, I just finished reading your newest book, about how to write about the natural world, and I thought it was great.

W: I'm glad you liked it.

M: You know, before I picked up your book, I never thought of nature writing as a specific genre.

W: Not many people do. But really, learning how to describe the natural world is important to all forms of writing. In my book, I stressed that nature writing almost exclusively depends on using your five senses of sight, hearing, smell, touch, and taste. The whole purpose of nature writing, after all, is to paint a picture of the world around you. If you think about it, Creative Writing professors teach their students the same things concerning imagery.

M: That may be true, but most of my friends in Creative Writing say that one of their big problems is that they don't use enough description in their works.

W: That's not surprising. Many writing students have trouble because it's hard to put the description of the world around you into words.

M: I always had trouble with using imagery in my writing until I read your book. After doing some of the exercises you suggested, I feel like my writing has improved some.

W: That's wonderful. I think that if writing students practiced writing about the natural world around them, they'd find it much easier to put images into writing.

M: That's one of the reasons I thought I'd talk to you. Since I know this is the time when you professors have to start planning what classes you want to teach next term, I wanted you to consider forming a class on nature writing. We could use the book you wrote as the class textbook.

W: I'm flattered that you think my book would be good enough to form a class around.

M: And it would be great to get writing students to appreciate the natural world. I mean, we're usually zooming through our lives so quickly that we don't have time to actually stop and look at the world around us.

W: You have a point there, but do you really think there would be an interest?

M: Absolutely. I think it would be popular even with students who aren't studying writing. No other class at the university teaches about nature writing. It would be a hit.

W: I'm glad you think so. Unfortunately, the department here doesn't. I suggested teaching a class on nature writing over two semesters ago, but the department head didn't believe it would be popular with students.

M: Are you kidding? I know tons of people who would want to sign up for it.

W: I'll tell you what. If you think you could get thirty people to send letters to the department head expressing support for a nature writing course, it might convince him to approve one.

M: OK. I'll make an announcement about the course in my Creative Writing class and try to get students to write those letters.

04 Service Encounter

W: Hi, may I help you?

M: Hi, I'm here to ask about meal plans.

W: Sure. What are you looking for?

M: Well, I'm thinking that I should probably change my meal plan.

W: OK, what meal plan are you on right now?

M: The twenty-meals-a-week one. But I'd definitely like to get something smaller, since I'm always missing my meals, and I end up wasting lots of money.

W: Well, we have the fourteen-meals-a-week, the ten-meals-a-week, and the seven-meals-a-week plans available.

M: How much are those compared to the \$3,000 that I'm paying for the twenty-meal plan?

W: Let me look this up . . . OK, so it's \$2,700 per year for the fourteen, \$2,500 for the ten, and \$2,400 for the seven. I'm sure you can see that the twenty-meal-plan is the best deal.

M: Well, considering that I really only average about ten meals a week with my hectic schedule, I'm going to get that one.

W: OK, so you'd like to downgrade to ten meals a week? I can arrange that for you. Let me put it into the system. Done.

M: That was quick.

W: Yep. Anything else I can do for you today?

M: Well, yeah. Actually, I'm still concerned about the meals that have been wasted and I'm sure will still be wasted—even with the new meal plan—just because of the way my schedule varies and changes unexpectedly. I mean, what if one week, I only manage to make it to three meals, and the following week, I find that I actually want fourteen? I just wish that there was another system that was more flexible.

W: OK, I understand your dilemma. You know, you could actually go off of a meal plan entirely, and purchase something called "Meal Points," which you can use at the various establishments to buy snack foods, and even to buy individual meals at the dining facility.

M: Really? I can do that?

W: Sure. And also, when you purchase "Meal Points," you'll be buying a dollar for eighty cents.

M: Huh? What does that mean?

W: Let's say you'd like to buy one hundred dollars worth of meal points—remember, you can use them to buy practically any kind of food you'd like around campus—you'll get them for eighty dollars.

M: Hmm, so it's like getting a twenty percent discount. Not bad . . .

W: This way, you won't have to feel like you're wasting any of your meals.

M: That's a relief.

05 Astronomy

M: OK, many of you had questions about Earth's earliest atmosphere. So to, uh, answer those questions, let's start at the beginning. So, uh, during the first phase; um, the very first gases that existed in the Earth's atmosphere were hydrogen, helium, and hydrogen-rich gases from when the planet was formed from, uh, from the remains of a star. Now, these gases are really light, and the solar wind, or fast-moving streams of particles from the sun, were able to blow these gases out into space easily. So the first gases in Earth's atmosphere escaped, and the Earth had no atmosphere for a while. Then Earth underwent a lot of geologic activity. Inside the Earth's hot interior, heavy metals were sinking toward the center, while lighter materials like rock rose toward the surface.

Let me clarify. The events happening inside Earth's interior caused a lot of volcanic activity on the surface. We had volcanoes exploding constantly. Now all this volcanic activity released, um, a lot of gases into the air in a process called outgassing. OK, you all get that? *Outgassing*. That's the second step. Now, most of the gases released by these volcanoes were steam or water vapor, carbon dioxide,

and nitrogen, so our early atmosphere was composed chiefly of these three gases. So does anybody know what Earth's early atmosphere was like?

W: Um, well, the Earth would have been extremely hot. And since there was no water or oxygen, there wouldn't be any life. And I think I remember hearing that the atmosphere was denser than it is today.

M: Absolutely. Hot, dense, devoid of life. As in no living things at all. Think of the carbon dioxide-rich atmospheres of Venus or Mars, and you'll get a good idea of what early Earth may have been like. Well, the next major thing that happened was water formation. So Debbie, how was water able to form?

W: Uh, well you said much of the Earth's atmosphere was water vapor. So I guess the Earth eventually cooled down enough for water to form.

M: Yes. Once the atmosphere cooled, the water vapor in the atmosphere began to condense and create precipitation. This is how our oceans were formed. Much of Earth's carbon dioxide was dissolved in Earth's oceans, leaving an atmosphere rich in nitrogen and with less carbon dioxide and water vapor. Water acted as a catalyst for life. Once water was created, the final major step was able to occur. About 3.5 billion years ago, life began to develop in the form of unicellular bacteria. This was followed by more complex organisms, most notably, photosynthetic blue-green algae. And this is where things really got interesting.

Photosynthesis, you'll remember, is how organisms like plants and algae are able to convert carbon dioxide into energy. As most of you probably know, one product of photosynthesis is oxygen. The algae absorbed much of the carbon-dioxide and released oxygen into our atmosphere. As plants continued to evolve, more and more oxygen was released into the atmosphere until our atmosphere transitioned from a carbon-dioxide dominant atmosphere to its current state as an oxygen-rich atmosphere.

06 Zoology

M: OK everyone, listen up. We're going to conclude this week's lecture series by talking about two apes that are very similar to one another. I'm talking about our close cousins, gorillas and chimpanzees. I'm sure most of you recognize that outside of their respective sizes, gorillas and chimpanzees are very similar physically, but what about socially? In fact, there are some notable differences in the social structure of these two primates that I would like to spend some time going over.

First, let's talk about similarities. You should note that gorillas and chimpanzees share almost the exact same DNA as humans. Gorillas and humans share approximately ninety-seven to ninety-eight percent of the same DNA, while chimpanzees and humans have approximately ninety-eight to ninety-nine percent in common. Evolutionally, this not only makes gorillas and chimps closely related to us, but to *each other* as well. So obviously, they're going to share lots of similar characteristics, right? For example, both gorillas and chimps walk on their knuckles and tend to form groups.

Each of these groups consists of a dominant male that acts as the group leader. But here we start to run into some differences in group structure that work to differentiate the two primates. You see, gorillas are much more solitary than chimpanzees. Yes, they do form groups, but these gorilla groups are much smaller than chimpanzee groups. A gorilla group usually consists of about a dozen individuals: a male gorilla, several adult females, and their young.

Sometimes the group may include a few younger males, but they rarely mate with any of the females. The females belong to the dominant male. Chimps, on the other hand, live in large groups of 50 or more individuals, sort of like a mini-society. And unlike gorillas, many chimps in the group may be male. This large group consists of several smaller subgroups—another characteristic that is not seen with gorillas. These chimpanzee subgroups often consist of a mother and siblings. Much of the younger chimps' behavior is learned from the different individuals in their subgroups and, like humans, chimps appear to have a special bond with their mothers and siblings.

Now, as in the case of many social animals, the dominant males in both gorilla and chimpanzee groups are usually the biggest in size and brute strength. This is not to say that the dominant male will stay in power forever. Both gorillas and chimps can be, and often are, overthrown by others. Dominant male gorillas can be overthrown by a stronger, tougher gorilla, who will then take over the group. The displaced gorilla will then usually spend the rest of his life alone by himself. Then what about chimps? Well, chimpanzees display similar dominance patterns, although displaced males are not always sent into isolation like displaced gorilla males.

There is one exception to this system of dominance that I feel is worth mentioning. Whereas gorillas rely on brute strength to gain the dominance of a group, it appears that chimps may also rely on intelligence to move up their group hierarchy.

In a study conducted by primatologist Jane Goodall in 1964, a chimp named "Mike" was able to gain control of a group because he was smart. This chimp was not the usual candidate for a leader. He was one of the lowest in the dominance hierarchy and very weak physically. He was often attacked by chimps much bigger than him. But one day, Mike stumbled across a kerosene can lying around Goodall's camp. None of the other chimps had paid any attention to them, except for Mike. Grabbing one of the kerosene cans, Mike began charging the other males of the group and banging the can with his fists. All the other chimps were terrified of the loud noise, and Mike became the leader of the group without even fighting. He proved that chimps can use their intelligence, and not just brute strength, to gain power.

So what do these differences in social structure tell us about these animals? Perhaps it demonstrates the slightly closer genetic relationship that chimps have with humans. Large communities, subgroups, gaining power through intelligence—are all unique characteristics that humans and chimpanzees share. Whatever the case, these slight differences in the social structure of gorillas and chimpanzees are fascinating topics for further study.

07 Office Hours

- W:** Hello, Professor Williams. Can I talk to you for a sec?
- M:** Of course, Ann. What can I do for you?
- W:** Well, you see, I've been having a lot of trouble with the tests for the class. I barely passed this last test. But I've been trying to study for them.
- M:** This class can be really hard, but the study guides should help. Did you use the study guide I provided to review the key concepts of this chapter?
- W:** Yes, and I think that's part of the problem. The study guides don't seem to reflect what's on the test.
- M:** What do you mean?
- W:** I mean that I've been using the study guide. In fact, I practically memorized the information on the study guide, but then when I get to the test, I usually find a whole bunch of questions that were not on the study guide.
- M:** I'm still not sure that I understand. Would you happen to have a copy of the last test that we could go over?
- W:** Actually, I have a copy of the last test *and* a copy of the study guide. Let me just find them. Here they are.
- M:** OK. Now, let's look at a question that you missed. Hmm... It looks like you missed question number ten about off-price retailers. The question asked, "What is an off-price retailer?" The correct answer was C, "a retailer that sells goods at prices twenty-five percent or more below traditional department store prices." You chose answer A, which states the definition of a discount store.
- W:** Actually, I just guessed on that one. I had no idea what the answer was. It wasn't in the study guide.
- M:** OK, let's look at your study guide. The word "retailing" is listed right here, but I see that you didn't write much down.
- W:** Yeah, I just wrote down the definition. Wasn't that what I was supposed to do?
- M:** Yes, but you also should have written down the types of retailing, like, for instance, off-price retailers. I see that you've defined each term in the study guide, but you didn't go any deeper. You should also have written down the types of retailing and anything else that we discussed in class or that was in your reading.
- W:** But it doesn't specify that in the study guide. It only has the word "retailing."
- M:** Well Ann, the exams test deeper knowledge than what's listed on the study guide. The study guides list the key topics, but it's up to you to explore these topics deeper. And there's one other major reason why I didn't list the different types of retailing on the study guide.
- W:** And what's that?
- M:** Conciseness. There are about fourteen different types of retailing that exist, and there's no way I can list all of them on a single page.
- W:** Then how do I know what to look for?
- M:** We went through all the types of retailing in the lecture. Weren't you here then?
- W:** Yes, I was. And I took notes on it, too.
- M:** Did you look over your notes for the test?
- W:** I glanced through them, but I relied mostly on what was on the study guide.
- M:** That's probably the problem. You depend more on your study guide than your notes. Ann, the study guide is just *a guide*. It's a rough outline of what will be on the test. It is not an in-depth list of everything you'll need to know to do well on the exam.
- W:** So how do I study for the test if I can't depend on the study guide?
- M:** You can still use the study guide. It lists the key terms and concepts you'll need to know. However, it's your job to explore and study these topics deeper.
- W:** How? I obviously can't study all the information in the reading; that's hundreds of items to memorize. How do I know what part of the reading is going to be on the test?
- M:** Do this by depending on your notes. Rather than just defining the terms in the study guide, take the concept listed and use that as a starting point. Then go through your notes and write down everything that we talked about in class concerning that concept.
- W:** Well, OK. But that's still an awful lot of stuff to study. We go over so much information in class.
- M:** It will get easier once you read through your notes a few times.

08 Service Encounter

W: Excuse me, sir. Can I talk to you for a moment?

M: Absolutely. How can I help you?

W: Well, this is kind of embarrassing, but, uh, I'm having some problems with your weightlifting machine. I, uh, I think I might have broken it.

M: Which one? We have two machines.

W: The one over there in the corner.

M: What happened? How did you break it?

W: I'm not really sure. I was lifting weights, and everything was going fine. It was working properly, but then . . . I don't really know what happened. It just stopped working right.

M: Can you be more specific?

W: There might be something wrong with the steel cable that connects the, you know, the bar thing with the weights. You know how you pull the bar down, and the cable lifts the weights up? One minute it was going fine. I pulled the bar down, and the weights seemed to lift up fine. But the next time . . . well, I did yank the bar down really hard, but that shouldn't have caused it to break, right?

M: I don't think so. Still, you need to be careful with the equipment.

W: I was. I didn't yank it down that hard, but the second time, the bar just came down easily. It wasn't pulling any weight. And I had that thing set at twenty pounds. I tried pulling it down again and again, but nothing. No, uh, resistance at all. The cable just doesn't seem to be connected to the weights anymore.

M: Sounds like the cable may have snapped.

W: Well, is there a place you can go to get it repaired?

M: Maybe. It depends on how damaged it is. I'd better go have a look.

W: Yeah, but before you do that, can I ask you how much this is going to cost?

M: Well, as I said before, it depends on how damaged it is. We'll probably have to have a repairman come and assess the cost. I'm guessing, what with the cost of the wire and the repairman's time, it'll cost at least \$100.

W: \$100? Just for a simple repair? What if you can't repair it?

M: I guess we'll have to look into getting a new machine.

W: And how much will that cost?

M: Well, it's a pretty valuable weight lifting machine. Better than the other one we have. But as a school, we'll probably get some kind of discount. I would say somewhere in the \$1,200 range.

W: \$1,200? If the entire machine is broken, I'm going to have to come up with \$1,200 to replace it?

M: What? Of course not. Accidents happen, we expect that. That's why the school has insurance for the equipment. You won't have to pay the entire cost for a new one.

W: Oh, that's a relief!

M: However, you will have to pay a slight fee for repairs and damage.

W: How much?

M: \$50.

W: That's still a lot, but it's much better than \$1,200. Do you have a form I have to fill out or something?

M: Yes. Let me just get you one. Here it is. Now, this is what we use whenever a student happens to damage or lose part of our exercise equipment. You need to write your name, address, and student ID number on the form. Then you fill out right here on this line which piece of equipment has been damaged and how. Now, you said the steel cord on the weight lifting machine snapped?

W: Uh, I think so. I didn't actually see the snapped cord, but it has to be that. I mean, why else won't it pull up the weights?

M: Hmm. Well, we'd better go over and check. Let's see here. Uh, the cord looks fine.

W: You're right. I didn't actually stop to look at it before I came over to talk to you. Something else must have broken.

M: Uh, I think I found your problem, and the good news is, it's easily fixable.

W: It is? What was the problem?

M: Here—the pin that holds the weights together fell out. That's why you weren't pulling up any weight. The pin just needs to be re-inserted.

W: This is so embarrassing. I can't believe I didn't stop to check if the pin was still in. I'm sorry that I wasted your time!

M: Not a problem. It's better than having a broken machine.

W: Thanks for all your help.

09 Psychology

M: To continue our discussion on emotion, today we're going to go over the facial hypothesis—sorry, I mean the *facial feedback hypothesis*. The facial feedback hypothesis suggests that our emotions are activated by our facial expressions. In other words, the type of face we make triggers what we feel. Everyone got that? According to the facial feedback hypothesis, our facial expressions *create* the emotions that we experience. Let me go a little deeper to show you what I mean.

We all know that we make certain facial expressions when we experience an emotion. In a previous discussion, we talked about how these expressions are, for the most part, universal. For instance, when two people from opposite parts of the world experience a distressing situation, their eyes open wider, their eyebrows shoot up into their forehead area and their lips may open partially. So, yeah, people everywhere exhibit similar facial expressions during similar emotional situations, but what do our facial expressions have to do with emotion? Well, our first inclination would be to assume that we make an appropriate face in *response* to an emotion. For example, we smile because we feel happy and we frown because we feel sad, but the facial feedback hypothesis states that the facial expressions we make actually activate or *cause* the emotions we experience. We feel happy *because* we smile, not the other way around.

The facial feedback hypothesis works like this. Say we're put in a situation that calls for a certain emotion. Perhaps we are in a situation that calls for an emotion of sadness. First, our brain registers the sad situation and sends out a signal. Now, according to the facial feedback hypothesis, this signal activates the part of our brain that controls facial movement. So all this happens in the brain, and only after we exhibit the appropriate facial movement do we feel the emotion.

Let me take a little detour here to go over what I mean by *facial movement*. OK, so uh, we have 80 facial muscles that control our face, 36 of which control facial expressions. These muscles react to form different expressions. So the next thing to happen in a sad situation is that our facial muscles respond to the brain's signal by drawing the inner corners of our eyelids closer

together and pulling our lips downward in a frown. But at this point, we still don't experience the *emotion* of sadness. Our faces react, but our emotions do not at this point. Finally, feedback from our faces reaches the appropriate program in the brain that controls our emotions. This feedback then activates that program and triggers the emotional response. Only now do we actually experience the emotion of sadness.

If this theory is correct, then the facial expressions that we make are essential to how we experience emotion. So theoretically, a person who lacked control of his facial muscles wouldn't experience any emotion, right? But how do we test the accuracy of this theory? OK, right now, I want everyone to smile. Now I want everyone to frown. Good. Our smiling should have caused us to experience the emotion of happiness, and our frowning should have *caused* us to feel sad. Did this happen? Did anyone of you feel suddenly happy or sad based on the expression you made? Probably not. So at first, the facial feedback hypothesis appears to be wrong. However, after numerous studies, researchers did find something interesting. They did not find that making a facial expression *causes* emotion, but they did find that feedback from our faces can either increase or suppress an emotion that a person is already experiencing. In other words, the facial expression *exaggerates* what you're already feeling.

Say you're experiencing a joyful moment and you smile. The smile alone did not cause you to become happy; however, it can *increase* the intensity of your happiness to make you even more joyful. Or say you're in a difficult situation where you have to look happy. In this case, a smile probably won't turn your misery into happiness, but it may serve to alleviate your misery somewhat. The feedback from your face really can help, even if it's not in the way originally predicted!

So in conclusion, the facial feedback hypothesis is both correct and incorrect. While evidence has revealed that facial feedback does not *cause* emotion to occur, it has also proven that facial feedback does have at least a slight influence over the intensity of our emotions.

10 Geography

W: Today, we're going to start our unit on overpopulation by asking whether Thomas Malthus's theory on overpopulation was accurate or whether it was downright wrong.

But first, who is Thomas Malthus and what is overpopulation? Thomas Malthus was a famous political economist of the 18th century. He believed that at the rate our world's population was growing, we would soon use up all our resources and reach a point where the Earth would no longer be able to sustain us. This situation is called overpopulation.

Now, when a country experiences overpopulation, it often faces a series of economic difficulties. For instance, India, which is predicted to surpass China's population in the next fifty years, has so many people that the country is facing poverty and is running out of land to put people. Thomas Malthus predicted these types of problems over two hundred years ago and came up with his famous theory about overpopulation.

Now in his theory, Malthus said that the world's population was progressing at a geometric rate. This is when you have a series of numbers where each number is being *multiplied* by a particular amount to get the next number in the sequence.

For example, think of the sequence 2, 4, 8, 16, 32—each successive number in the sequence is multiplied by 2. That's kind of how our population works. On the other hand, Thomas Malthus thought that while our population was progressing *geometrically*, our food supply was progressing at only an *arithmetic* rate, when the same number is *added* to each successive number. Think of 1, 2, 3 or 2, 4, 6, 8—the same amount is being added to each number. So if our population is growing geometrically, and our food supply is growing at an arithmetic progression, what's going to happen?

M: There's not going to be enough food for everyone.

W: Right. Hence, we have overpopulation, a situation in which there is not enough resources to go around. Now Malthus believed that the only way to stop overpopulation was through misery and death. He wrote in his essay that once the population exceeds the power of the Earth to support it, then "premature death must in some shape or other visit the human race."

This death would most likely come through war, severe famine, or the spread of plague-like diseases.

M: But didn't he think that there could be other, less gruesome ways to deal with overpopulation? What about, uh, doing what China did by limiting the amount of children each couple could have?

W: He did propose the use of such techniques, mostly for the poor and the working classes. But overall Malthus thought that the horrible outcomes of poverty and widespread death resulting from overpopulation were inevitable. Mankind would suffer until enough people died that the world could once again sustain the human population.

Now in reality, Malthus's beliefs were correct on certain levels. For instance, overpopulated countries do have lots of impoverished citizens, shortages of food, and other economic difficulties. However, many of Malthus's apocalyptic predictions did not come to pass. Can any of you think of an example?

M: Well, Malthus predicted that we'd have widespread famine and starvation across the world. That didn't happen. Even though there are famines in some parts of the world, Malthus's prediction was that we would see massive famines across the entire world. We don't see that happening.

W: Correct. In particular, Malthus believed that widespread famine would occur in Europe, which did not happen. Malthus also believed that social reform and higher wage increases wouldn't benefit society in the long run, because he felt that more prosperous families would have the means and the desire to have more children, thus increasing the population even more.

Now, looking at current worldwide trends, this appears to be false, because our most economically wealthy countries like the United States, Japan, and the European continent are actually experiencing *decreasing* population rates. Yes, did you have a question?

M: Yes, I just wanted to point out that Malthus also didn't really take technology into account, right?

W: Yes, Malthus did not adequately consider what advances in technology could do for mankind. Advancements in technology and science have prevented Malthus's predicted catastrophes

from taking place. In fact, experts from the UN Food and Agriculture Organization believe that with our current technology and production processes, our Earth can produce enough food to be able to sustain our current population of six billion people.

Mini Test 1

01 Sociology

M: I want to talk about a fairly new field of study called, uh, don't laugh, but it's called *garbology*. As you all can probably guess, garbology is the study of garbage, and more specifically, it is the study of landfills and the trash that overflows from them. Are we pretty clear so far? There are a couple of reasons why someone might take an interest in garbology.

For one thing, it's a way to learn about the past. Think of it this way—the study of trash kind of imitates an archaeological study. Trash items reveal valuable knowledge about the passage of time. And considering that some ancient cultures left no writing, tombs or any other artifacts, all we're left with to study is something everyone is sure to leave behind—their trash. Anyway, something else garbologists hope to learn by studying the waste that a particular population produces is their patterns of food consumption and trash disposal. Garbology can also unmask certain environmental concerns.

Just to give you a bit of background, the word "garbology" was originally coined by A.J. Weberman, a uh, a writer actually, to describe his studies as he sorted through a famous pop singer's personal trash. He wanted to uh, well, he wanted to learn more about the singer, so he could write a book on him. So anyway, I think I might have mentioned before that the study of garbage did not begin until recently. In fact, it wasn't even a legitimate academic area of study anywhere until 1971. The University of Arizona was the first to offer garbology as a course of study, which focuses on educating students about the patterns seen through the contents of trash, and even traces history through the contents. So what have garbologists learned so far?

A little garbology knowledge can go a long way, especially in deciphering the mysteries that are left by older cultures. For example, by studying food remains, garbologists can tell what kinds of food a population used to eat and what their nutrition was like. Or pieces of tools that were broken or failed could be used to learn about the types a technology a culture had developed. Finally, studying the pollen from plants found discarded in the area, garbologists can learn about the flora in the region. Do you all have any questions about how garbology is used to study the past? Good, let's keep moving on then.

In addition to learning from exploring ancient remains, garbologists also investigate trash to learn about the present. Garbology has revealed unique patterns in human behavior. For example, by studying the number of food packaging and disposable convenience items found in trash, they have been able to determine that humans are no longer relying on handmade products and cooking as they used to.

Additionally, garbology also gives some insight into the food consumption patterns between the upper, middle and lower classes. In a study, garbage was collected from different neighborhoods in search of soup cans. While the cans were relatively non-existent in the garbage of the rich, the trash from the middle-class neighborhoods were full with these cans.

What do you think that means? To begin with, the assumption is that the rich can afford to hire help with preparing meals and can also afford to eat out. Thus, there is barely any prepackaged convenience food in their trash as they have no need for it. Meanwhile, the middle-class generally looks for convenience in its food purchases. This kind of information is priceless to corporations who need to determine who their targets should be in their marketing plans.

Let's discuss one last aspect of garbology: It has helped divulge some previously unknown facts about biodegradation. See, before, it was believed that trash decomposed at rates far quicker than it really does. The reality is, many things do not even decompose at all! Plastic, for example, seems to last forever, which poses several obvious environmental problems.

Even worse than plastic is paper. Here's something that'll boggle your brains: newspapers alone make up nearly fifteen percent of the trash in landfills. What's more is that newspapers *from the 1950s* can still be found in fairly good condition. On one hand, the lack of biodegradation serves garbologists because the preserved items are easier to study. However, because of the serious predicament that the Earth is in, biodegradation, or rather, the lack of biodegradation, is an issue that needs to be addressed.

02 Psychology

W: Let's see. OK, let's continue where we left off concerning how humans form their understanding of experiences. To prepare for the discussion, I had you read about Rom Harré's idea of personal theories. Who can give the class a brief overview of the reading?

M: Well, Harré was a social construction theorist who thought that personal theories are central to the human experience. But, uh, can you explain a little more about what you mean when you say personal theories?

W: I think it helps if you consider it like this: the ways that people perceive themselves form the foundation for how they perceive the environment outside of themselves. Is that clear? So their interpretations of the world are constantly being influenced by the systems that they've created, systems that help people organize life events according to how they view themselves. These systems are called personal theories. So, there were a couple of factors that Harré thought were part of how people learn to understand themselves and the world around them. Based on the reading, can you mention any of those?

M: Um, well, I remember that one of the factors is the notion of person. That's the visible aspect of the individual. So I guess the notion of person is how people want others to view them, or uh, yeah, how you want other people to perceive you.

W: Good. And what was the other factor in the development of personal theories?

M: Isn't there also the notion of self?

W: Could you expand a little more on that?

M: Uh, I'll try . . . but to be honest, I'm not really sure I completely get this. But anyway, from what I understand, the notion of self is the privately held belief system that individuals have about themselves.

W: You're totally right. So, just to clarify, the sense of person is public whereas the sense of self is private. Are we all clear on everything so far? Great, then let's move on. You'll probably remember from your reading that Harré made a clear distinction between the social and personal aspect of the person to show how the two form a whole. Now, my question for you all is, what did Harré have to say about the role of the community in the formation of a sense of self?

M: Usually, in communities, an individual is conceived as fitting into a particular category or role, such as worker, parent, authority figure, and so it goes that the person's social being is seen as embodying this role.

W: Well put. However, within the context of this role, individuals create their own sense of self in order to have a private being. So let's say your role right now in your community is that you're a student. Within that role, you define yourself as a diligent student. In this way, you are creating your own private sense of self. Or, as a member of the community you have a public self, which is embodied in a role. However, there are personal aspects of that role, which people create as part of the role, but it's a more private sense of self. OK, now, according to Harré, are people born with a sense of self?

M: No, in fact he made a big deal out of explaining that the self and the person are not innate; but rather, they are constructed through social experiences.

W: That's it—right. And that's a key point that we'll talk about next.

03 Office Encounter

- W:** Professor Williams?
- M:** Ah, Gillian, come in. What can I help you with today?
- W:** Well, it's about the paper . . . uh, well, I've run into some problems. See, my aunt hasn't been well recently, and I've been spending a lot of time with her.
- M:** I'm sorry to hear that.
- W:** And, well, as for the paper, I've tried to give it my best effort, and while I've been able to form most of it, I'm afraid that I won't be submitting my best work due to my current circumstances. What should I do?
- M:** Really, all I can say is try your best.
- W:** It's just that I feel at this point, my best won't be enough. Especially because I really would like to excel in your class. I was hoping that, well, that I could have until Monday to finish my paper. I really feel that having the weekend to recuperate would allow me to produce a paper that I could actually be satisfied with.
- M:** I see that you've had to shift your priorities in order to tend to your aunt, but the truth is, I'm unable to give you an extension this time.
- W:** I don't understand. Why not?
- M:** Three weeks ago, you asked for an extension, and I gave you one. Unfortunately, you didn't honor the new due date. In fact, you then asked for an extension on your extension. It's always been my policy to give only one extension per student per semester. I feel that it's only fair for the other students, particularly to those who never ask for one.
- W:** I understand that, but given my situation, couldn't you make an exception?
- M:** The thing is, I already have . . . It sounds rigid, but sometimes one has to stick steadfastly to certain rules. Just for the sake of fairness.
- W:** OK, it's just that I would really like to do well in this class.
- M:** You can still do very well. You have until tomorrow to complete your paper and to reflect what you have learned in class. And if for whatever reason, you are dissatisfied with your performance on this paper, then you have other opportunities throughout the semester to redeem your grades.
- W:** So what would you recommend that I do?
- M:** Let's see, what would I recommend? Well, first and foremost, work hard on your paper, to the

best of your ability. Also, you still have the final exam and the group project, both of which account for twenty percent of your grade. That's a huge chunk. In addition, you can continue to show up to class and participate, and prove to me that you do indeed want to learn.

- W:** OK, I understand. Thanks very much for your advice and your time.
- M:** Anytime. Best of luck to you on your paper. I'm sure you'll do fine.

Chapter 3 Function Questions

01 Psychology

- W:** Today I want to talk about the development of moral reasoning, and, uh, a theory by Lawrence Kohlberg. Kohlberg theorized that there is a specific pattern of development—that is, stages that people go through—when they are forming their moral reasoning. We'll split them into three stages—uh, levels, really, of development. So, um, the first level is called a pre-conventional level. Kohlberg defined this level as, uh, as a stage when people are concerned only about the impact of an event on themselves. There is really not much concern for how one's decisions or events affect anyone else. Kohlberg noticed that a lot of kids' moral development was at this level. For example, if throwing a rock at someone is fun for the child, well then, that's enough to cause the action. To put it another way, if it feels good, do it! The pain caused to the person being hit by the rock is not considered. Now, the child may also be aware that doing certain things will bring about some sort of punishment. And the child might avoid any action that will get him or her in trouble. But make no mistake—there are no moral decisions being made here. Instead, the child just wants to avoid punishment. He or she doesn't avoid the bad behavior because he or she realizes it is morally . . . uh, morally wrong. OK, moving on . . . as you may have already guessed, the next stage is the conventional stage—conventional level. Most teenagers find themselves at this level, but it can also be seen in adults as well—I mean adults who don't attain

a higher level. People at this stage start to take into account how their actions affect other people. Typically, their moral thought processes are greatly affected by society. In other words . . . hm, how can I put this? In other words, they'll conform to the societal norms of what is thought to be right and wrong. Because society views certain things as moral or immoral, individuals begin to view them that way, also. So, what differentiates them from those in the first level is they actually have an idea of right and wrong, independent of any qualms about punishment. But they haven't quite made *their own* decisions about right and wrong yet.

So, next is the post-conventional phase. In this level, people will begin to develop their own sense of right and wrong. So, basically, they no longer really consider what society thinks is right and wrong, and they definitely aren't thinking about just punishment. They just want to do something because *they believe* it's the right thing to do. They've internalized society's ideals and made them their own, often changing societal rules in the process. Does that make sense? Now, with this phase, people begin to see how right and wrong can change in different situations. Or maybe they see different reasons for doing the right thing. Basically, right and wrong become subjective. Maybe an action is right in one situation, but not in another. I think we can all think of a situation where that would apply.

02 Philosophy

W: OK, today I want to look at two different philosophical ideas. Both have been very influential since their development, but they each have their own viewpoints on the world and on reality. In fact, though they are each based upon the metaphysical—that has to do with things that are not strictly physical, but also things like, um, truth, or causality—uh, they differ on a number of points. These ideas are objectivism and solipsism. It'll be really easy to compare them since they're so different. Let's do that now.

We'll begin with their ideas about reality. Now, objectivism is an idea that was formed by a woman named Ayn Rand. It basically theorizes that, apart from the world we know, there is

another reality that is completely separate from what we perceive with our minds. So this reality is considered to be, um, independent from what we think or what our minds tell us. It's there, no matter what. But, now, solipsism is completely different. It argues that perhaps, not only is the reality we perceive with our minds the only one . . . but it is also *created by our minds*, so to speak. What I mean is, as far as solipsism is concerned, the mind is the only thing that really exists. So the two ideas are really kind of at odds with each other. They're very much opposite.

OK. They also differ in how they understand the things that make up this thing called reality. Now, in comparison with objectivism, solipsism advocates that the existence of anything outside the mind really can't be proven. What's a good example I can use? Let me think . . . All right. See that apple on the table over there? How do you know that it exists? Your mind is telling you that it exists, but what if your brain is manufacturing it? Then what? You wouldn't actually know whether your mind was creating the world around you. You would have no way of knowing if it was real or not. So that's solipsism's idea of reality.

Now let's take objectivism's view on that apple. Unlike solipsism, objectivism argues that the apple on the desk is really there. Even if you were to walk out of the room, that apple would still be there. Right? Because with objectivism, your perception of it has nothing to do with the apple's actual *existence*. Instead, the world is the way it is regardless of whether your mind perceives it. Got that? Objectivism argues that reality exists apart from your mind. Solipsism contends that, um, that your mind is the only reality.

Let's look at another way that the two philosophies vary. Objectivism suggests that a reality separate from our own minds is substantiated by our sensory perceptions—smell, touch, sight, and even things such as intuition. Solipsism, on the other hand, would argue that things outside of the mind aren't really there. All of those sensory perceptions are just the product of the mind. Remember, that's the main theme with solipsism: everything that we perceive—whether sensory or not—is simply created by the mind. Objectivism believes it actually exists, independent of . . . oh.

how can I put this . . . of how our minds function or perceive it. Really, all objectivism and solipsism have in common are their metaphysical roots; they both deal with an *idea*—the idea of reality. Their interpretations of that reality, though, are completely different.

03 Office Hours

M: Hello, Marjorie. Did you come to see how you did on the test? I don't have them graded quite yet. Although I'm sure you did quite well.

W: Thanks, Professor Maxwell, but I actually didn't come to find out about my grade. I have a little problem, and I came by to ask if you could give me some suggestions.

M: Well, sure. What's the matter?

W: I want to teach after I graduate, and I'm a little concerned because I haven't had any hands-on experience. I also want to learn to plan interesting lessons so that the students can enjoy getting their education. So I was wondering if you have any suggestions on how to get some experience.

M: Oh, I don't think you need to worry too much. You're an excellent student, and you've shown a lot of promise in all of my classes you've taken. I'm sure you'll be a wonderful teacher.

W: Still, I'd really like to have the opportunity to try teaching in a controlled setting before I graduate and get a job where I'm expected to run the class. I think it could be really helpful for me to have someone else give me tips and ideas on how to improve.

M: Well, I suppose that's understandable. I'll tell you what, we may be able to do something next semester. What would you think about doing an independent study course? You could assist me with one of the lower level classes, and get some experience.

W: That would be great. What kind of stuff would it involve? I mean, what would I do exactly?

M: You'll get to observe how I handle different situations, grade papers, make tests, and assist me in teaching. Then, toward the end of the semester, I'll permit you to teach several classes on your own. You can design the entire lesson and decide what kind of homework the students will have.

W: The only thing I would be worried about with that kind of independent study course is that I

wouldn't have enough time for it. I have a pretty full schedule next semester as it is. I'm taking a full course load, and I have to work part-time, too. Plus, I'm involved with a couple of volunteer organizations that take up some of my free time.

M: It does sound like you're busy. But at least consider it. I really think that an independent study course would allow you to try out your teaching skills and learn a lot. I took a course that was very similar when I was an undergraduate, and it proved invaluable. I really depended upon what I'd learned when I got my first teaching job.

W: Well, I'll definitely think about it. I'd really like to, but I just don't know if I have enough time, but maybe I can figure out a way to rearrange my schedule or something. Thanks, Professor Maxwell.

M: You're welcome, Marjorie. I hope you get to do that course. Let me know if you want to set it up.

04 Service Encounter

M: Hello, Nurse Garnett. How are you today?

W: Hi, Brady, I'm doing well. What can I help you with?

M: Well, um . . . I heard an announcement on the student radio station that the university alumni association offers health insurance.

W: Yes, that's right. It's really very good insurance.

M: I was wondering how I could get it after I graduate in May.

W: Since it's offered by the alumni association, the health insurance is available to any former university student, as long as the student has received his or her diploma. The only thing required is a complete physical. They just want to know what kind of health you're in before they insure you.

M: Well, I have diabetes, but other than that, I'm completely healthy.

W: Then you should have no problem getting approved for coverage once you graduate.

M: What kind of policies do they offer?

W: There are actually a lot of different options. Coverage starts out with a \$1,000 deductible—that's the part you pay before the insurance kicks in—and a \$45 co-pay. The co-pay just determines how much you will have to pay for basic services like a doctor's visit. The insurance will pay for the rest.

- M:** So basically, if it's anything minor, the insurance doesn't help at all. How much does that policy cost per month?
- W:** It would probably be about \$150 a month for someone your age.
- M:** That's pretty expensive, considering it only covers major medical problems. It wouldn't even pay for my diabetes medicine, or my regular checkups.
- W:** True, but it is all-inclusive. The insurance the alumni association offers includes just about every kind of doctor. It will take care of specialists, eye doctors, even dentists. Most insurance companies are limited to regular doctors, maybe vision coverage, but it's very rare for an insurance policy to include coverage for dentists and specialists.
- M:** Well, I hope I never get sick enough to need a specialist, and I really think that extra coverage would just be a waste of money for me. I just need insurance to help cover the normal stuff—a check-up, medicine, that kind of stuff. I don't want to pay for coverage I hope to never use. I would rather just pay for those things if I have to, instead of all the time.
- W:** Well, no one thinks they're going to need health insurance for the bigger stuff, but the reality is, a lot of people do need extensive insurance coverage.
- M:** I know, but I can't afford to pay for it. I guess I'll just have to do without health insurance.
- W:** You shouldn't give up just yet. Go ahead and take this brochure. It explains all the benefits I mentioned in a little more detail. Think about it for a while. Really, it is a good insurance policy.
- M:** OK, I'll take it and look it over. Thanks for the information.
- W:** No problem. I hope it helps.

05 Business

- M:** I'm glad to see you all recovered from the test in our last class enough to show up today. Um, as you know, in advertising there are a number of different mediums to consider when devising an advertising plan. And they can be pretty effective or not very effective at all. To give you an idea of the positive and negative points a certain method might have, I decided to focus on advertising in magazines. All right. Let's start with some of the more appealing aspects of magazine advertising.
- First off, there are a ton of specialized magazines out there, which means you can reach your target audience very easily. They attract certain people to read them, and the readers often spend a lot of time interacting with the magazine. That means that if you can get the right kinds of advertisements in the right magazine, the readers will probably be interested in what you're selling. Does anyone know what I mean? Yes? Kayla?
- W:** You know, the subject material is obviously interesting to them if they subscribe to the magazine. Um . . . like a flower seed company advertising in a gardening magazine, for example.
- M:** Right. Another thing to factor in is that magazines are generally established businesses with a long-term customer base. These people subscribe to the magazine every year, and there is, uh, high customer loyalty. There is kind of a, um, a trust built up between the magazine and the customer. So, for example, if you are able to advertise your kitchen gadget in a cooking magazine, it's almost like the magazine is recommending the product to its customers. Another advantage to advertising in magazines is that you can be very creative with your advertisements.
- W:** What do you mean? I mean, how do magazines allow you to be any more creative with your advertisements . . . than any other way of advertising?
- M:** Well, you could do full-page ads, ad spreads—like across several pages—or angled ads. For example, on that creativity thing, have you ever seen an ad that is sideways from the way the rest of the magazine reads? Or that includes a perfume sample? These are the kinds of things customers like. Let's move on to the . . . the um, the disadvantages. Because magazines are so specialized, a lot of times, you may not be able to reach the customer base that you would like to for large-scale advertisements. If that's the case, and you have to move up to a more widespread magazine, your advertising cost will skyrocket.
- W:** Plus, most magazines only come out monthly or even less than that.
- M:** That's a good point. Since they do come out sporadically, you may not be able to have that constant advertising presence that you would get with another medium.

I just have one more disadvantage you should consider with magazine ads. Lots of companies pay money to have magazine advertisements, and often, all the ads are located around the same areas of the magazine. This means you are competing with other companies for visibility.

06 History

M: The railroad was one of the most important developments in the entire 19th century. Before the railroads were completed, it was very difficult to make the long journey across the continental United States. Its completion signaled the beginning of a new era for the young country. It was a time of many different changes, and it even altered the way of life in the West.

The Union Pacific and Central Pacific Railroads were given, um, they were given permission to build the first transcontinental railroad. The plan was for them to meet up in the middle, which they did at Promontory Point, Utah. Lawmakers approved the plan because of the changes it would effect. Um . . . one was faster travel. Another was quicker and more efficient mail service. They also hoped that the railroad would encourage settlement of the huge chunk of land that had been bought in the Louisiana Purchase.

One of the most important effects of the railroads was that towns began to spring up all along the rail lines. Farming, mining, and tourist communities were thriving. The new railways allowed people to get—have access to—things that made life a lot easier. Things like, uh, like food and supplies. People didn't have to go back east anymore to get the supplies they needed. The new availability of commercial goods encouraged people to move farther west. Got it? They wanted to try to build new lives for themselves there. Needless to say, the economy was thriving, in large part because of the good ol' railroad. It also gave people more security in some ways. In the case of an emergency, help wasn't nearly as far away. However, along with these came a number of results that lawmakers and the railroad companies themselves never could have predicted. What I mean is, long-term effects included a lot of things that people don't exactly smile on these days. Things like the death and eventual near-extinction

of bison—bison being the really big, hairy animals, uh, some call buffalo, that used to be so common in the US—they became nearly extinct in most areas across the plains of the United States. As all the towns were built, oh, and people began to cultivate the land for farming . . . well, bison became a nuisance. The large herds trampled the crops. Nobody wants their wheat crops stomped into the ground. So they put up fences. Gradually, the bison began to die off. People also killed them to keep them out of their crops, or to eat for food, which decreased their numbers. Um . . . let's see. Oh, yes. The railroads also meant a change in lifestyle for the Native Americans. Their land was overtaken by new communities, and their primary food source—the bison—was being killed off. This eventually caused a number of tragic deaths through wars between the new settlers and Native Americans, as well as through wars between different groups of Native Americans vying for land. OK. Then, another effect of the railroad was that livestock were introduced to the American West. Ranchers brought the cattle in on the trains. Now, this had all kinds of implications, to people, land, and the ecological stability of the region, as well. So listen up. First, not all people liked the livestock. The farmers didn't want them roaming free because they would ruin their crops—just like the bison, but the ranchers wanted their cattle to be able to wander and graze on the prairie grasses. Eventually the disputes between the farmers and cattlemen culminated into . . . I mean, they turned into several big fights. These were called range wars. The livestock also grazed on the food the bison ate, contributing to their decline. Plus, as if that wasn't enough, they ate so much of the prairie grass that they stripped the ground of the roots keeping it in place. With the introduction of cattle, massive amounts of the topsoil became vulnerable to erosion. It just washed away. This—in part, along with a long drought—eventually caused the famous “dust bowl” in the Great Plains of the 1930s. So, the West couldn't stay the same—it progressed and changed. Uh, but not all the changes were good ones. A lot of people suffered, and a lot of conflicts resulted from the building of the railroad. The entire character of the West was forever altered. You might want to think about that. It was a really important time in the history of the United States.

07 Office Hours

- W:** Professor Bentley? Can I come in and ask you about the research paper for your political science class?
- M:** Of course, Meredith. Are you having problems with the paper?
- W:** Kind of. It's just so long . . . I feel overwhelmed. I don't really know where to start on it. I've been working on the research for a while, but I don't know what to include and what to leave out.
- M:** Well, to start with, what is your paper going to be about?
- W:** I decided to cover the political structure of France. There's plenty of information, but it's almost too much. I mean, you mentioned that you wanted a section on the country's history, but France has so many years of history! I just don't know how to narrow it down.
- M:** Well, since the overall paper is not supposed to exceed forty pages, including footnotes and all, you could devote around ten pages to the history. Try going through the research and sketching a timeline for the development of France.
- W:** I'm not sure how that will help . . . it would take forever to make an accurate historical timeline.
- M:** Well, that's true, if you put in everything that ever happened. Instead, eliminate all the . . . the extra stuff, you know, that didn't really have much to do with how the country formed. Just put in the big events, like the French revolution, or any other major power shifts. Even the more minor wars don't need to be covered. The history of the country is just supposed to give, um, kind of a background for the political structures.
- W:** OK, I can do that. Oh, yeah, what kind of sources are best? I have a lot of different kinds, but I've heard that you prefer certain ones.
- M:** Yes, I do. I don't want any random websites or magazine articles. All of your information should be from academic sources. Like academic journals, quarterlies, and research publications. Also, you can use educational websites, such as those posted by other universities. Otherwise, I really don't want any online resources. Books are always fine, of course. Our library has a good selection, but then I'm sure you've probably already found them.
- W:** Yeah. But how should I organize the information? I know that the requirements for the paper include the history, the country's future political

outlook, and how the different parts of the government interact, but I don't see how that will transition very well.

- M:** Well, that's really for you to determine, but I think I would start with the history, then describe the type of government in the country, how it functions, and finish with the outlook. It seems to kind of go in an order that is logical. You want to make sure that you don't start describing something that your reader hasn't been properly introduced to establish a . . . a basis for what follows. Your reader has to have some concept of what you're talking about.
- W:** That sounds good. I just don't know how I'm going to get a forty-page paper done in the next four weeks.
- M:** Meredith, I told the class about this research paper at the beginning of the semester. I even gave you an example so that you would know how extensive it would be. You should have a good portion of it—at least twenty pages—written already. It's worth fifty percent of your grade, after all.
- W:** I know, and I did start researching it right away. But then I got overwhelmed, and spent too much time going through all that information before I came to talk to you.
- M:** I'm sure that if you try hard you can get it done in time. I would suggest you get busy, though. Set a goal for a certain number of pages to complete each day. That should help keep you on the right track. Just make sure that you leave yourself enough time to read over it and make any corrections it needs.
- W:** I will. Um . . . thanks for your help, Professor Bentley. I have to go. I have a literature class in ten minutes, but I appreciate your advice.
- M:** Oh, you're welcome. I'll see you in class, Meredith.

08 Service Encounter

- M:** Hi, I need to sell my books back. I have a huge stack of them.
- W:** OK, let's see what we can do. Um . . . I can take all of them back except this one.
- M:** Oh, you mean my biology book?
- W:** No, your *Fundamentals of Psychology* textbook.
- M:** You can't take that one back? But it's still in really good condition. I made sure to take care of it so that it would still be worth a lot.

- W:** It is in very good condition, but I'm afraid that the university just won't take it back. I'm sorry. Sometimes books just aren't bought back.
- M:** But why wouldn't the university want it back? It was brand new when I bought it, and it was the most recent edition. It even still has the CD-ROM that I didn't even use. It was really a pretty good book.
- W:** I know, but that doesn't mean we can take it back.
- M:** Well, why wouldn't the bookstore want it?
- W:** The textbook companies issue new editions at different times, and they probably just released a new one. Even if your book was the most recent edition when you bought it, that doesn't mean it's still current. A lot of publishing companies offer new editions very frequently.
- M:** This book cost me \$115, and I only used it for one semester. Isn't there anything else I can do with it? Can you give me any suggestions?
- W:** I understand why you're upset, but maybe there is another option that you can check into.
- M:** Really? What's that?
- W:** The university bookstore has a textbook trading website that allows students from all branches of the university to get into contact with one another and exchange books. You just post the textbook information, what class it was used for, and how much you believe it's worth. You should also include a list of textbooks you'd be willing to trade it for, and the classes they are for. Then you can browse and look for someone who has a book you want and who also needs the book you have. It works very well.
- M:** It sounds like a good idea, but what if I don't want to actually trade it, I just want to get cash for it?
- W:** If you get on the website, you'll start out at the homepage. You have to input your student ID number so that the university knows you're using their website. Then you are required to post your textbook profile—that's the textbook information I was talking about. But then you choose whether you'd prefer a trade or a straight buy. If you click the straight buy, the website organizes the offers you receive for your textbook over a certain period of time. The only catch is, at the end of the time period, you have to take the highest offer, no matter how unreasonable you may think it is.
- M:** Well, I guess that would be OK. I would still be getting more than I would get for it otherwise. I just can't believe I actually have to do that or trade it. I never would have thought that the bookstore wouldn't take it back.
- W:** That's just the way things go sometimes. Here, let me write that website down for you. And remember to put the little number on the back of the book on the textbook profile. It's near the barcode. A lot of textbooks have similar titles, and if you forget the number, it can be hard for students to determine if it's the right book other students are looking for.
- M:** Thanks, I'll remember that. Do you have any other tips?
- W:** Well . . . sometimes a picture of the book's cover can help, too. Students can do a search for the subject, then browse through pictures. If someone sees the book's picture, they know it's the right one, and they'll usually bid on it right away.
- M:** Great. Thanks for all your help. I'm definitely going to try out that trading website.
- W:** Sure. If you have any problems, you can come by and ask me. See you later.

09 Environmental Science

- W:** OK. We've been discussing some of the consequences of the use of nuclear materials on our planet—some of the accidents that have been caused, the impact on wildlife, things like that. To finish up our chapter on nuclear problems, we're going to cover how nuclear waste is disposed of. This is a huge problem. With all the nuclear power plants, the nuclear applications used by militaries around the world, and even the industrial use of nuclear material, there is an excessive amount of nuclear waste to dispose of. The problem is, the options are limited. I mean, you can't just pile nuclear waste into your local landfill. It takes thousands of years before the radioactive isotopes start to decay and they aren't dangerous anymore. So what do you do with all that unstable waste? Well, one of the most common ways of getting rid of, um, nuclear waste is to process it to make it more stable. This can be done using a process called vitrification. Basically, all it is,

is adding sugar and lithium and then spinning it really fast in a hot cylinder. It can also be condensed into a smaller volume by using ion exchange, or mixing it with special chemicals. Then it's sealed in a steel drum. I'm not talking about the kind of drum musicians use! I mean a huge steel barrel that is welded shut and then washed thoroughly. Of course, after that, you still have to put the drums somewhere, because there is still a chance that the radioactive material will corrode the steel and seep out.

Also, another problem with the radioactive waste is actually storing it. There are a lot of, uh . . . a lot of ideas on this. And, you know, there um, there isn't any answer that makes everyone happy. But one thing to do with nuclear waste is to simply store it in huge storage bunkers. Scientists can kind of watch it then, monitor it to make sure it doesn't leak. Plus, the really dangerous parts start to decay after a few decades. So if they do decide to do something else with them, it's not as much of a risk of contaminating things that are exposed to it. OK. So, that's one way of disposing of nuclear waste.

Another common way of disposing of it is to put it in a secluded area of the environment—you know, like underwater or buried underground. Oh, yes . . . this neutralizes its immediate danger to humans, but the danger to the environment is still massive. I mean, who knows what it could do to the vegetation and the animals in the area? Underwater, it could put marine creatures at risk. A lot of people are concerned that—long-term, anyway—this could cause even more damage than most of the other options. They don't want to put the environment at risk just to store nuclear material.

Transmutation is an option that is being explored as well. It, uh, it involves . . . it's kind of like changing the chemical makeup of the radioactive material into a type of nuclear waste that is less radioactive. It uses nuclear reactors to process the material and make it less dangerous.

Transmutation also allows it to be used in some kinds of industrial processes, so that it is "recycled" in a way. Now, the . . . there's one more possibility I want to discuss with you. That's disposing of radioactive waste in space. Some people don't want nuclear material just floating in space. But a lot of people like this

idea because it wouldn't have any direct effects on the environment—the ground would be safe, the animals would be safe, the food would be safe. However, there are several, um, several disadvantages. For one, it would take a *lot* of trips to space to get rid of all our used nuclear material. This makes it financially unfeasible. Another reason disposing of nuclear waste in space is unappealing is that there is the possibility of a severe nuclear accident if one of the rockets carrying the material crashed.

10 Art History

M: All right, everybody. We've taken a look at a lot of sculptures lately, but consider how they were made for a moment, instead of just their beauty. Today we're going to talk about the different methods that can be used in sculpture. Specifically, we're going to discuss—uh, modeling, carving, assembling, and casting. We're going to talk about how to distinguish between them.

Anyway, I want to talk to you about the different types of additive and subtractive methods, and then consider a few famous pieces of sculpture. Oh, um, additive just means that you add things one by one, and subtractive means that you start with a big chunk of something and remove pieces. We'll go ahead and talk about the additive ones first. First off, modeling. Modeling involves the use of clay and, well, the basic idea of modeling is to continue adding a material until you have a finished product. So, in the case of clay, the process always starts with something to work the clay around. It's usually some kind of core . . . or some kind of a framework to give the sculpture its structural strength. Then, the clay is formed into a representation of, say, a person or something. People have used modeling for thousands of years. Anybody have any ideas of some kind of famous sculpture that was modeled?

W: What about those terra cotta soldier statues found in the ground in China? Were they modeled?

M: They sure were. Generally, you can tell if a sculpture was modeled—and therefore, additive—by how it was made. For example, if the sculpture has a core and it was made of clay, it was modeled. Terra cotta is clay that has been baked in a special oven, so it was modeled. Is everyone ready to move on to the next one?

OK, the next additive method is called casting. It's actually very similar to the modeling method in one important way: casting first requires a model. OK, so casting involves a mold, which is basically just the outer shell of what the sculpture will look like. Then, some sort of material is poured into the mold and allowed to solidify. These materials can include a lot of different things: metals, sand, concrete . . . It's a very versatile sculpture method. Once the material has hardened, the mold is removed and the sculpture is complete. OK, so does anyone want to offer an example?

W: There's a statue in Venice, Italy of a man on a horse. I learned about it in another class, but I forget what it's called. I'm pretty sure it was made with a cast, though.

M: You're right. It's called the *Equestrian Monument of Colleoni*. The sculpture was made with bronze. The melted bronze was poured into a cast, it hardened, and the sculpture was complete. OK, let's go ahead and move on. We'll talk now about assembling. It's an additive process that is characterized of mat-by materials being used together to form something.

W: Wait, I thought that was modeling.

M: Oh, I guess I should clarify. Now, while modeling involved a core and one material, assembling just . . . let me think of the best way to say this . . . it really just puts different materials together. This is actually done quite often with metals. The metals are actually fastened together or sometimes just placed on or near each other. Does anyone want to try to give an example of assembling?

W: This might be a long shot, but I've seen a lot of art from a guy—David Smith was his name, I think. And he would just take a bunch of stuff—stuff from a junkyard, garbage basically—and he'd put it together and make a sculpture out of it.

M: Yes, actually, David Smith is a great example. He actually has an interesting story: after learning about welding in an automobile factory, he decided to apply that knowledge to art. So he began putting old metal parts together to make art. Now, he's one of the most famous sculptors of the 20th century.

OK, let me move on to the last one. You all know what carving is, right? Basically, you start with a big piece of material—wood is very common—and you use some sort of tool to take

pieces away. This, of course, is a subtractive method. And, well, I'll offer an example this time. Do you know Michelangelo's famous statue *David*? That was made using a big piece of solid marble, and Michelangelo just chipped away at the block. That's right! There are a number of important sculptures in history that were made using carving, and *David* is one of them.

Chapter 4 Stance Questions

01 Economics

M: We've been talking about inflation and its effects, usually bad but sometimes good, on the economy. Now, remember, inflation is a situation when the value, the uh, the purchasing power of money goes down. A dollar today doesn't buy as much as it did, say, yesterday, or last year, or whenever. It causes prices to go up. But today, let's talk about *stagflation*. Stagflation is the combination of inflation and a stagnant economy in which production actually falls.

So, basically, uh, today I want to illustrate stagflation by using a specific event . . . and, uh, I'll show you how that event caused the different negative effects that led to stagflation: high prices and a stagnant economy. It takes distinctive conditions to, uh, to create stagflation in the economy, like during the 1973 oil crisis. The United States, and most of the rest of the world, for that matter, relies upon something called OPEC for its oil. OPEC, or the Organization of Petroleum-Exporting Countries, is basically a partnership that collectively produces most of the oil in the world and so can strongly influence the price of oil. The oil crisis began as OPEC announced it would no longer export oil to the US. This action had a number of consequences . . . all of which led to the period of stagflation.

The price of raw oil in the US went up . . . lots . . . like, 130 percent, since these producers no longer sold their oil there. This means that the US gasoline manufacturers had to raise the price of gas. I mean, they still had to make a profit, right? So to compensate for the, uh, the increased oil prices, they lowered gas production. You see, I could show you what I mean with a bunch of graphs and mathematical formulas,

but really, I'm afraid that would just complicate the issue. Of course graphs and formulas are important, but right now, in this class, I just want to describe why companies lower production and what results from that action.

Here we go: OK, there's a really good reason, well, for *the oil companies*, anyway! Yeah, so there's a really good reason that companies lowered their production. And in this case, I mean that the American gasoline manufacturers lowered their production of gasoline. You see, when you lower production, the price goes up. Makes sense? No? OK, well, think about it this way: if there is less of any given product, people will pay more for it. Yeah, if something's scarce, then they'll typically pay more for that product than they would if there were a lot of it. So the US oil companies raised the price of gas, which in turn caused an increase in gas prices.

But here's the problem for the gasoline producers—they're not making any more profit, because as you'll remember, the price of the raw material, oil, went up. So hey, prices went up for the consumer. And if I can put in my 'two-cents' worth, uh, my opinion is that there aren't too many things worse for an economy than this. So you end up with a stagnant economy along with inflation . . . what do we call it? Stagflation!

02 Business

W: Today, I'd like to talk about a sales model known as "direct selling." So let's start right off with a definition, shall we? Direct selling is just like it sounds: direct. As in, um, directly to the customer, a sale made directly to the consumer. You all know that products are typically sold in stores or um, well, over the *Internet* these days. In direct sales, the customer doesn't necessarily have to even enter a *store* at all. Direct sales is a way of selling a product directly to the customer without using a shop or an agent. For example, a knife manufacturer may sell its knives directly to the consumer . . . without using a store, for instance.

There are a number of different methods a company can use to sell directly to the public. And um, let's go over those now. The first one here, I'm sure you're all quite aware of: a lot of direct sales are made through telephone calls

to consumers. They're those annoying phone calls you always get during dinner. You know, the kind that gives you a long explanation of why their product is so good, and how low the price is. Usually, they start out with some kind of a question. The question that is phrased in such a way that most people will keep listening, thus, uh, thus giving the seller a chance to make the sale. That's one method of direct selling.

Another important way to sell directly is through the use of seminars. Have you ever gotten a letter in the mail saying that you'll get a *free gift* if you come to some presentation about something? You're curious, so you go, right? Who wouldn't want a free gift? Then you go to the presentation and find out that they just wanted to get you there to *sell you something*? Ugh! That's the seminar approach. Quite often, these are seen in the form of money-making seminars. The seminar might be on oh, let's see . . . how to make money in real estate, how to make money in the stock market, and so on. You get a free gift for showing up, but of course at the end of the seminar, a sales pitch is made. Usually, they want to sell you books or tapes that offer more in-depth information on what was presented in the seminar.

And last but certainly not least, we have demonstrations. Salespeople love to use demonstrations. A demonstration, sometimes called a *product demonstration*, is when a salesperson actually shows you how to use the product. It's a great way to attract buyers, and well, frankly, I think they're kind of fun. You see these all the time at fairs and exhibitions. I often take a seat and enjoy them myself at such events. They're not typically very formal, and during them, the salesperson can not only describe the product's benefits, but can also show the potential customer how to use the products.

03 Office Hours

M: Hello, Allison. I'm glad to see you're feeling better. That must have been a pretty bad strain of the flu you got for you to miss three of my classes in a row.

W: It was terrible, but I *am* feeling much better now, thanks.

M: What can I help you with?

W: Well, I'm actually concerned about my sculpture. Since I was out sick for so many classes, I'm not as far along as the rest of the class. I talked to Jainie, and she's nearly done with her sculpture. So is Tom. And Tom told me that you moved the due date up a week and a half. I'm just not sure I can get my entire sculpture project done in time.

M: You should be able to catch up from those missed classes during studio times. That's actually why we have the studio open after classes and during the evenings. I know it can be hard to finish an entire project if you miss classes, but if you just spend some extra time in the studio, it shouldn't be too much of an ordeal.

W: Ideally, that's true, but every time I go to the studio, it's completely full. There isn't a single table open, and all the tools are being used, too. Last time I went, I even tried to squeeze in at this one table. It was so crowded that somebody accidentally hit my elbow. It damaged my work so badly that I had to completely redo part of my sculpture.

M: Now, Allison, I know that the studio can get a little crowded at times, but this is a class that requires work outside the classroom. It's a studio course, and you're getting credit for it. That means that you need to find times to go to the studio when it isn't occupied.

W: I know, Professor Brighton, I just don't know when that is. Do you have any suggestions?

M: Well, you could try going early in the morning. I know the thought isn't pleasant, but the studio is open from seven until nine, when the first class starts. I know for a fact the studio isn't busy then.

W: I'm really not a morning person . . . any other ideas?

M: You know, since you were sick, you might have to make some sacrifices in order to get it done. I mean, I . . . well, you still have to keep up even if it's not easy, right? But, OK, OK, anyway, let me think . . . Maybe you could ask another student to go to the studio at a different time so that you could go later. You said that Jainie was almost through. Maybe she'd even be willing to forego one of her visits to the studio.

W: That's a great idea! Maybe if she isn't willing to do that, Tom would be. Then I could get my work done, and still not have to get up so early.

Thanks for the suggestions, Professor Brighton. I'm sure I'll be able to get one of them to help me out.

M: Not a problem at all. I'm glad I could help. Just make sure you get that project done by the twentieth—that's the new due date. I'll see you later, Allison.

04 Service Encounter

W: Hi, can I help you with something?

M: Yes. Uh, my mom called and told me she sent a package to me using express mail, and I should have gotten it today. But it wasn't at my dorm, and it was supposed to be delivered there. So I thought maybe the mail center got it by mistake. It's kind of important, too—it's my birth certificate. I really hope it isn't lost.

W: Yeah, I uh . . . I see what you mean. You don't want to lose that. Well, we usually get packages fairly early in the morning. I checked the storeroom earlier, and there wasn't a package back there. Plus, all the packages we receive are entered into the computer system, and there aren't any packages mentioned in today's records. Hmm. It's your birth certificate, you say?

M: Yeah. My mom put it in one of the big document envelopes with the bubble wrap inside them. I think she may have sent it registered mail.

W: Wait, I'm confused. I thought you said she sent it express. The kind of mail service she used could affect when it's delivered. Maybe she sent it the wrong way, and it will be here tomorrow.

M: I don't think so. She did send it by express mail, but I think she also registered it so that if it was lost, there would be a record of it.

W: I'm really not sure what to tell you. Did you check with the dorm staff? Maybe they have it. Maybe you should verify that none of the other dorms have received it in error. Maybe it was delivered to the wrong one or something.

M: That could take a while. How many dorms are there in all, again?

W: Uh, let's see. There's Davis Dorm, there's Winters Hall, um . . . Fairbanks, Underwood, Parsons . . . you're right, there are quite a few. I think there are close to seven. But I really think that might be your best option. I really don't know of anything else for you to do.

M: I guess I'd better get started, then. It's going to be a long day. I sure wish they would have just delivered it to my dorm.

W: Well, there's no need for you to walk around the whole campus from dorm to dorm. I have a list of the dorm phone numbers. Try calling them, first. Then, if one of them has it, you can just go to that one, instead of walking all over. I'll bet one of them got it. Do you know what day your mom sent it?

M: I think she mailed it on Tuesday, but it may have been Wednesday, I guess.

W: Either way, if she mailed it express, you should have gotten it by now. I'd definitely check the dorms. Here is that directory of phone numbers. In fact, I'll bet you'll find it there. This has happened in the past and the missing package always shows up at a different dorm. So I wouldn't worry, but now you know what to check, OK?

M: OK, well, thanks.

W: Good luck. I'll keep my eyes open here, too, just in case it shows up. Actually, let me write your name and number down so that I can contact you if I find out anything.

M: Sure. It's Brian Masters, and my dorm phone number is 555-4281. Thanks for your help.

05 Environmental Science

W: OK, so everybody talks about all the pollution that goes into the air, but doesn't nature have ways to take it out? Actually—and this might surprise some of you—the answer is yes. There are actually four different ways that nature takes particles of various . . . uh, various kinds of pollution out of the air. So everyone, get out your notebooks and write this down, because it will be in a pop quiz sometime in the near future.

The first way that nature takes bits and pieces of stuff out of the air is through good old-fashioned rain. Bet you didn't know that, did you? It's called rain out. Does anyone have a guess as to how rain helps lessen pollution?

M: Is it because the moisture of . . . um, well, it kind of traps the pollution as it comes down?

W: You're on the right track, but that's not it exactly. You see, rain drops start to actually form *around*

the pollution. Think about it this way. In order for condensation to occur, there has to be something for the moisture to condense on. Well, the pollution in the air is what the rain condenses around. Then, when it rains, the pollutants fall down to the ground and get absorbed into the soil. By the way, if you put "rain" on your quiz, you'll get it wrong. Rain out. Got it?

Let's move on to . . . oh, yes, sedimentation. OK. Say a volcano erupts. It spews huge plumes of ash and soot into the air. It lingers there a few days . . . and then what?

M: It falls to the ground.

W: Exactly! But why? Anyone know? No? OK, well, it's because of gravity. Basically, many pollution particles are actually heavier than air. So, if this is the case, they'll just fall back down to the Earth. It doesn't get much easier than that, so without further discussion, let's move from sedimentation to the next, um, the next way that nature sort of cleans itself.

Next up is something with a long name: photodissociation. It's not quite as complicated as it sounds, though, so don't worry. What it is . . . it's, um, well, it's where radiation from the sun breaks down all the chemicals in the air. It breaks them into other things. I feel like I'm not explaining this well. Basically, the sun's radiation can break down chemical bonds. So, if there is an O₃ particle, which is ozone, sunlight can break it down into O₂: oxygen. So, as you can see, the sun depletes the amount of ozone in the air. Finally, we have oxidation. It's where oxygen *combines* with other elements to form something else altogether.

M: You mean like with acid rain? I heard something about oxidation having something to do with acid rain.

W: Acid rain is definitely an example of oxidation. The oxygen combines with the sulfuric dioxide in the air, and well, through a lengthy process that I'm not going to get into in this class, well it forms acid rain. And like rain out, the pollution gets placed back into the soil. And by the way, this last method is a big problem, because when the acid comes down, it kills trees. So the air may be cleaner, but there's pollution on the ground.

06 Business

M: All right. Productivity is always an important concern in business. It can either make your business succeed or fail. If your employees aren't productive, there's little chance that your business will succeed. The converse is also true. If your workers are productive, there's little chance it will fail . . . at least, way less of a chance. There are still lots of other factors that can make a business fail . . . but anyway, what we're going to be talking about today has to do with productivity. It's called the Hawthorne Effect. Basically, the Hawthorne Effect states that a simple increase in the attention that a worker gets will increase his or her productivity. Sounds pretty unlikely, I know, but that's what the theory says. But, as you can imagine, there's a lot of debate about whether it exists. See, in the 1920s, a factory started doing these experiments on how different changes affected their employees' productivity. Uh, this factory was called Hawthorne Works, which is where the Hawthorne Effect got its name. Anyway, this factory brought in lots of researchers to conduct their experiments. So, today I'll just talk about the experiments they did—uh, the ones that support the Hawthorne Effect and those that don't, and I'll let you all make your own decisions. In the first tests, they altered the lighting in the factory, then measured the amount of productivity. Now, I don't know about you, but I would think that if the workers had more light, rather than less light, they would be more productive. But actually, the initial findings suggested that the lighting really didn't matter. See, the researchers found that, regardless of the lighting, the productivity in the factory went up. This is puzzling. I mean, why would the productivity go up seemingly for no reason? Either there should be no effect at all, or there should be some correlation between light level and productivity. So the scientists at Hawthorne Works got this idea. They thought that maybe it was just because extra attention was being devoted to the workers. So, because they were getting more attention, the workers performed better. A later test seemed to support the Hawthorne Effect. The researchers recorded that this time, when the subjects were moved to another room, they were consistently more productive, regardless

of anything else that was done. They felt that this was due to the extra attention the employees received, but I don't really believe it. Subsequent review of the experiments revealed other facts. What do I mean? Well, the room the workers were moved to had better lighting, more air flow, and, on top of that, it was quieter. So there are actually quite a few reasons that could have caused the increased productivity—not just the extra attention. There are a few other things that help to disprove the Hawthorne Effect. In one experiment, the researchers began with the subjects in the same room, and measured how productive they were. Then, they took them to a different work area and measured it again. Everything stayed pretty much the same. However, the researchers then gave the subjects breaks. This caused a notable increase in their productivity. When they returned to their original work areas without breaks, their productivity fell. Therefore, the researchers concluded that the attention really had nothing to do with it. The breaks caused the increase in productivity. Another experiment done at Hawthorne Works also seems to undermine the Hawthorne Effect. It also reinforces what the scientists learned with the last experiment I mentioned. Just like . . . just like um, in the . . . the last one, the workers were moved to a different work area, but the workers didn't speed up. In fact, individual workers accommodated to the average speed of all the workers combined . . . there were no great workers, no terrible workers, *only average workers*. What I mean is, and this is really fascinating, even if a worker was particularly fast, he or she would slow down so that he or she wouldn't make the whole group look bad. Interesting, huh? But this really seems to contradict the idea of the Hawthorne Effect. I mean, if it was just the attention causing increased productivity, the workers in each of these experiments should have done better. But they didn't. So basically, the whole idea of the "Hawthorne Effect" has been called into question, and with good reason. So, while the Hawthorne Effect may be one of the most well-known ideas about productivity, extra attention toward your employees may not *really* cause them to do better. Instead, your best bet is better working conditions and salary.

07 Office Hours

M: Professor Stevenson?

W: Yes? What can I help you with, Dan?

M: Well, I noticed in the campus newspaper yesterday that you had placed an advertisement for a research assistant position. I was hoping that you could describe what's expected a little for me. I might be interested in it.

W: Well, it's a two-semester commitment. I don't want to hire someone and then have to find someone else halfway through the research. So, I guess, first of all, can you commit to two semesters as a research assistant? It takes quite a bit of time.

M: I'm not taking a full course load next semester, and I had planned on taking it easy the following semester, too. So I don't think the amount of time should be a big deal. Two semesters is fine. I mean, one or two or even three is OK by me. Whatever.

W: OK. I need someone who can help me with both field and laboratory research. Basically, you need to know laboratory rules and have a good knowledge of chemical interactions. What kind of chemistry classes have you had?

M: I'm actually majoring in chemistry, and I'm a junior this year, so I've completed quite a few. I can bring you my transcript—what I have so far—if you want.

W: That wouldn't hurt. I usually don't require transcripts, but hey, since you're offering . . . I really need to know what level of chemistry you are at right now. Um, also, a lot of the job is just observation. You'll accompany me during field studies, and you should really be able to pay close attention to the smallest details. I can't have my research assistant missing something, or it could compromise the whole experiment. Are you detail-oriented?

M: Very. I'm also really organized, so keeping track of massive amounts of information is pretty easy for me. I also don't usually misplace things.

W: Wonderful! But the most important thing is, do you have any relevant experience? You know, like with a research firm, or something like that?

M: I've never had the privilege of working with a research firm, but I worked for a forensic laboratory analyzing various samples during my sophomore year. I know how to use all kinds of microscopes, DNA analysis software, and . . . well, all sorts of stuff like that.

W: It sounds like you might be a good candidate. You certainly have the right experience. What we're going to do is test water samples in the area for dangerous chemicals. Then we'll take blood samples of people who live in the area and look for those same harmful chemicals in their blood samples. I'm looking for any correlation between the presence of hazardous substances in the body and high levels of the same substances in the communities' water supplies. It's going to be fairly involved, and I want to make these tests and measurements in our subjects and in the water several times a month. Which means we'll be very busy.

M: It sounds like it would be very interesting work. What does the application process involve?

W: Well, first, of course, you . . . you, uh, have to fill out a paper application. I also require three different professional references and a chemistry examination. Then, I conduct an extensive interview. There's also a one-week probationary period, during which I can decide if you're the right candidate for the job. After that time, you'll be permanent for the entire length of the research project.

M: Does this job provide any credit hours, by chance?

W: It doesn't count for any credit hours, since it is a paid position, but it can be used in substitution for an upper-level chemistry course if you are awarded the assistantship. Also, this is the sort of thing that most graduate schools look for on an application for graduate studies. It really looks impressive to have worked on a professional research study. Plus, if you do get the position, and I decide to publish the research—I generally do, by the way—your name will be on it as well, which can also be added to your résumé when you're looking for a job after you graduate.

M: It sounds like it is a great opportunity to learn more and to build up my credentials. When is the application deadline?

W: It has to be submitted by five p.m. on September 17th. If any part of it is left blank, it won't be accepted, so make sure you fill it out completely.

08 Service Encounter

- W:** Hi, I was wondering if you could help me with something.
- M:** Well, I guess that depends on the problem. What's your question?
- W:** I want to get signed up for work study again next semester. Can you check my financial aid status and see if I'll still be eligible?
- M:** Sure . . . uh, you'll still be able to qualify, but unfortunately, my information says that the deadline for applying was on the—let me see—twenty-ninth. Unfortunately, a deadline's a deadline. There's nothing we can do about that.
- W:** Wait a sec. What is today? I thought it was the twenty-seventh.
- M:** It is, but the deadline was actually last month, not this month. I'm sorry, but that means you won't be getting any work study. Once the deadline has passed, there's really no way to submit a work study application and get all of the required processing, signatures, and approval done. It's really a very strict deadline.
- W:** Oh. Well, I work in the admissions office and I really enjoy it. Isn't there some way to still get work study?
- M:** No, there's not. I wish I could help, but there's really not anything I can do. And I have more bad news. I used to work in the admissions office when I was still a student here, and they don't allow non-work study students to work there.
- W:** Maybe they could make an exception? You know, since I still qualify for work study, but I didn't apply in time. I already know the job, and I like it a lot. Plus, it's my last semester. I would rather not have to learn a brand new job for just one semester.
- M:** Hmm . . . let me think for a minute. Um, you might be able to file a petition for exception with the director of admissions. You have to fill out the petition, and then write a brief essay about why you should be granted the exception. They look at your work record, your grades, and your character, and then make a decision based on the composite—you know, how good of an employee and student you are.
- W:** OK. I should be considered a pretty good employee, and I have a 4.0 grade average. Then what?
- M:** Well, if you check out, they may decide to let you go ahead and keep working there. But you should know, it's pretty rare for them to grant a petition of exception to the work study rule. Generally, they prefer to keep those positions open for students who are actually receiving work study aid. There are a lot of good positions that are for students that don't qualify for work study. In fact, if you check around you might be able to find one you like better. Uh . . . there may even be a different kind of position open in the admissions office. A lot of times, the different departments will have several different positions, and only a few of them are work study. At least that way, you wouldn't have to change offices or work environment. You'd still be working with the same people.
- W:** I guess that might work. I'd still like to keep my other job, though. Do you think you could get me one of those petition forms? I'm going to fill it out, and if my petition for exception is refused, then I'll think about finding another job. Hopefully that won't happen, it'll be accepted, and I'll have my old job back.
- M:** That would be nice. Here's that form. Now, make sure you include your entire work history at the university. So if you've ever had a work study job in another department, put it down under work experience. And you'll also want to make sure to fill out the part about your current course load and your major and minor. The department directors like to know that stuff so that they can determine whether the job you're doing is applicable to your major.
- W:** OK. Is there anything else?
- M:** Not that I'm aware of. You might include a couple of references. After you submit the form, you'll probably have to wait about a week while they check into everything. Then they'll contact you and interview you about your petition. You should have some idea about whether they have approved it or not by the end of the week after next.
- W:** Thanks for all your help.

09 Anthropology

M: Major changes in how people gathered food occurred during a period of time known as the Pleistocene Epoch, which was, oh, it was from about 1.6 million years ago to roughly 10,000 ago. And as with anything in anthropology, well, there was a good reason for this change. You see, during this time, the population exploded. More people meant that the old methods of gathering food were no longer sufficient. Yeah, so, it was during this time that people came up with the idea of *broad-spectrum collecting*. Suddenly, people started eating things they hadn't before . . . oh, things like shellfish, clams and oysters, for instance. And really, they ate anything they could find! Well, that was edible, anyway.

Let me explain broad-spectrum collecting now. You see, during much of the Pleistocene Epoch, people could more easily gather enough food to feed their families. They picked berries or gathered different fruits, and dug up nutritious roots and vegetables to eat. They also hunted for large game, um, animals, a lot. But for some reason, toward the end of the Pleistocene Epoch, people began to look for more varied sources of food. This is what is known as broad-spectrum collecting. This . . . this, is uh, basically just a fancy name for eating a broader spectrum—oh, sorry—for eating a greater variety of foods than they used to. They sought out a more diverse selection of food types.

Now, there are a lot of different ideas about why people started looking for different sources of food. The population increase isn't in question; it is really an acknowledged fact that there was a larger number of people in the Pleistocene era. But it's actually kind of controversial about why broad-spectrum collecting began to develop, and how this population explosion impacted the hunting and gathering of food. Some people, for example, they, um, think that the population increase caused people to hunt too many of the larger animals. So many, in fact, that the animals weren't able to reproduce fast enough to maintain their numbers. This is what is known as the overkill hypothesis, and it's really, well, if you ask me, it's the most reasonable. Basically, all kinds of animals seemed to become extinct—or at least, there were a lot fewer of them—during this time.

But hey, regardless what I think, this idea is disputed by a lot of people, who think that these extinctions were simply the result of climate changes. They say that in order for such large numbers of varied species to become extinct, the climate would have to be the reason for the change in gathering habits. But—listen up—these extinctions followed the movement of human beings around the world. So I mean as people moved into the until-then uninhabited parts of the world, oh, like North America and Australia, well, the extinctions followed. This really seems to indicate that hunting had a large part in these die-offs. So yeah, these extinctions, well, they happened *worldwide*—wherever there were humans. Now, unless the climate changes were uniform around the globe, it is far less likely that they were responsible for broad-spectrum gathering. Human population, on the other hand, was consistent in its trends: it was going up.

Broad-spectrum collecting also accounts for the fact that much of the food people began to eat was work-intensive to gather or hunt. If other sources of food were more readily available, it is much less likely that people would invest the time necessary to track down these other sources of food and prepare them for eating. A good example is shellfish. A lot of kinds of shellfish have an outer shell, which makes preparation far more time consuming.

With all the demands already placed on humans' time, it seems . . . what's the word? Unlikely, I guess. It seems unlikely they would take extra time to find this food and prepare it unless their other options were limited due to overkill. OK . . . I know there are a few more things I wanted to cover. Oh, yes. There's one more reason the overkill theory seems plausible to me, and that is that people were simply not eating so well . . . they weren't getting the nutrition they needed. Now, you might think that if they were eating from a wider variety of food sources, they should have had better diets. But the fact is, if these people were used to eating easily accessible food, and that food started dying off, they would be forced to begin finding alternate food sources. It's not that they were eating different foods that they liked better; they were eating whatever they could find, regardless of whether it was good for them or not.

10 Biology

- W:** Before we begin, I want to remind you all that your papers on animal intelligence are due next week, and that each group will be responsible for a ten-minute presentation on their particular topic. With that in mind, you may want to pay extra close attention to today's lecture, which should be pretty interesting. It's about medicine, and in particular, I'm going to talk about animals that, well, animals that take and use medicine.
- M:** What do you mean? They know that certain things can help them recover from illnesses?
- W:** I thought my little introduction might surprise or, well, even confuse some of you. And to answer your question, Tom, no, not exactly, but you have the right idea. You see, animals seem to know that certain plants can help them with sickness.
- M:** I really don't see how an animal could be aware of the medicinal properties of a plant. I mean, it's more likely that they just eat this stuff because they ate it before, and maybe it happened to help with a common problem. Or maybe the animals eat the plant because it's part of their diet anyway. And they happen to gain some other benefit just because they eat it.
- W:** Well, you could think of it that way if you wanted to, I suppose, but if you did, you'd be wrong! Actually, animals really do seem to know that certain plants help them medically.
- M:** Really? Hmm. Like what, for example?
- W:** Like the fact that certain kinds of monkeys, when they find aspilia plants—they actually purposely go out each day and locate these plants—they rub the leaves in their mouths. They are very bitter, and the monkeys don't even seem to really like the taste. It's really as if they know the plants are beneficial for them.
- M:** How are they beneficial? I mean, are they just nutritious, or . . . ?
- W:** No, they aren't just nutritious. These plants are really good at killing parasites that inhabit the intestines of wild animals. The acidity kills them. There are other animals that do these kinds of things, too. Usually, the "medicines" they take are to treat some sort of fungus or parasitic problem. Let's see . . . oh, yes . . . bears. Bears chew certain leaves too, in order to get rid of internal parasites, but they also use the medicinal properties of plants to treat external problems,

- as well. Um, like chewing the Osha root and then spitting some of the juices into their fur. By doing this, they can get rid of parasites that live on them. It's kind of like a bear bath.
- M:** I didn't know that animals were that smart. I always just kind of figured that they only did things because that was what was instinctual.
- W:** And that may be some of it. But these kinds of things happen far too often to simply dismiss them as mere coincidence. Here's another example. This one is really cool. Do you all know what cyanide is?
- M:** It's a poison, right? A really deadly one. You're not going to tell me that some animals eat cyanide.
- W:** Oh, but I am! They do. It's really quite an amazing phenomenon. In fact, I've saved the best for last. You're not going to believe this one, OK? Anyway, a lemur—that small, monkey-looking animal with a really long tail—some lemurs eat a certain kind of bamboo that has cyanide in it. In fact, every day they eat about twelve times the lethal dose for animals of similar size. Now, they just do this for food. So, how do they counteract the poison then?
- Well, the lemurs somehow found out that, by eating the soil, yep, dirt, they can keep the poison from killing them. The ions in the soil neutralize the poison, allowing the lemurs to eat all the bamboo they want. Pretty amazing, isn't it? So, in conclusion, I think there is some pretty strong evidence here that animals are smart enough to learn how to protect themselves, even if that means using medicine. I suppose you could argue against me, but I'm pretty sure you'd be wrong.

Mini-Test 2

01 Biology

- M:** Today we're starting out the week with a look into the discovery of evolution. There's a couple of different factors that come into play here, but I think it's easier to think more about the important figures in the discovery of evolution. So there're two people in particular who I think were instrumental in figuring out how evolution works. The first is Charles Darwin, who is known mainly for his work in developing evolutionary

theory, which I'll go into more detail about later in the lecture. The second figure I'd like to talk about is Gregor Mendel, the father of modern genetics.

Before I go on, I think I should give you some context so you'll understand what people thought about evolution before Darwin. You may never have guessed it, but mining contributed to the discovery of many fossils as workers dug away at the Earth. In Europe, the remains of gigantic saber-toothed tigers and elephants were discovered. And at the beginning of the 19th century, popular naturalists had begun to explore the notion of evolution, but they didn't really know how to explain how it happened. That's when Darwin comes in. I'm sure there isn't a single person in the room who hasn't heard of Darwin. Initially a student of medicine, he tired of his studies and went on to study theology. He left that, too, and came across the opportunity to sail across the world in the 1830s. Well, as it turns out, the captain hadn't really gotten his maps correct, so there were a lot of deviations from their original itinerary. In an interesting sort of way, as scholars, we owe a debt of gratitude to that captain. Yeah, we should be grateful to him! Because you see, the side trips didn't discourage Darwin. Quite the opposite: They gave him the chance to travel for about five years, to everywhere from the South American coasts, to the Galapagos Islands to Australia, and across the Indian and Atlantic oceans. See, all this traveling gave him the chance to encounter an endless array of animals, including several ancient species that only remained as fossils. The observant Darwin noticed that animals changed as their environments changed. In 1838, he created a theory about the evolutions he observed in some species. In Darwin's opinion, these species clearly changed, or evolved, over time. He then wrote about the appearance of new species as a result of natural selection in his famous book *On the Origin of Species*. Does everybody know what that is, by the way? I don't really want to spend a lot of time on it, but the theory of natural selection goes as follows: let's say an animal's environment suddenly changes—like it gets colder and stays colder. As a result, many species die off quickly, but some possess attributes like, denser fur, say, that allow them to survive, whereas others do

not. You see, these traits are passed on to the next generation. This is survival of the fittest, and this is how species evolve.

Anyway, Darwin's ideas were truly groundbreaking, but honestly, he didn't really have any way of proving his theories. People paid attention to his work, but seeing that he couldn't support most of it, he was dismissed. I mean, uh, well, most scientists did not take his theory seriously. And that's where Mendel comes in . . . see, all the evidence Darwin needed was provided by Gregor Mendel, but unfortunately, the paths of these two amazing minds never crossed, delaying the advancement of the theory of evolution for many years to come.

How did Mendel's work support Darwin's theory? Well, think back to what Mendel did: he was a Czech mathematician and botanist who spent seven years breeding pea plants. By controlling their pollination and recording the results, he noticed some patterns. Eventually, he was able to even predict the patterns of the hybridization of the plants. And after observing many generations of these patterns, Mendel gained an understanding of the laws of heredity. Through his mathematical calculations, he turned it into a science of genetics. Like Darwin, the implications of Mendel's work were not fully realized until the early 20th century. Still, when it was recognized, it meant that there was finally an explanation of how the traits from an evolved species were passed down over generations. The knowledge of heredity and genetics from Mendel's work was necessary to support Darwin's theory of evolution, thus completing the picture for not only the discovery of evolution, but also its widespread acceptance.

02 Communications

- W:** Let's continue our discussion on the sociopsychological tradition in communication theory. Just to help the flow of the discussion, maybe we should recap some of the information we've already learned about it. So, what are the basic aims of sociopsychological tradition?
- M:** Um, well, I guess its goal is to figure out how a person as a communicator will act in a number of situations. So what theorists are looking for are predictors, or signs, of how people will act

in a situation when they need to communicate with others.

W: Thanks for your input. Is everybody pretty clear on what the sociopsychological tradition is then? It's all about how people act in a communicative situation . . . you know, when they have to communicate.

Good, then we can jump right into one of the two prevalent theories in sociopsychological theory: trait theory. The best way to approach this theory is to first understand what I'm talking about when we refer to *traits* in this class. Can anyone define what a trait is in communication theory?

M: A trait is a characteristic that a person will display pretty regularly—these are the parts of our personalities that are apparent to others.

W: Exactly! Traits help psychologists understand behaviors, and for communication theorists, it helps us interpret and study communication styles. The interesting thing is that traits can often be used as predictors of how people will act in any given situation. What are some examples of traits studied in communication theory?

M: Communication anxiety! And how about conversational narcissism?

W: Those are great examples. Really, there are hundreds of them, but I want to focus on one that has been studied extensively: argumentativeness. When I say argumentativeness, most of you probably think that's a negative trait, don't you?

M: Sure. I guess I just can't conceive of it *not* being negative. I mean, an argumentative person is probably hard to get along with and very hostile.

W: I'm glad you brought that up. Later in the lecture I'll address those issues, but for now, let's just say that argumentativeness is actually a *positive* trait as far as communication goes. Argumentativeness is characterized by a willingness to engage in conversations about controversial topics. Another characteristic of the argumentative trait is that the person is able to argue and support his or her points and refute the points of others. This trait is a good predictor of a person who is open to learning, willing to listen to other points of view and build his or her own communication skills. What else could we guess about a person with the argumentative trait?

M: That they are assertive?

W: Yes, exactly. Here, I have to make the distinction between a person who is argumentative and an assertive person. Although assertiveness is part of the argumentative trait, please understand that an assertive person is not necessarily argumentative. Do you know what I mean?

M: You mean because a person might be assertive and choose not to argue their points.

W: Yes, that's right. And here's something regarding this trait . . . this argumentative trait that I'd like to add. And it's uh, well, it's a little counterintuitive. We talked a little bit about how someone might equate argumentativeness with aggression, but in communication theory there is actually a recognized difference between argumentativeness and verbal aggression. What do you all think the difference is?

M: Argumentativeness is a trait associated with effective communication while verbal aggression is what happens when someone cannot pull off being argumentative.

W: Uh huh, right. Let me give you an example. In a study, married couples were observed to see how their communication styles influenced the quality of their marriages. Couples who were argumentative, that is, those that were able to argue effectively and reach compromises, were found to be less violent than couples who were not argumentative. And, in fact, they found that the violent couples were on the whole much more verbally aggressive. Can anybody guess why this was so?

M: Right . . . right, makes sense. Um, it's because verbally aggressive couples can't verbally work out their differences. So, basically, the idea is that argumentativeness should balance out the tendency to be verbally aggressive, which can lead to violence.

03 Office Encounter

W: Hi, I'm here to sign up for courses for next semester.

M: OK, I can help you with that. Do you have your add course form already filled out?

W: Um . . . add course form? I don't think I got one of those. All I got in my campus mailbox was a course book with all the course offerings for next semester. I've looked through it, and I think I've got all my courses picked out already.

M: OK, well that's a good start. In order for us to get into the system, though, we need you to fill out an add course form. It should have been on the last page of that course book you looked through.

W: Oh, I guess I didn't see it. I'm sorry. You don't happen to have any around here, do you? My dorm is on the other side of campus, and it would be such a pain to have to walk all the way back there.

M: No worries, we have plenty of them here. Here you go. All you have to do is put your student identification number and class at the top and then put the course number, the professor's name, and the course title in the boxes below that. Let me know if you need any help, OK?

W: Oh wow, this is a little more complicated than I thought it would be. It says here I need the professor's permission in order to sign up for the course. So, do I take this form to the professor before next semester, or what?

M: No, that's really just a formality for higher level classes. The truth is that at this point in the process, you're just pre-registering for next fall. That way, professors can get an idea of what their class sizes will be and the university can match up the bigger classes with big lecture halls. That's not to say this isn't important, though. For a lot of seminars, you need to be pre-registered or the professor won't let you take the course.

W: So, I don't have to worry about getting the professor's permission at the beginning of the semester, then?

M: Nope . . . At that point, the professor will be able to make sure that you have all the prerequisites, if the class has any, and it can all get settled then.

W: OK, I guess that makes sense. What should I do if I change my mind, though?

M: Well, remember, you have a two-week shopping period at the beginning of next semester to visit different classes and decide which ones you'll actually take.

W: Wait, and I won't have to pay an extra fee?

M: Nope. That way, students can find out about the professor's teaching style and if the class is really something they want to take.

W: That's such a great policy. Thanks a lot. I think I'm done here.

M: No problem. And if you have any more questions about the policies, check out the website. It has all the information there and you can even download and print out the forms you need.

Chapter 5 Organization Questions

01 Business

W: Today we're going to move on to something called the product life cycle. Just like people, well, products go through stages of life. I mean, you're born, you start out kind of slowly, then you mature, make your impact on the world, and then, well, sad, but we all die. Likewise, every product goes through a life cycle too. Soap, toys, clothes, computers, . . . everything. As I was saying, just like human beings, a product has to be born. And that's what happens in *the development and introduction phase*. Two major things happen in this stage. First, the product is created—and of course, in doing so, in creating the product, the company pours a lot of money into making a *prototype*. Once that's done and the product is ready, advertising starts, and customers are introduced to the product concept first, closely followed by the actual product. So yeah, the product hits the market in this phase.

Now, you need to understand that sales for new products—except in really, really rare cases—usually start out slowly. So the company needs aggressive marketing to get customers to take notice of the new product. Typically, the company is losing money on the product at this phase.

So our product grows up a little, and now it's a teenager, so to speak. The second phase is the *growth stage*, and yeah, it's kind of like being a teenager. Not quite mature, but getting bigger and better all the time. What do I mean? Well, remember, in the first phase, money is typically not made on the product, but now, now the thing starts making money. The product starts to stand on its own two feet. This stage can bring intensified demand for the product, and it begins to gain a reputation. The general public is more interested in the product, because they've heard about it some. But if you think

everyone is just fine in this stage and there are no problems, let me tell you something. Competition *increases* in this stage as other companies start to copy the product, making their own versions of it. Hey, life's tough!

Moving on, when people hit their twenties, they begin to mature. The third stage is called, you got it, *the mature stage*. Now people recognize the product immediately, and it has an established customer base with a good, long-standing reputation. This lasts for a while—it varies by product—and the company can make lots of money—typically more than in any other phases. People know the product and continue to buy it. Now, as a side note, it's important to realize that some products never reach this stage. Hey, some people never grow up, right? Well, some products are released, never become popular, and are immediately taken off the market.

Now comes the sad part: just like we humans, there's a time to uh, call it quits. Everything dies, including our once-strong product. The final stage in a product's life is called *the decline stage*. Eventually, the popularity of a product has to end. And when the product becomes outdated, or customers lose interest, it goes into the decline stage. The product is not worth producing anymore, so the company phases the product out.

02 History

M: OK, let's talk about an important force that helped shape American society in the 1920s and 1930s. Any guesses about what it might be? No? Well, anyone ever heard of the Charleston? How about the jitterbug? They're different kinds of dances that were popular during that era. You see, the dance halls of that time drew crowds from all over and began to shape society in a lot of different ways.

Let me first give you an idea of what these dance halls were. Dance halls first cropped up in the major metropolitan areas after World War I. A lot of the dance craze was fueled by a desire to forget the war, you know, to forget about the hard times. Big cities like Chicago, New York, Boston, and Detroit opened up huge

venues where people could congregate and dance. These dance halls hosted popular bands, which helped encourage people to come.

Actually, in New York, about ten percent of the people joined in the dance craze once a week. All together, about six million people attended a dance hall in 1924. Now, I don't know if that sounds like many to you guys, but let me put this in perspective for you. That was just in one city. Six million people, in dance halls, in one city, in one year. That's a lot.

So, what did dance halls do for culture? First, dance halls gave society a different view of entertainment. Now, I know we don't normally think of dance crazes as shaping society, but if you think about it for a minute, it's really true. Just like rock and roll affected American culture, the dance halls that started opening up in the 1920s really influenced young people's ideas of entertainment, relationships, and different beliefs. What do I mean by that? Um . . . during the early twenties in the United States, a lot of people thought dancing was evil or inappropriate. They thought that it encouraged the young people to be irresponsible and reckless, but the teenagers and people in their twenties were really drawn to this form of entertainment because it was fun! So they developed different beliefs about dancing and entertainment in general. This, of course, it . . . uh, it changed American culture. It gave people a place to go and socialize.

Now, dance halls also had an effect on . . . hmm, what's the best way to put this? Dance halls gave people a different idea of what proper behavior was. Now, today we would think dance halls were not at all morally offensive. It was just people dancing. But it was actually rather progressive for the time. In a way, it allowed people to get away from their very proper, um, some would say boring lives. They got to go out and dance, to be with strangers. And I think eventually it led to the idea that such behavior was just fine, even if it was shocking for some at the time.

03 Psychology

- M:** How is everyone today? Feeling good? How about happy? Angry? Most of you are just looking at me with a blank expression, wondering why I'm asking. Well, that's what we're talking about today: emotions. You see, psychologists have been fascinated with emotions for a long time because they are so complex and intricate. And one theory called the Two-Factor Theory of Emotion tried to do just that—explain how emotions are created. Anyone ever heard of it—the Two-Factor Theory of Emotion?
- W:** I've read about it . . . yeah, let's see. It's a theory suggesting that emotions depend upon things, um, two factors, and those are physiological arousal followed by cognitive interpretation of that arousal.
- M:** Um, yeah, that's basically it, exactly. To rephrase, um, this two factor theory of emotion states that we need two things to feel any emotion at all. OK, the first of these things is some sort of physical arousal . . . you know, a stimulus. That's the first thing, and then second comes the cognitive interpretation part mentioned. Second, we need to interpret, in our minds of course, we need to interpret what this physical stimulus means. OK, so one of the things that defines the Two-Factor Theory of Emotion is that it has a reliance on your physical state. Let me explain: you can think of different physical states, right? Like, maybe your muscles are tired, maybe your hands are shaking. So you see, psychologists recorded that people sometimes perceive that they feel a certain way just because of their physical arousal. In other words, if I'm shaky and my heart is racing, I think I'm nervous. I don't take into account that I could simply be feeling the effects of all the sugar in that chocolate cake I had a while ago. OK? Does everyone understand?
- W:** I'm just not sure I see the connection between physical state and emotion. I mean, where does the mind come into it all?
- M:** Good question. You see, because you think you feel that way—like nervous, for example, even though you really just ate chocolate, you actually begin to feel nervous. The emotions become real—I mean, yeah, now you're really nervous—even if it is a false interpretation that initiates them. They called it cognitive interpretation—

basically, how somebody perceives a certain event or set of circumstances. OK, that's the theory, but now I'd like to introduce a little surprise. Yeah, the uh, the theory is not accurate. And well, as it turned out, it seems that the theory overstated the importance of arousal to cause emotions. People later learned that you do not have to have some physical arousal to feel an emotion. I mean, think for a minute about, oh, a great day in your life. Go ahead guys, actually think about it. OK? Well, I'll bet one or two of you feels happy right now, huh? Certainly nothing aroused you physically, you just created an image in your heads. So in the end, this theory was pretty much considered not to be accurate.

04 Literature

- W:** Think about some of the classic literary works. Now, think about the plot and the story structure. How many of them are actually very unique stories? Not many of them. This was the point of an important literary movement called structuralism. Structuralism wasn't just predominant in literature, either. It was actually a cultural movement that affected nearly all the arts and sciences—psychology, anthropology, mathematics, history, and of course, literature.
- So what is structuralism, exactly? In literature, it's the idea that the most important part of any literary work is, um, is *its underlying structure*, not the characters—even if dynamic, not the plot itself—even if it's interesting, and not the writing style—even if it's beautiful and clear. Structuralism is looking for . . . well, for *uniqueness*. So basically, if the structure of the work resembles previous works, even in the slightest way, it isn't considered noteworthy. Let's look at an example. Can anyone think of a truly unique literary work?
- M:** How about *Romeo and Juliet*? Think of all those interesting and complicated plot twists. That's got to be unique.
- W:** Actually, *Romeo and Juliet* uses a classic theme: boy meets girl, falls in love, but there is a huge problem: their families can't stand each other. Thus, the tragic ending. This structure is seen over and over again throughout history. For that reason, the structuralists would criticize it. A structuralist would say that it uses a "formula." Understand?

M: OK, I guess I can see that.

W: All right, then . . . but what if the story were switched around, changed . . . would it be "unique" then? For example, if the story were about two families that liked each other, and then arranged for their kids to get married, but the kids didn't like each other . . . and all this leads to a tragic end? Would that satisfy our highly critical structuralists?

M: Hmm . . . it's uh, it's completely different, so it must be unique.

W: Sorry, no. It would not satisfy the structuralists. It still has the same basic elements: love, animosity, and of course, the tragic ending. The formula is still the same. And, uh, by the way, structuralists have a name for this . . . they call it an "inverse structure."

M: Then what are structuralists looking for, exactly?

W: Like I said, something completely new and different, without any comparisons. In structuralism, the whole goal is to reduce the story down to it's . . . to it's, um, it's basic components—the most basic structure. Then, if the structure is new and different, it becomes noteworthy. Otherwise, it's just another piece of literature. The thing all structuralism has in common—I mean, whether it is in history, or psychology, or anthropology, or literature—is that it looks for the meaning of things in the distinctiveness of its structure. In literature, specifically, though, structuralism doesn't see any value in the work unless it is unique.

05 Astronomy

M: Today we're going to get started a little differently. Do this: imagine you're an astronomer. You've seen Saturn in a telescope—and you all have, right? You all know what Saturn looks like? Rings . . . yes? OK. So, you've seen the rings, but neither you, nor any other astronomer in the world, can come up with even the slightest clue of what they're made of. How . . . how frustrating would that be? Well, luckily for us, a Scottish physicist named James Clerk Maxwell finally solved the mystery in 1857. So, my fellow astronomical sleuths, what do you think the rings are made of?

W: Can I guess? I'd have to say that they're made of solid rock. I mean, how else would we be able to see them?

M: Well, that's a very common guess, and that's what many thought in the past, but that's actually incorrect. So, should I go ahead and crack the mystery for you all? OK. So, this Maxwell that I mentioned a minute ago, he decided that the rings had to be made of tiny particles that orbit around the planet.

W: Tiny particles? Tiny particles of what?

M: Would you like to guess?

W: Oh, wow, I don't know. Um, well, would they be little pieces of rock?

M: Nope, but that's a good guess. OK, I want you all to get this, so I'm going to help you out. Think about this: you all know that the rings are really bright, right? And they appear brighter at different points in the planet's rotation. OK, so, knowing that, what can you surmise? No one? Here's another hint. They reflect over eighty percent of the sunlight that hits them. Now, what material is this starting to sound like to you?

W: What—no, um, ice?

M: That's it! Great job, you just did in a few minutes what it took astronomers over two hundred years to do! Of course, you had help. Anyway, you're exactly right about the ice. The particles are pieces of ice that range from, well, tiny, to as big as a large snowball that you might make during a snowball fight. So, honestly, "particles" is almost misleading because it makes you think of something really small, but that's what they call them. Anyway, so where did these particles come from?

W: Actually, before we move on to that, could you explain how they actually formed rings?

M: Good question. It is yet another mystery; the rings are really only about, at the most, twenty or thirty meters thick. That's very thin. So how do they stay in such a thin pattern? Well, astronomers believe it is because the particles tend to run into each other as they orbit. After a while, they had collided so many times that they all just sort of fell into the same orbit. No one particle could stray from its own orbit because it would just be knocked back by an adjacent particle. Does that make sense? Let's move on to how they formed.

06 Environmental Science

W: Let's go back in time a few years to the 1940s. The world is at war . . . yeah, World War II is being fought. Let's say you're the leader of a country that has men fighting in hot, tropical areas. But here's the problem—not only are your men fighting the enemy, they're also fighting mosquitoes. Yep, lots of your men are dying from malaria, a disease caused by the bite of a mosquito.

So you look around and find this stuff . . . DDT, which was actually made many years earlier. But you're smart, so you figure out that this substance, DDT, also does a great job of killing mosquitoes, it's a pesticide. You spray the stuff in tropical areas, right where your troops are . . . and yeah, the mosquitoes die. This is good, but little do you know that the pesticide DDT also has some very significant drawbacks. DDT's problems came to light pretty quickly. Though scientists knew DDT killed mosquitoes, they hadn't realized that the mosquitoes would be able to quickly adapt to the toxin through natural selection. Over time, mosquitoes quite simply became resistant to the pesticide, and the parent mosquitoes passed on this resistance to their offspring. You could spray the stuff on 'em, and why, they'd drink it up and laugh at you! So the number of cases of malaria rose again . . . um, really, really fast. And mosquitoes reproduce fast, so *the entire population* could acquire resistance very quickly. Pretty soon, almost all the mosquitoes were resistant to DDT.

Another downside is DDT's effects on the environment: plants and animals. In terms of animals, we'll talk about birds. Many birds were exposed to the pesticide in the process of spraying for mosquitoes, and it severely weakened their ability to reproduce. Furthermore, many of the birds ate the mosquitoes with high DDT levels in their bodies. The DDT caused the eggshells of the birds' offspring to be thinner than normal, which failed to protect the baby bird until it could survive outside the egg. This was a huge problem . . . you know the bald eagle of North America? Well, it just about became extinct because of this. There's something else to consider. Scientists initially figured that DDT

couldn't pose any real threat to the environment because it's not water soluble, but they didn't think about the fact that it can be carried in fats and oils. So it is still possible for it to be transported to other areas. So, yes, it did end up harming the environment.

There's a *third* negative effect of DDT that we need to discuss before moving on, and well, actually, I just mentioned it in passing. Yeah, you see this pesticide causes something called *biomagnification*. Basically, what this means is that the poisons build up in the animals, and the higher up on the food chain an organism is, the higher the levels of DDT it takes in. Over time, the level of DDT builds up, OK. Hmm . . . let me explain: if an insect has some DDT in its body, and then a bird eats a lot of such insects, by the time it gets to the top of the food chain, there's a whole bunch of DDT inside the animals. It accumulates is what I'm saying. This meant that the entire food chain was affected by the negative ramifications of this pesticide—all the way up to humans.

Now, despite all the many drawbacks of DDT, it did have a few strong points. Like I said, it helped reduce the incidence of malaria. Granted, in tropical areas, the number of cases rose again, but they still weren't as high as they were initially. And in countries that aren't tropical, it *drastically* reduced the number of cases. So, yes, DDT is absolutely an effective pesticide.

There's really no doubting that. It also had a positive result in that it limited the cases of yellow fever, which is another disease transmitted by mosquitoes. If it weren't for DDT, these diseases might still be causing major problems in countries around the world. Now, the cases are much more contained than they were, although they are still a big problem in some parts of the world.

OK. Uh, in most of the developed nations, DDT isn't used anymore, but a lot of countries are still using it for various purposes. So the controversy over DDT is still a major issue. However, if you look at the negative points and the positive points, my opinion is that the negative points easily outweigh the positive ones.

07 Sociology

- M:** We're going to talk about something that is pretty complex, but it's also an important part of sociology. So, the topic today will be game theory. And if you're wondering, yes, it is a theory all about games, but don't let that fool you into thinking that it isn't a very important and complex sociological theory. Anyway, let me go ahead and define the theory first. Game theory is basically just a series of observations about the way people play games: typical games that we play, like chess or sports. Game theory looks at all the possible scenarios for how a game could be played, and then identifies the best course of action. That is, the um, the best course of action if each player employs a certain strategy. So, in essence, game theory is a study of the strategies that people use in games, but it applies to real life too—um, to many situations, not just games. Games, then, are just a good way to see how people use strategies. Understand?
- W:** No, I don't get it. Wouldn't it just be a big list of good strategies? Where does the theory part come in?
- M:** Well, players in games use different strategies, right? I mean, a strategy has to change. Let me give you an example. If you were playing tag, and two people went off to the left, while only one person went to the right, the best course of action would be to go left. You know, because you have a higher chance of tagging someone. But if two people went right instead of left, the best course of action would change. The best thing you could do in that case would be to adjust your strategy and go right. So your best strategy changes according to the strategies of other players. So, you can't say "the best strategy in tag is to go left" because that wouldn't always be true.
- W:** OK, I understand. So game theory is really about tailoring your strategy to the strategies of other players. But what happens if you can't beat them, only match their strategy?
- M:** Yeah, there's another theory for that—a part of game theory. The Nash equilibrium, deals with—well, um, it's kind of like a different theory, but it's important to understanding game theory. Basically, when every player chooses their best strategy, there is an equilibrium, where no one has a superior advantage. This equilibrium idea had been around for a while. It was first mentioned in the early 1700s. But the equilibrium wasn't very applicable to game theory in general, until John Nash figured out how it applied more universally. Here's an example of how this applies. One of the most famous examples is called the prisoner's dilemma. Basically, the game simulates a set of interactions in a prison. Let's say two prisoners are planning to escape. The example says that they have two different choices. They can stay loyal to each other and keep the plan a secret, or they betray the other and reveal the plan, in exchange for a lighter sentence. So, there are advantages and disadvantages of each choice, so you can't really say that one is better than the other. The equilibrium is achieved if both decide to betray the other. Neither choice has adverse consequences, and neither prisoner is really affected by the betrayal. On the other hand, if only one of the prisoners betrays the other and is caught . . . neg . . . negative consequences ensue. The first prisoner—the one that committed the betrayal—has the upper hand.
- W:** What if neither of the prisoners betrays the other? Like, if they both stay loyal? Isn't that equilibrium, too?
- M:** Actually, the theory says that what you're describing isn't equilibrium, because as long as both stay loyal, there is the *fear* of betrayal—the situation is completely unstable. They're probably both wondering if each prisoner is going to betray the other . . . so really, there's the possibility that they'll change their strategies at any time. Both prisoners opting to betray is completely stable, and stability is key to the Nash equilibrium. Now, not all of these little games have a Nash equilibrium, only some of them. The Nash equilibrium is really useful in analyzing the way that people react to things. For example, in sociology, we use it to help predict how people will respond to different actions on the parts of the people around them. You see, these games are not just about the game; they're all . . . they really are about people and understanding them.

08 Education

W: Where does the responsibility for the student's learning fall—on the student or the teacher? This question has been debated in education, well, probably about as long as "education" has been around.

I remember sitting in a class one day wondering why I wasn't learning anything. Then I looked down at my notebook. It was covered in doodles, you know, those little drawings that students make in their notebooks when they're bored. So why wasn't I learning? Simple. I hadn't been paying attention! I closed my notebook and made sure I didn't get distracted. And I started *actively listening* to the teacher, and even questioning her. By the end of the class, I had learned quite a bit. I will never ever forget that day, because it finally hit me that I had a part to play in my education. With that said, let's get into it . . . now, one of education's longstanding ideas is the "banking" concept. Basically, this reinforces the idea that children need to be taught lots of facts in order to "deposit" knowledge into them. The teacher, of course, is responsible for this.

M: But if I don't pay attention, like you were saying earlier, then it's not the teacher's fault I'm not learning, it's mine. It doesn't make sense for the teacher to be held completely accountable for the education of the students. I mean, it would kind of bother me to not have a part to play in my own education . . .

W: I know what you mean, and that's exactly why this idea—this "banking" concept—is not accepted by everyone. So that was the old theory. Now for the new, and this is, actually this is my main point today. I will start with a man named Paulo Freire. Paulo Freire was a Brazilian teacher who made a, um, a name for himself by examining and contesting this concept. He published a book called *Pedagogy of the Oppressed*. Pedagogy means teaching methods, by the way. In his book, he tried to combat the idea that students are just inactive subjects for the teachers to shape however they wished. Instead, he wanted teachers to relinquish this idea in favor of another: that students should learn interactively. He also wanted to emphasize that the teachers should facilitate learning but not completely take it over.

M: I thought I had heard of someone else—other than this Freire guy, I mean—talking about students participating in their education . . . I can't remember his name.

W: You're right there are others. But Freire is the man who really put all of this, the uh, the notion of active participation on the part of students in their own learning, he put all this into a comprehensive volume dedicated to the subject. He also . . . he made it apply to modern education, instead of past methods of education. And he added another aspect to the idea, too. He felt that the typical teacher-student relationship hampered learning. I'm talking about the whole authority thing, you know, "I'm the teacher. I'm in charge. Obey me!" He wasn't into that. Nope, he wanted the authority structure abolished and replaced by a different one where the teacher is also a student, and the *student is also a teacher*.

M: I don't think that would work very well. I mean, how could the class even progress?

W: Well, he thought that if both the teacher and the student had dual roles, the educational experience would be more enriching for both parties. Uh . . . really, he wanted the whole relationship to be about learning from *each other*. I have to tell you, I actually learn a lot from you guys. I don't use a method completely compatible with Freire's ideas, but I do use parts of them. For example, I let you guys present your semester projects to each other, and discuss them and ask questions. Why do you think I do this?

M: Um, to see if we know what we're talking about.

W: Well, partially, I admit, but mostly because a lot of times, you guys are your own best teachers. I mean, you learn well from each other, and you also learn the most when you're preparing to teach your peers. I learn things from you guys when I listen to your projects that I never would have known if I had done all the research, because you think differently than I do. So it is beneficial for all of us. Remember that when you present those projects next week.

09 Biology

M: Today I want to talk to you about the importance of genetic diversity in animals. If a population of animals is said to be "genetically diverse," that just means there is a great variation in the genes of that species. Typically, very large populations of animals show genetic diversity, while smaller populations do not show such great diversity. Genetic diversity allows animals to adapt to changes in an environment, to build up resistances to diseases . . . we'll discuss that more in a second. It actually affects a lot of different systems in animals . . . especially the reproductive process. One of the most prevalent concerns scientists have regarding endangered species is their lack of genetic diversity. Many animal species are now either threatened or endangered, which, of course, leaves a much smaller number of animals to reproduce and continue the species. At first, a reduced population isn't too much of a problem, uh, well, in terms of genetic diversity at least. But . . . but, uh, eventually, all the animals start to have the same genetic lineage. So they are lacking the introduction of new genetic material. Basically, the old material just gets recycled, over and over again.

So what, then, is the effect of reduced genetic diversity? There are many, actually. First, animals are more susceptible to disease when the gene pool is reduced—when there's little genetic diversity. Usually, when different strains of viruses or diseases hit, the species survives through its eclectic mix of genetic material. The diversity enables them to survive, because there are usually some families of animals that are more tolerant of the disease than others. These animals survive, and then reproduce, which passes this immunity on to the others in their species. If there isn't a wide variety of genetic diversity, and all the . . . they all have the same characteristics, they will also all have the same weaknesses. This puts the species in danger of complete extinction by a single, particularly potent disease that they don't have a resistance to. This susceptibility gets worse as the genetic diversity decreases, meaning that the problem gets worse with every generation. The originally unique genetic material gets . . . well, watered-down.

To move on to another negative effect: because of this lack of genetic diversity, and the subsequent watering-down of the original genetic information, the animals' offspring are born with more deformities. The genetic information gets corroded. Hmm, let me explain that. Without a source of new genetic material, the body has fewer options when it is forming. Instead, the genes recombine in defective ways, producing multiple genetic problems. A good example is the cocker spaniel. These animals have such a lack of genetic diversity that many of them experience a variety of health problems as a result. These health problems in animals with a lack of genetic diversity are not always very obvious. The defect can be as simple as a higher disposition toward heart problems, or arthritis. But, um, in any case, the animal's genetic integrity is weakened.

OK . . . let's see. I know I was going to make a third point. Oh, yes. All of these problems affect the overall population viability. If the entire species has such a lack of genetic diversity that they are in poor health, that puts the whole species at risk. All of the factors I've already mentioned . . . well, those factors make for a pretty poor outlook for the survival of the species. The susceptibility of the animals to disease makes them prone to widespread population wipeouts. Their compromised physical health means that many of them die before reaching old age, and the deformities cause a large number to die shortly after birth. Or while still really young. So the entire population is threatened by the lack of diversity. The whole situation is really pretty sad.

So, how about an example of how all of this information applies to a specific animal? One species that is battling these problems are cheetahs. These animals are rare in the wild, and have been bred in captivity for many years. But because the overall number of cheetahs is so small, they have a severe lack of genetic diversity. Scientists actually estimate that as many as eighty percent of all cheetahs have the same genetic material. That's a lot! Um . . . really, a lot. These animals face all of the physical problems associated with this, too. In fact, their problem is so bad that cheetahs have a difficult time successfully reproducing at all. Their reproductive organs have been weakened by the limited genetic information.

10 Art History

W: In the 14th century, the populations of Europe and Asia were profoundly affected by the Black Death, which was a disease that killed millions of people. But of course, here you all sit in an art history class, so I'm going to talk about its, the uh, the Black Death's effect on art. Whereas before this time, art had been more unrealistic, the art after the horror of the Black Death reflected a . . . a new attention to the reality of life, no doubt brought on by the amount of tragedy the people had witnessed. Um, yes, Robert?

M: You, uh, just an observation, but you would think the people at that time would want to escape the sad reality of the Black Death in their art and culture.

W: Well, with the Black Death, the entire population of Europe dropped by, like, a third. One out of every three people died from this sickness . . . hard to believe. And the ones that lived, well, these people, um, were either feeling guilty that they had survived, or maybe they just thought about what death meant more often. They became religious, and they were obsessed with the death they had seen. Actually, that's one of the hallmarks of art immediately following the Black Death. It has . . . a morbid quality that just hadn't been seen before. Never before was an entire generation of artists so completely captured by death and tragedy.

M: What do you mean? What was so morbid about their work?

W: Well, to start out with, a lot of the colors were extremely somber. Black, greens, and occasionally dark blues were the overriding colors, and even normally bright colors like yellow, when they were used—which was rarely—were toned down and made more . . . oh, gloomy, I guess.

Second, most artists included representations of death or death scenes in their art. A really famous artist of the time, Francesco Traini, created a painting called *The Triumph of Death* where three coffins are being viewed by a group of people. Inside are bodies that are decaying as the people look on. In another corner, a "grim reaper" sort of character—a witch with a big blade used to kill her victims—is overtaking people in another group . . . people who are . . .

who are just going about their daily lives. The painting is of course reminiscent of the Black Death, and it shows how *each member of society* was affected by it. It even appeals to the emotions, evoking a depth of sorrow because the Black Death so unexpectedly killed so many.

Now let's move on to Giotto, another Italian artist, who, who tried to make things appear as realistic as possible. So realism can be understood as the third effect of the Black Death on art. Giotto showed similar themes as other artists of the day—death and dying, of course—but he added this idea of realism . . . in particular, he showed real emotion on people's faces, and in their gestures. This wasn't really done too much before Giotto. Anyway, because of this, he is considered to be one of the artistic fathers of the early Renaissance painters.

OK, uh, onwards to the final effect of the Black Death on the art of the day. An entire new school of art appeared, and it was called "The Art of Dying," well, when translated into English, anyway. These works, I should add, had a real purpose. The paintings and often the woodcuts . . . you know, when you carve a design into a wooden block and then creating an image by pressing the inked block onto a piece of paper. Well, anyway, the purpose of these was to show um, hmm . . . how can I put this? Well, really, the purpose was to show people how to die well.

M: How to die well? That sounds, uh, kind of strange. I mean how does one die well, anyway? I don't quite understand what you mean.

W: Well, to understand any type of art, you need to put it into its historical context, and in this case, remember that Christianity was the dominant religion in Europe. So when I say these works from The Art of Dying school offered advice on how to die well, I simply mean that they reflected the church's outlook on death, and in particular, life after death—and how to get to heaven.

Chapter 6 Content Questions

01 Business

W: OK, everyone, when you think of a traditional large company, what comes to mind? A big office, perhaps? Lots of workers. What about managers? Well, some companies have lots of managers . . . lots *and lots* of managers. And when a company has many levels of management, that company is said to be a "tall" organization. And can anyone guess what the opposite of a tall management structure is?

M: I'd guess a *short* management structure?

W: Good guess, but no, it's a flat structure, but more on that later, OK? Back to the issue at hand, which is tall management structures. So . . . you might have the company president—that's one level. And then you might have a vice-president. That's another level. And then you might have, oh, I don't know, general managers. And below them managers. And below them assistant managers. And then management trainees. And then, who knows . . . you might have sub-assistant-manager trainees in training! OK, I'm making a joke here, but yeah, some companies have *huge* management structures, called um, we call them management hierarchies.

There's a good reason for hierarchies, of course. And that is that when a company grows, when it gets really huge, well, you need to control the organization so you need managers telling people what to do. But here's the problem: problems arise, um, *significant* problems arise when you have vast management hierarchies, the first of which is poor communication, in particular the problem of what's known as *distortion of commands*. What do you suppose that is? John?

M: Um . . . same thing that happens here in class, I'd guess. I mean, you give us information in every class. But um, as you probably figured out, we don't always remember that information correctly on a test, right? I mean, we get things wrong, even though you told us the answers here in class.

W: Good illustration, and yes, I certainly have figured that one out, John! So yeah, basically, what John's getting at is that people can interpret things differently than they're supposed to. Meaning

can be lost through incorrect interpretation of a manager's words.

So that's one problem. And there's another . . . it um, if you have a tall management structure, it can take a long, long time for decisions and orders to pass through the levels. So let's say the company president gives an order to do something . . . something that will affect everyone in the company. Well, in a company with a tall structure, that order can take a long time to reach the actual workers. This makes companies slow to respond to change in the market.

Finally, managers are expensive, very expensive. Managers have assistants, secretaries, bonuses, big salaries . . . you name it . . . they're expensive. Um, you've all heard about companies that downsize, right? Layoff workers. Well, did you know that typically, they try not to downsize the people actually making the products? Statistically, they downsize middle managers in companies that just have too many levels of management. And if you ask me, that's not altogether a bad thing. I mean, if a company is going to be effective in the global market, it can't have so many managerial levels.

02 Environmental Science

M: So, we've been discussing the diversity of plant and animal species found around the world, and, um, we've also talked about how humans have benefited, and, uh, continue to benefit, from many of these species. The problem we face is how to make sure the diversity of plants and animals is *preserved*. After all, species are dying off, they are going extinct and disappearing every year. And as they disappear, we lose some of the diversity of species on our planet. We lose *important* biological resources.

What I'd like to talk about now is how we as humans can *manage* these precious biological resources. The two methods we are going to talk about today both aim to preserve species so they don't become extinct, and each method aims to protect both plant and animal species. They just go about doing it in a different way, as you'll see from the examples.

Now, traditionally we've managed biological resources through institutions like zoos, botanical

gardens, and aquariums, all of which are examples of what we call off-site management. Off-site management is when we take animals and plants out of nature and let them live in a special place where scientists and caretakers can watch over them and protect them. The other choice you have to preserve plants and animals is called on-site management. That's when you leave plants and animals in their natural environments, their habitats. This is important: the two choices for biological resource management are on-site management and off-site management, clear so far? Good.

Since it has been the most common throughout human history, let's start off by talking about off-site management of plants and animals. Usually, off-site management involves separating plants and animals that would otherwise be found together in nature. So, if you wanted to protect zebras, they would go to a zoo, whereas if you wanted to protect a species of grass that shares the same natural environment with zebras, the grass would be planted in a botanical garden. There is no attempt to preserve the natural environment in off-site management. The aim is to preserve the individual species. Because of this focus on individual species, zoos and botanical gardens can be places that protect species from extinction and even allow them to be put into new natural environments later. Now, on-site management, that's a whole different game. When you want to preserve biological resources in one place, you have a much harder job. First of all, where do you draw the lines? Well, that's where national parks come in. National parks are being created, as I speak, around the world to preserve biological resources in their natural environments, so those resources are not threatened by human destruction. Unlike zoos and botanical gardens, however, natural parks face difficulties in terms of their size. How big do you make it to protect everything in them? One problem is when animals leave the park and get killed by hunters. This doesn't happen in zoos. On the other hand, by making a park, you protect a larger number of species all at once. You protect them as they live together, you protect the entire natural environment, and that means even preserving biological resources we haven't yet discovered.

03 Office Hours

W: Hi there Professor Martin . . . do you have a minute?

M: Sure, Jane, how's everything going?

W: Good. I read that article you suggested on waterway restoration. It was really interesting. I think that the work those environmental scientists are doing to clean up polluted streams and rivers is very impressive, and needed. I just had no idea they had the technology to remove so many chemical contaminants.

M: Oh, glad you enjoyed it. The river project that article talked about uses cutting-edge technology. It's all still very new, but, um, I think a lot of people will be adopting that technology in the coming years to clean up other waterways.

W: You know how, um, the other day in class, you were talking about how students should try and get some hands-on experience if they want to go into the environmental science field?

M: Yes. I always encourage my students to do that. I can't overemphasize the value of practical experience for any future career, be it in environmental science or some other field.

W: Well, I think you convinced me to give it a try. The thing is, how do I, um, *actually get* hands-on experience? It's not like environmental companies and organizations are willing to hire college sophomores.

M: Jane, one very easy way to get experience, and also to meet some very interesting and dedicated people who care about the issues and are doing something about it, is to join a local environmental group and volunteer to help with one of its projects. A lot of the local groups are always looking for volunteers. There is more work to do than there are people to do it. So it would allow you an excellent opportunity to get good practical experience. There are a lot of groups, large and small, in our area that you could volunteer with. If waterway restoration is something that interests you, I could introduce you to a group that I know well. They are a nice bunch and would certainly appreciate the help.

W: It does interest me, and I really want to do something about cleaning up the river. Um, uh, but you see, I'm taking classes full-time and have a part-time job too. I'm really busy, and I'm not sure I have time for volunteering. That's why I was thinking of a paid job.

M: Let me suggest another option, then. You could do an independent study project. You would work with a sponsor and design a project. And you could do the project while you volunteer with a local environmental organization. For example, you could help the organization test water samples and write an analysis about it.

W: That sounds great. Does that mean an independent study project would take the place of a regular class?

M: As long as you find a sponsor and get approval from the department, then yes. In that case you could get credit for your project just as if you were taking a regular class.

W: Neat.

04 Service Encounter

M: Hi, I was wondering if you could help me. I'm having a lot of trouble balancing my classes and my job this semester. It's really tiring me out. And we still have ten weeks to go. My friends all suggested I talk to you to get some advice.

W: OK, well, let's talk about your schedule and see if we can find a way to help you. To start, can you tell me a little more about your schedule this semester and why it is giving you trouble?

M: Sure. The thing is, I have to work. My scholarship ran out last term, and now I have to work to pay for tuition, rent, food, all that. You know I barely make enough money to survive. And, you know, I work a lot, at least twenty hours per week. Sometimes more. Twenty hours is the minimum. Sometimes I have to work a lot more. Just depends on how busy the restaurant is. It's really hard, but I've got to do it.

W: So how about your classes?

M: Well, I'm taking six classes this term. I've scheduled them so that I can go to classes all day and then work every evening if I have to.

W: Six classes is a pretty heavy schedule for any student. And with work on top of that, it must be hard to find any time to study, or to get any sleep for that matter.

M: Tell me about it.

W: Do you need to take six classes?

M: Um, yeah, I have to take six classes if I'm going to graduate on time. I figured if I take six classes this term, and next term I can graduate on time. I really want to do it.

W: And how are your grades this term?

M: That's what worries me. I'm not doing so well. Before, I was a pretty above average student. I went into the term with a 3.5 GPA, but now my grades are slipping.

W: You know what, it sounds to me that you might want to drop a few classes and accept that you won't graduate on time. If you are facing this much pressure this early in the term, you are risking your GPA, your job, and your health. Why don't you just take the three classes that are most important to you, and focus on doing well in them? You also said that you are in a tight financial situation. It would seem that keeping your job is a top priority. Without it, how can you continue to go to school?

M: Exactly, I can't.

W: So I suggest you drop at least three classes. Sometimes it is important to recognize that you can't have everything that you want. You have to choose the best option for you.

M: What you are saying makes a lot of sense; I just needed to hear it from someone else. Thanks for your help.

W: Certainly, and if you need to talk about anything else, you can always drop in.

05 Philosophy

W: OK, so today we're discussing "positive skepticism." I'd like to spend some time talking about what it is, and more importantly, the influence of Michel de Montaigne on its development. First, imagine yourself living in a country that is being torn apart by bloody wars fought between opposing religious groups. You belong to one of these religious groups, but you see no point to the wars. All they bring is destruction. You have been educated to see that life can be and indeed was once better for all humans. What do you do?

M: I'd have to leave my country and go live somewhere else.

W: OK. Anything else?

M: I guess you could try to get the two sides to stop fighting. But that would be really tough.

W: Good. So you can see a little of what kind of decision Michel de Montaigne was facing when his home country was being devastated by religious wars between Protestants and Catholics

during the 16th century. Montaigne was a Catholic, but he had no desire to take sides. So he left his job as a lawyer in the city and withdrew to live quietly in the country.

You see, Montaigne was educated to value human dignity and believed education could help people improve morally. The world he saw around him was the opposite, so he decided to investigate why this was so. His investigations and writings inspired an intellectual trend known as "positive skepticism," a new approach for criticizing the harmful effects of tradition and authority.

M: Wait. How could he investigate the social problems of his time if he fled to the countryside? It's not like they had TV and Internet back then.

W: And even if they did, Montaigne would not have trusted them. You see, he felt that all he really could know was himself, and so he began his investigation by rigorously questioning himself and everything he thought he knew and answered the questions honestly. This prepared him to ask serious critical questions about society. His method influenced "positive skepticism" in three ways.

One was that he found that extreme positions in politics and religion were dangerous but appealing to many people. Why? Because they were easier than doing the hard work of thinking carefully. It is much harder to understand the complexities of the world and to live with them. So Montaigne criticized these extreme positions.

That brings us to his second contribution, and that was to promote moderation and tolerance. If more people shared Montaigne's view and refused to give in to the extremes, then 16th century Europe may have been a much more prosperous and less bloody place.

Finally, he rejected absolute positions, especially in terms of religious truths and morality, even though he was a religious man. This was an extremely important contribution since the wars of his time were fueled by religion and hatred of other religious groups. The most extreme believers could not talk to one another to solve their differences because each side was convinced that it was absolutely 100 percent correct and the other side was 100 percent wrong. These methods of critical thinking are still with us today and have inspired many writers to be skeptical of tradition and authority in their own times.

06 Sociology

M: When we talk about the largest form of social organization, we are talking about the concept of society. Society refers to a semi-closed system made up of individuals. However, it is a collective that is larger than any of the individuals.

Humans have developed a remarkable array of different forms of social organization; yet sociologists have identified a few key types of societies, types that share defining general features common to certain specific societies. I'd like to talk about three types today, just to give you a look at the considerable diversity of human societies. And one way to differentiate types of societies is to look at three dimensions—there may be some new words for you, so pay attention.

The first thing we look at in categorizing a society is its level of mobility. In other words, do its members live in one place, or do they move around? Then we ask about how members meet their need for food. We call this their subsistence pattern. So we ask what their subsistence pattern is. And a third thing we also ask is who does what job? This is what we call the division of labor. We ask what the division of labor for the society is. So we compare mobility, subsistence patterns, and the division of labor.

Let's start off at the beginning, with the very first human societies. The earliest humans developed a form of social organization that centered on movement. The key word here is movement. And what I mean by that is that the earliest human societies were highly mobile, moving from place to place in search of food, water, and shelter. Food was obtained exclusively through two means: hunting and gathering. This is why we call this type of society a hunter/gatherer society. If you are trying to get food by hunting animals and gathering plants, well, you have to keep moving. Animals won't stay around if you are trying to kill them.

Similarly, if you are picking all the berries, roots, and edible leaves in an area, you will eventually run out. So that's what I mean by movement being so important. Now the other thing is division of labor. In hunting and gathering societies, people don't really have specific jobs. So we say there is little division of labor. Sure, it's the

men that do most of the hunting and the women that do most of the gathering, but when it comes to cooking, building shelters, caring for children, healing, making tools, all those other jobs are done by anybody and sometimes everybody. There are no specialized jobs in a hunting and gathering society. Clear so far?

OK, then onto the next type—horticultural societies. Well, at some point, people got tired of moving around all the time and not always finding food, so someone discovered that he could collect the seeds for plants and plant them. People found a way to get greater control over their food supply by planting some food crops like wheat, corn, beans, etc. People still move around in a horticultural society, but not as much, and sometimes very little at all. They begin to settle down and spend more of their time raising animals and plants, but they are still going out hunting and gathering too, just not as much. There are other differences, too. Unlike the egalitarian hunter/gatherer societies, horticultural societies have some division of labor. Some people are political or religious leaders, who don't do as much of the work producing food as other people do. In some horticultural societies, there are a limited number of individuals who are healers or have other specialized jobs. Now, for our third type of society, we see a huge change. In this type, the agrarian society, people have settled down more or less permanently. That's not always the case with horticulturalists, who often move from time to time or even seasonally in some cases, but in an agrarian society, people are settled down, or sedentary. They produce all of their own food by growing it in permanent fields or by raising animals. Sure, some people might hunt, but the important thing is that agriculture is the dominant subsistence pattern. It is also in agrarian societies that we see significant divisions of labor, the rise of specialists who only do one job. For example, kings, warriors, doctors, priests, even teachers. Most people are farmers though in an agrarian society.

07 Office Hours

W: Hi Professor Jordan, can I talk to you? My name is Sandra Lewis. I'm interested in taking your Developmental Pysch. class next term.

M: Yes, hi Sandra, come on in. Take a seat.

W: Thanks. So I, uh, just met with my advisor and she tentatively signed me up for your class, but she said I would need to talk with you to get your approval and to ask you to sign a form. That's because I haven't taken Intro to Psych, and, um, it said in the course catalog that that class was a prerequisite for your course.

M: Yes, that is correct. It is departmental policy not to allow students to take middle and upper level courses without having first completed the necessary prerequisites. We do this because the courses above the introductory level courses presuppose that students have a certain amount of background knowledge. For instance, in Developmental Psychology, we start off assuming that you know all the theories and material covered in the Introduction to Psychology course, the 101 course. Without that background knowledge, it's hard to follow the course. So I'm afraid you'll have to take the 101 course first, and then you are more than welcome to be in my class next time I offer it, which I think, hmm, will be this summer.

W: Oh no, that won't work. I'm not going to be here this summer, and I really want to take your class. See, I have an internship this summer at a camp and will be working with disabled children. So I really want to take your class to help me be prepared for that experience. One of the supervisors at the camp, Jessica Franklin, graduated from here about two years ago, and she highly recommended that I take your class before starting my internship. She thought it would be very beneficial to have a foundation in the theory of developmental psychology to help guide my work.

M: Ah, I remember Jessica. Glad to hear she is working at the camp. I know that was something that she had hoped to do after graduating. Good for her. Tell her I said hello next time you talk with her.

W: Sure. Be glad to.

M: But about your situation, I can understand where you are coming from, and it sounds like you could really benefit from the class. And it's

great to hear that you are planning an internship this summer as well and want to apply the theories from the course toward your work, but without the background knowledge that you will need, I'm afraid the course will be too difficult for you.

W: Well, I know that I didn't take the 101 class here, but I have taken two years of psychology in high school, so I'm pretty familiar with the basic theories and concepts. I didn't take the AP test, but I still know a lot.

M: Hmm. How about this? What I can do is let you take the class on a trial basis. I'll sign your form and you can be in the class. But, I want you to check in with me on a weekly basis and let me know how you think things are going. Then we can decide if the course is right for you or not. I'd also suggest that you audit the 101 class while you are in my class. That means you'll be in 101, but you won't be responsible for all the work, and you won't get credit for it. But that way, at least, you'll be getting some exposure to how we teach introductory psychology at this college, and it might help you review what you learned in high school.

W: Professor Jordan, I really appreciate you doing this. I'm confident that it will work out. And of course, I'll keep you posted on how things are going.

M: OK then, where's that form you were telling me about?

W: Oh, right here. Thanks.

M: Just make sure you turn that in soon. They are pretty strict about deadlines around here.

W: Yeah, that's what I hear. My advisor keeps warning me about that. I'll drop it off right now. See you next term.

M: I'll see you then.

08 Service Encounter

M: Uh, hi, do you know where I can find the editor?

W: Yes, but she's not available right now. Can I help you with something?

M: Yeah, I'm a first-year journalism major, and I've been taking this class, Intro to Journalism, with Professor Woodward. He's a really cool guy, and the class is super interesting. Um, so I was talking to him after class the other day, and I told him that I want to become a journalist—my

goal is to write for *The New York Times* someday. Anyway, we were talking, and he said that I need to get some experience, build up a portfolio, you know. So he suggested that I try to write freelance for the school paper. I thought that sounded like a great idea. Because, you know, I used to write for my school paper in high school. So that's why I'm here. You guys are the school newspaper, and I want to see if I can get a job with you!

W: Wait a minute. Wait a minute. Slow down. Let me explain something. We do work with freelance writers, but we can't pay non-staffers.

M: Yeah, but if I write for the paper, I'm staff, right? That's how it was in my high school, except we didn't really get paid, but this is college.

W: No, not exactly. That's not how it works here. The way it works is like this. Right now, the paper only has a budget for five paid positions. That's our entire staff, five people, and that includes the editors, writers and a photographer. We're all part-time but we manage, somehow, to get it all done. Anyone else who works for us, writing, taking pictures, drawing cartoons, does so freelance. And for the purposes of our budget, they are considered nonstaffers. We can't pay them. I'm sorry. That's just how it is.

M: Oh, bummer. So much for that plan. I'm not sure what I'm going to do now.

W: Wait! Don't get me wrong, we *need* freelance writers, *big time!* I don't want to give you the wrong impression. I'm sure the editor would love to talk to you about working with us. She'd just need to see some writing samples that show what you are capable of. Then, if she thinks you can handle it, she can get you started writing one or two articles a week.

M: Yeah, but I need a job. I need to earn some money. My parents are helping me out with tuition and housing, but I have to use my own money for books and clothes, CDs, going out you know, stuff like that.

W: I completely understand that, but why don't you give it a try, writing freelance for us? You can get some experience and build up your portfolio in the process. And most importantly, if you stick around for a while writing with us, there is bound to be a staff position that will open up. If you become staff, we can pay you. That's actually how I got hired. Sorry I didn't introduce myself. I'm Gina. I write most of the sports articles.

M: Cool, I've read your stuff. I'm Alex.

W: I started out writing freelance. First covering student government, and then I got into reporting on the budget, ugh, that was not my thing. Yeah, it was tough at first, but I learned a lot. And then when one of the senior writers graduated, I got hired. And it just happened that he was the sports writer, and I love writing about sports. This is my last year. I love it. The job's part time, but it's a great place to work. Sure I can't get you to reconsider?

M: Did you say you needed help with sports?

W: We'd love some help.

M: Right on.

W: Let's get you set up with an appointment to talk with Martha. How does Friday morning look for you?

M: Anytime before eleven. I have class then.

W: Here, I'll leave her a note that you'll stop by at ten. Oh, and don't forget to bring some writing samples.

M: Will do.

09 History

M: As the Industrial Era swept across America in the later half of the 19th century, it created an enormous amount of wealth for a new generation of men, men who often had started from humble backgrounds only to acquire fabulous riches in their lifetime. Yet at the same time, millions of Americans were suffering in horrible conditions of poverty in the rapidly growing industrial cities. Some intellectuals of that time were championing the rise of these ultra-wealthy leaders of industry. They would say that a man gets what he deserves in life. For instance, if he works hard and becomes rich, then that is what he deserves. His wealth is the product of his hard work. Conversely, if a man is lazy and lives in poverty, then that too is his own fault. Such thinkers believed that America was a land of endless riches. They also said that if a man became very wealthy, the government had no right to take his money in the form of taxes, because he earned it and knows best how to spend it. But, you might say, don't governments need money to help the poor and those in need by providing public education, hospitals, sewers,

and other things that everyone can use?

One of the wealthiest men of the time, Andrew Carnegie, responded to such a question by promoting what he called the "Gospel of Wealth." It stated the main ideas I have just laid out for you: that men get what they deserve, that governments should let them get rich, and that they should be able to do what they want with their wealth, but he added something that others were not saying. Carnegie believed that a man with wealth was responsible to help others improve themselves, and to demonstrate his commitment to help other men improve their conditions, he gave generously, creating a system of 2,800 public libraries. He died before he could spend all of his money, but carefully left it entrusted to an organization that continues to manage his money today and give to people in need. Carnegie believed that such great men of wealth could indeed eradicate poverty from America without government interference.

Well, has the "Gospel of Wealth" lived up to the promises that Andrew Carnegie envisioned? Let's look at two criticisms before we decide. First, there is the problem of the ideas underlying the "Gospel of Wealth." Carnegie did not reject the idea that some men could become incredibly wealthy and that this might be a problem. He was more concerned with what they did with their money. The problem is that not everyone can become rich—not in 19th-century America or anywhere. People have different personalities and abilities. Some people are born with poor health and injuries, so that they must be cared for their entire life. Because the "Gospel of Wealth" continued to support the idea that people get what they deserve, it did not help face the real causes of problems facing American society at the end of the 19th century. Its narrow commitment to individualism obscured the realities many people faced.

Second, while Andrew Carnegie accomplished great things through his philanthropy, and set about to give away all his wealth, few others followed his path. For his "Gospel of Wealth" to truly have helped alleviate the suffering of so many during his time, it would have needed far more philanthropists to practice what Carnegie preached. That did not happen. It was a mistaken idea to think that if wealthy industrialists were

allowed to pay less money to the government in the form of taxes, then they would give it away more effectively. It didn't happen. There was and still are excellent philanthropists, wealthy people that give their money to others in need, but the problem is there aren't enough of them. So governments tax people and, if they are at their best, should use that money to make sure that everyone benefits.

There are a lot of things governments provide that aren't always recognized, but that improve the condition of all people, rich and poor alike. Without government programs, we would never have seen industrial cities cleaned up and made into healthier, safer places to live than they once were. Some would argue that these changes were more beneficial to most poor people than Carnegie's libraries, since these changes directly raised living standards.

10 Astronomy

- W:** We've been talking about the lunar landscape and lunar soil, and today I want to pose an interesting question to you, one that scientists are grappling with as we speak. Is there water on the moon? Or, theoretically, *could* there be water on the moon? It would seem that yes, water could be on the moon. We just haven't found it yet. Especially since we've talked about how the moon likely shared a similar origin with Earth.
- M:** But how can there be water on the moon if there is no atmosphere and little gravity? Wouldn't any water that may have been on the moon have evaporated a long time ago?
- W:** Yes, Earth and the moon share similar origins, but scientists think that if there is water on the moon, it likely came from comets or meteors that contained ice and crashed into the moon. This is also a theory of how Earth got its water, but what you said is correct. Any water on the moon's surface would evaporate quickly. That's why scientists think any water on the moon would have to be in the form of ice, specifically underground ice deposits. These could be in the form of crystals or perhaps larger bodies of ice.
- M:** You mean like an underground ice lake or something?
- W:** Exactly. That's exactly what we are talking about, possible frozen underground lakes. Now, if ice were on the moon, where would you start looking?
- M:** The poles. They are coldest. That's where they are looking for water on Mars too, and it's where ice is found on Earth.
- W:** Right. You'd look for ice in the polar regions. Well, when investigating any theory, as you all know, scientists make the best guesses they can possibly make, and then seek evidence to support or disprove their theory. Let's take a look at the evidence in support of there being ice on the moon.
- Now, scientists have been thinking about this problem since the 1960s, but it wasn't until 1996 when they got their first solid evidence. A spacecraft called *Clementine* was sent to investigate the lunar South Pole and sent back the first evidence of potential water. Its radar suggested that it had found deposits of water ice a few meters under the moon's surface. Then in March of 1998, a second spacecraft, *Lunar Prospector*, confirmed what *Clementine* had found. Even more, it confirmed that there are large deposits of water ice at *both* the moon's north and south poles.
- M:** How did they know the ice was there if it was underground? That's what you said, right?
- W:** Good question. They know because they found indirect evidence in the form of hydrogen.
- M:** What do you mean by that?
- W:** What I mean is that instruments on the spacecraft detected hydrogen. Hydrogen, as you know, combines with oxygen to form water, the chemical formula being H_2O , for two hydrogen atoms joining an oxygen atom with water being the result. The instruments on *Lunar Prospector* could not detect H_2O , but it could say if there was or wasn't any hydrogen present, and what the instruments showed was lots of hydrogen, enough for perhaps trillions of tons of water ice. But the scientists, being scientists, were not satisfied with indirect evidence. So guess what they did next?
- M:** They got samples of ice to bring back?
- W:** That would be ideal, but at present it's too expensive and difficult. They had a simpler solution. When *Lunar Prospector* was ending its lifetime, the scientists crashed it into one of the craters where

ice was expected to be located. They had hoped that the crash would cause water vapor to be released. If that happened, they could see the water vapor with powerful telescopes, and it would give direct evidence for the presence of water ice. However, they knew the chances were very slim, less than ten percent.

M: So, did they find the water vapor?

W: Unfortunately, no. They did not detect water vapor from the impact, but that does not mean that there is no water on the moon since there are many uncertainties. For the time being, we'll just have to stay tuned and see what the scientists cook up next.

Chapter 7 Inference Questions

01 Philosophy

M: Yesterday we left off talking some about Ayn Rand's Objectivism. You'll remember that Rand's philosophy is ultimately about the quest for happiness, but what we're going to focus on today is the Objectivist view of reality. That would be considered the metaphysical aspect, meaning that it deals with issues of the nature of reality aside from customary scientific explorations.

Are you all clear with that? Just keep in mind that "metaphysics" literally means "after the physics," so I guess you can see it as the philosophy of things *beyond the physical world*.

Anyway, the Objectivist view of reality is based on three axioms set out by Rand. The three axioms are the Primacy of Existence, the Law of Identity, and the Axiom of Consciousness.

So, on with the Primacy of Existence. The basic idea is that there is a reality that exists with or without people being conscious of it. Another way to put it is that aside from people knowing and sensing things in the world—which is what we're calling consciousness—there is a greater reality. The Primacy of Existence is in direct opposition to philosophies of Relativism that claim that instead of there being an objective reality, that people create their own, unique realities. So, for example, a Relativist would say that a car crash occurs because a person believes it does, whereas the Objectivists maintains the self-evident truth that a car crash

occurs regardless of whether or not we want it to. This is actually how the axiom is defended—see, the existence of a greater reality is why people have something to be conscious of in the first place.

OK, I'm assuming there are no questions so I'll move on to the second axiom: the Law of Identity. So keeping the Primacy of Existence in mind, now consider that everything that exists in this objective reality has an identity. What does she mean by identity? Identity refers to the different attributes, or characteristics, that set something apart from other things. Quite simply, a chair is a chair, and not a desk. That simple example shows that something can only have one identity, but that's not to say that something has to only have one characteristic. Half of the chair might be made of wood, the other from metal. Those two characteristics are part of the identity. But these characteristics occur in specific amounts, and the characteristics are definite. This is why this axiom is important—it basically proves that reality has definite identities that can be learned.

The idea that something can be learned makes up a part of the Axiom of Consciousness. See, once we acknowledge the identity of things, that something exists, people are conscious and able to learn. All knowledge is based on the fact that we are conscious, or aware, of the objective reality and the different identities that reside there. So anyway, Rand also says that since one can't be conscious without there being something to be conscious of, it follows that the mind does not *create* reality, but instead, through consciousness, discovers it.

02 Linguistics

W: In linguistics, we often focus on really particular details of language. Today I want to move away from that and discuss the relationship between culture and language and how each affects the other. I want to start with the theory of linguistic relativity, which is more popularly known as the Sapir-Whorf hypothesis, after the two linguists who formulated it. Has anybody ever heard of the Sapir-Whorf hypothesis? No? I only ask because it's pretty popular. In fact, it's been applied to many other fields as well.

OK, so the premise of the theory is that the way a language is structured influences how its speakers think and behave. Do you all get what I mean? If you think about it, it's pretty amazing. I mean, they're essentially saying that the language you speak determines how you think and how you act. It's not just that. On a much greater level, it also suggests that the world for any given culture is perceived through completely different eyes, or tongues, more appropriately. Do you understand how we get to that conclusion? It's because of the way that their language allows a culture to express and understand their unique realities. Sapir and Whorf were a professor-student team. They formulated this theory over the course of many years working with a variety of different groups. It resulted from performing experiments in comparative language studies. That's when linguists study two different languages next to each other to find their similarities and their differences. After all was said and done, they reviewed their results and came up with the theory of linguistic relativity.

Anyway, before you all completely dismiss this, let me say, there's a lot of evidence that supports this theory. One of the more cited cases was the work that Whorf did with the Hopi. After studying and analyzing the Hopi language, Whorf observed that, both linguistically and culturally, the Hopi had very different conceptions of time than English speakers. He noticed that the Hopi didn't have different tenses as we do in English to express when things happen. For example, in English, we would say "ran" to express that the action happened in the past, but the Hopi have no equivalent to the past tense. In order to express the same thing, they would use a word that literally translates to "running from memory."

Like I said, Whorf noticed this difference and thought it was . . . uh . . . different. The more he learned about the Hopi culture, however, he realized that this was no sheer coincidence. It turns out that the Hopi have a different way of thinking about time. For us, it's natural to view time as a line. Something happens, and it is done. Something will happen in the future, and what that means for us is that it's farther up in the line. But the Hopi saw time as a process, so instead of a line, it was more cyclical.

03 Office Hours

- M:** Good afternoon, Professor Stevens. Are you free right now?
- W:** What time is it? Hmm, I think I can spare a moment. What's up, Aaron?
- M:** I wanted to talk to you about my last paper. I'm pretty unhappy with my grade. Plus, I'm not sure what you meant by some of the comments. Do you think we could go over it?
- W:** Certainly. Do you have the paper with you?
- M:** Yup, here it is. See, in the introduction, you wrote, "logic." I couldn't figure out what you were referring to.
- W:** When I write that on a paper, it means that the two sentences that are circled have no logical link to each other. You wrote: "The critical issue that Cineweb faces is how to make sure the company can succeed in light of the success of established Internet video rental services." Next you write: "In addition, Cineweb's name should be advertised more, in an effort to make it stand out from its competitors." The problem is that the second sentence didn't seem to relate to the first. Instead, you'd want to add a sentence that would introduce the second sentence as one of the ways that Cineweb could deal with the issue, perhaps. Otherwise, it doesn't really make any sense.
- M:** Yeah, I see what you mean. OK, what about this: in the third paragraph, you circled the word "institution" and all it has next to it is a question mark. What does that mean?
- W:** Sorry, that is pretty vague. Let me explain—you're calling Cineweb an institution, but that's not accurate. I sort of get the sense that you were trying to use it synonymously with "business," but you can't do that.
- M:** Right, I guess I was just worried about using "business" too much. But I do get it—an institution is not the same thing as a business.
- W:** Uh huh. Anything else?
- M:** Just one more. At the bottom of the page, you said that I didn't provide sufficient evidence to back up my proposals, but I thought I did that by talking about precedents with other companies.
- W:** You did do that, but what I *really* wanted you all to do was relate the precedents to how it could apply to Cineweb. Do you understand?
- M:** Right . . . so not just include companies that have tried a certain tactic before, but how it could benefit or harm Cineweb in particular.

W: Exactly. You know, Aaron, taking a second look at this, it seems that you didn't quite understand the assignment.

M: It's true. But thanks for explaining some of these comments to me . . . I just wish I could do something about my grade. I *know* I could do better if given a second chance. Especially now that I have a clearer idea of what you're looking for.

W: Why don't you do a rewrite?

M: Really?

W: Yup. What I'll do is just average your first grade and the grade from the rewrite together. Does that sound fair?

M: More than fair. Thank you so much! I really appreciate it.

04 Service Encounter

W: Hi, maybe you can help me. My name is Bianca and I'm the president of the juggling club.

M: How interesting! I didn't even know there was a juggling club. So anyway, how can I help you?

W: We've actually only been around for a year. We wanted to host a juggling competition, and I thought that a room in the student union building would be perfect. I just need to find out how to go about that.

M: Well, Bianca, the way it works is that a representative from the group comes in and submits a reservation form. It's quite easy from there, really. We'll make sure that the requested room is going to be available on the date. Everything else is up to the group.

W: What do you mean, exactly? Like providing food or something?

M: Yes, like catering and advertising and um, like decorations.

W: Yeah, I gotcha. OK, so you said we needed to submit a reservation form? Where exactly do I get that?

M: The reservation form? Didn't it come in your organization packet at the beginning of the year? The Student Activities Office sends them out at the beginning of the fall semester.

W: None of this is ringing a bell. Where would I have received this?

M: You wouldn't receive it personally. It goes to the organization's mailbox in the student union building.

W: I don't think we have a mailbox. I mean, I've kind of just organized everything myself from the very beginning.

M: Uh oh, it sounds like you're not registered with the university. Unfortunately, in order to use campus facilities, you have to have a recognized organization.

W: Wow. I don't even really know what that means. So how do I go about getting our group officially recognized?

M: Well, when your group becomes recognized, you not only get access to campus facilities, but you also get some funding, depending on the size of your group.

W: I can't believe I didn't know about this. Does the process have to get started at the beginning of the semester, or are we still eligible?

M: You'll still be eligible. First, the group has to come up with a constitution and submit it to the Student Activities Office.

W: What's the constitution have to be like?

M: You have to include the name of your group and your membership list. Also, you'll have to describe the basic organization of the group, so like, how you choose your leaders . . . stuff like that.

W: OK, that sounds easy enough. Then what?

M: Then the review board will either approve or reject the application. If you get accepted, you'll receive the organization packet with the reservation forms and all sorts of other important information.

W: All right, that sounds good. Oh, you wouldn't happen to know how long it takes for the constitutions to be reviewed, do you?

M: The review board meets every other Thursday. They notify all applicants as soon as a decision has been made.

W: Great. Thanks for your help.

M: No problem. Good luck with that!

05 Geology

M: Continuing our conversation about volcanoes, today I want to talk about types of volcanoes. Geologists generally group them into four types: cinder cones, composite volcanoes, shield volcanoes, and lava domes. Just to forewarn you: all of these have alternate names, but to

avoid confusion, for this class, we'll be using the above terminology. So, what was the first type I mentioned?

W: I think you said cinder cones.

M: That's right! Thank you. OK, so anyway, cinder cones are thus named because they are composed of hardened pieces of lava called cinders. The cinder cone is formed when there is a violent eruption from a central vent: vent being the opening. The lava solidifies when it contacts the air and it falls around the vent. Over time, a circular cone builds up around the vent.

W: What are some other characteristics of cinder cones?

M: Well, for one thing, they're usually very steep and they have a bowl, called a crater, at the very top. Another thing about cinder cones is that they don't really get to be very high. In fact, I would guess most don't really get higher than a thousand feet.

The next type of volcano is the composite volcano. These are very steep and symmetrical. They have a central vent at top, and the eruptions through this vent are how the cone is initially built up. But as the volcano gets larger, lava usually flows through little networks of cracks on the side of the cone. When the lava hardens in the cracks, the entire structure is strengthened.

W: I'm sorry, but can you give us some examples of composite volcanoes?

M: Of course. Composite volcanoes are much larger than cinder cones. In fact, a couple of the world's biggest mountains, such as Mount Fuji and Mount Rainier are composite volcanoes. Does that help?

All right, the next type of volcano we'll be talking about is shield volcanoes. This type of volcano gets its name from its appearance. See, they're really broad and kind of dome-shaped. I guess some geologists thought that from the side, they resemble a warrior's shield. Anyway, the reason shield volcanoes are shaped that way is because they are made when fluid lava eruptions spread over large distances and cool. Like composite volcanoes, lava often flows out of the flanks of the volcano, which also explains how it gets its gentle slopes.

W: Isn't Hawaii completely made up of shield volcanoes?

M: That's right. Hawaii is just a chain of shield volcanoes that rise up thousands of feet from the ocean floor. In fact, Mauna Loa, which also has the distinction of being the world's most active volcano, has been found to project over 28,000 feet above the ocean floor. Crazy, huh? Shield volcanoes are massive—they can be up to three or four miles wide.

There's one more type that I'll talk about. It's called a lava dome. In a lava dome, the volcano doesn't really erupt; lava just barely comes out, if at all. Most of it piles up right around the vent. So, instead of growing from the buildup of lava on the outside, it grows from the inside. It's actually pretty common to see these on the side of a composite volcano.

06 Art History

W: Good afternoon, class. I bet there isn't one person in here who *doesn't* think of the name Andy Warhol when the pop art movement is mentioned. It's gotten to the point that the movement is inextricably tied to this one figure, and with good reason. Andy Warhol had an incredible influence on shaping the American pop art movement and was largely responsible for legitimizing pop art. We'll go into further detail a little later in class, but I think I'd like to start with a definition of what pop art is exactly.

I think people have conflicting ideas about what pop art is, mostly because it was a movement that was going on in a lot of different places all at once. There was the Spanish movement, the British movement, even the Japanese pop art movement. But the earliest emergence of the movement sort of happened simultaneously in Britain and the United States in the early 1950s.

Anyway, at its simplest, pop art employs well-known images and themes as a kind of celebration of popular culture and a rejection of elitism. It's often looked down upon as being lowbrow, I guess, but a lot of pop art is actually pretty academic. There were many different figures that influenced pop art, but really, the one that always comes to mind is Andy Warhol. I said earlier that Warhol heavily influenced the

American pop art movement. He did this in a couple of ways. Before I start, I want to emphasize that Warhol was a trained artist, and was actually a working artist during the 1950s before he became a prominent figure in the movement. I say this because I think most people assume that he was a hack, so to speak . . . uh, someone who merely capitalized on a passing trend. I guess you can still argue that if you like, but he also had some very interesting ideas about art.

See, the man was completely enamored with pop culture. Taking cues from the movement, Warhol added a different aspect to his art. One way that he shaped the movement came from his ideas about the role of mass-produced items in the art world. He likened himself to a machine and wanted to elevate items that were mass produced to art. For example, some of his most famous paintings are those of Campbell's soup cans. Really, most of his subjects were really recognizable. And for him, the important part was making art that had mass appeal. In other words, he wanted his art to attract and speak to the majority of people, not just art critics.

I also want to mention Warhol's tendency to collaborate with other artists. His frequent collaborations helped changed people's previous attitudes about art. What I'm referring to is how, usually, artists tended to be really protective about their work. It was generally seen as a more personal thing. But the other side of Warhol's ideas about elevating mass-produced items to objects of art was that he also wanted to mass produce art. Do you all get the distinction? OK, so anyway, by collaborating with others, he created an assembly line of art, which, needless to say, was very uncommon at the time. But after that, collaborations weren't looked down upon so much and it was very much a part of that movement.

Warhol pushed pop art into the consciousness of the public not only through depicting popular subjects, but by bringing pop art to the gallery. In a 1964 exhibit called *The American Supermarket*, Warhol and other like-minded artists presented different pieces that represented a supermarket. They featured paintings of soup cans, vegetables, meat—all the things that you see when you go to the supermarket.

The importance of the exhibit was twofold. For one thing, it was really the first big exhibit featuring pop artists. This is significant because it kind of added legitimacy to those artists and the works they created. Also, the subject matter made people think to themselves, "What is art?" Do you all see what I mean? Because it wasn't what people were used to, I think that simply seeing these pieces in a gallery forced people to evaluate their personal ideas about what makes art *art*.

07 Office Hours

W: Good afternoon, Professor Moreno. I was hoping I could talk to you for a couple of minutes.

M: Sure, Marcy. What's on your mind?

W: I just saw my midterm evaluations on the website, and, I have to say, I'm a little disappointed about my participation grade.

M: Let me pull up your file. OK, I got you down with a B minus. That's not a bad grade.

W: I understand that. What I don't understand is why it's not an A. I mean, I haven't missed even one class all semester. I'm here every single time, and I'm always prepared. And after talking to some of the other students in the class, we all agree that I'm one of the most vocal students in class.

M: Well, Marcy, although I certainly appreciate your good attendance, that's really not all there is to it.

W: Wait, but it's not as if I just show up and stay quiet for an hour and a half. In fact, I make a point of making at least three comments per class. That's more than what some people could say for their own participation. Some people never say anything at all.

M: That's true, but to be fair, most of the other students do participate pretty regularly.

W: I know. I guess my point is that I just don't really get how I could have earned a B minus so far. I've been working for an A plus, and I didn't expect the participation grade to be dragging down my average. I try really hard in class.

M: I can see that you do, and I appreciate that. Let me explain something to you, though—I don't give anything away in my class. That means you have to work for everything.

W: But I do.

M: You may think you do, but from this conversation alone it becomes apparent that your attitude about participation is not at all what I'm looking for.

W: Sorry, I'm not really following. What are you looking for exactly?

M: Have you ever heard the expression "quality over quantity"?

W: Yeah.

M: What I'm getting at is that I don't only expect for my students to speak up in class. I also want to make sure that people are adding *quality* contributions to the discussion.

W: Oh. I'm sorry, but would you mind explaining what you mean by *quality* participation? I obviously have different ideas about what that is.

M: Marcy, I don't mean that your comments aren't interesting. But ultimately, some comments are more relevant to the discussion than others. It's those kinds of comments that the others can learn from, which is what we want, obviously.

W: So I just need to try to keep my comments more on-topic then?

M: Well yes, I think it would help if you could limit your in-class commentary to things that are immediately relevant to the discussion. Otherwise it's just distracting to the others.

W: OK, I can do that. How else could I improve the quality of my participation?

M: I would advise that you pay more attention to your interactions with your peers and try to be more attentive to what others are saying.

W: Like how? I don't get it.

M: OK, you mentioned earlier that you try to make at least three contributions every class.

W: Uh huh. I thought it was a good way to make myself participate.

M: I can see that, but don't you think that maybe by doing that, you tend to focus more on meeting your quota rather than really listening and responding to what others have to say?

W: Oh wow, yeah, I can see that. I never meant for it to be that way . . . I guess I was just really focused on nailing this one part of the class, but I see what you mean now, I really do.

M: It just happens that way sometimes. But now you know how you can improve, and that means you can bring your B minus up to an A plus by the end of the semester if you keep the things we talked about in mind.

08 Service Encounter

M: Hi, how are you?

W: Good, thanks. Can I help you with something?

M: Yeah, I'm actually here to use one of the practice rooms.

W: OK, so you want to make a reservation? I'll just need your student identification card. While you get that, answer me this: what instrument do you play?

M: Oh, no, no, no. I already made my reservation. I'm supposed to be in practice room B4.

W: You did? I wasn't expecting anyone until three-thirty this afternoon.

M: Oh, really? I have a practice room reserved at two. So I guess I'm a little early, but I definitely made the reservation for two p.m.

W: Let me look for it . . . what's your name?

M: Mike. Mike Brady.

W: I'm sorry, Mike. I don't see it here. You're sure it's for today?

M: I'm positive. I made it specifically for today because I knew I'd finally have some time to relax today.

W: OK, it must be here somewhere then. Oh, I know! Maybe it was filed as Brady Mike. There are so many people coming through here, we rarely have a day that a reservation isn't misfiled. But I guess that's not the case today. I'm sorry, Mike. I don't see you anywhere in the system.

M: Oh, geez. Is there any way you could let me in to the room anyway?

W: The whole point of the reservation system is to make sure that, in busy periods, everyone has access to the rooms. But also, we need to have a way to keep track of who's using the rooms. You know, just in case there is damage or anything like that.

M: Right, I understand that. We need to keep these rooms open and in good condition for everyone. But, I guess what I'm thinking is that if anything is damaged, you'll know it was me.

W: I wish it worked that way. But even that way, you wouldn't be the one assuming the responsibility for the room. Unless you're on the system, I'm completely responsible for the rooms. You know how it is. I would if I could, but—

M: —you can't. OK, what options do we have?

W: Mike, when did you make the reservation?

M: It was about a month ago. I remember because I found out about my cosmology midterm on

the same afternoon. In fact, that's why I made the reservation . . . I figured that since I would be done studying by today, and I'd probably be half crazy after all of that studying, I could finally get down here for a couple of hours and practice away.

- W:** I hear you.
- M:** Why did you want to know about when the reservation was made?
- W:** Well, I thought that if it was recent enough, we could pull up the paper file. But, we only keep those for a week. I know, it seems so senseless, but don't worry, we'll figure something out. What we need specifically is the reservation number. You don't happen to remember what that was, do you?
- M:** No way. I don't even know what that is.
- W:** I wouldn't expect you to. It's a seven-digit number that's generated by the system when you make the reservation. If we had that, we could pull it up on the computer. But . . .
- M:** There's really nothing else we can do? It seems like we should be able to redo the reservation somehow. I mean, I can even tell you which room it was supposed to be in—room B on the second floor.
- W:** Actually, do you remember receiving a confirmation sheet when you made it? It's a half-sheet paper that has a reservation number and the particulars about when you're supposed to come in.
- M:** Oh yeah . . . the reservation number was on the bottom of that, wasn't it?
- W:** That's it. Do you have it? It would make everything so much easier.
- M:** Yep, in fact, I think I have it in my backpack. Just give me a second.
- W:** No problem.
- M:** I can't find it anywhere. It must be in my room. I don't live far from here.

09 Business

M: Hi, everyone. I'm sure you all know what mass production is, and even if you don't, it's most definitely a part of your daily life. How, you ask? Well, just to set the record straight, mass production is when large amounts of identical products are made on assembly lines. So the machine spits out the standard parts and then

people put them all together while the parts move down a moving conveyer belt.

Most people think that mass production was invented by Henry Ford, who used it to make the famous Ford Model T car, but the truth is that Ford really just popularized it. We're still not sure exactly who invented mass production, but semblances of the production method were seen as early as the American Civil War, when it was used to manufacture firearms.

The idea of the assembly line was first patented in 1901 by Ransom Olds of another automobile company, Olds Motor Vehicle Company. Yet, it wasn't through any relation to Olds that the Ford Motor Company began to use the assembly line. Instead, according to popular accounts anyway, officials from Ford got the idea from a Chicago slaughterhouse.

The official, Mike Campion, observed the employees at the slaughterhouse butcher portions of animals as they moved down a conveyor belt. Impressed at how fast the employees were able to work by performing a single function over and over again, Campion returned to the company and suggested they apply the "disassembly line" method to their production. After some initial doubts, the method was finally employed, revolutionizing manufacturing thereafter. Interestingly, as a way to honor the inspiration for the assembly line, the owner of the slaughterhouse, Pa Klann, was allowed to drive the very first automobile built on assembly line.

So now that you guys have a more accurate history of mass production, I want to discuss some of the advantages and disadvantages of the system. The most obvious advantage is that mass production is really fast. According to the archives at the Henry Ford Museum, after the system was started, they were able to make cars in three minutes. If that doesn't convince you of the efficiency of mass production, let me add that before it took one hour and 35 minutes to make one car. There are a couple of reasons why it's so much faster. Since the parts are all made by machine to a specific, standard size, people don't waste time refitting parts. Plus, the simplification of the employee's tasks made it a lot faster for them to perform their duties, although it made work less interesting.

Another advantage of the system is that human error is significantly reduced, if not completely eliminated. I sort of alluded to the reason for this before, but I'll elaborate. Remember that, before, all the parts were made by hand. But one of the hallmarks of mass productions is having a machine that makes the parts for you. That way, the machine just pumps out many of the same exact part and all the human really needs to watch for is that the machine is functioning correctly. Are we all still on the same page? Good.

All right, those were some of the advantages, but don't be fooled. There are some disadvantages as well. The first example relates back to my point about how mass production eliminates human error. See, the other side of that is that production design becomes kind of inflexible because you have all these machines making the same parts over and over. What I mean is that if at any point, you wanted to change the design, you couldn't just give an employee new specifications. You'd have to get completely new equipment to make the part for you.

That leads me to another disadvantage. We talked about how efficient the system is, meaning that, in the end, the cost per object is less because it takes less labor, but getting the appropriate machinery to make all the parts is extremely expensive. Now imagine you're a business owner. Unless you know for a fact that this machine and system are going to provide a design that you need to ultimately be successful, it would take a lot to convince you that it was even worth making the initial investment in the machinery.

10 Psychology

W: This week, we talked about all sorts of topics relating to sleep and dreams. Studying dreams is notoriously difficult, given their highly personal nature. Still, psychologists have come up with different ways of studying dreams that has revealed some information about what dreams are and why we dream. Aside from the more popular interpretations of dreams, who can tell us one of the ways that dreams can be used?

M: Well, Loewi talked about how it can help with creativity. Isn't that how he came up with that experiment that won him the Nobel Prize?

W: Yep, that's right. For those of you who aren't familiar with this case . . . Dr. Otto Loewi was a pharmacologist who was famously quoted as saying that he would have never performed his award-winning experiments if it had occurred to him while he was awake. In that way, he supported the idea that dreams can be helpful in coming up with creative solutions because you're less inhibited. But anyway, what is another way that dreams are studied or used in psychology?

M: Well, this refers more specifically to lucid dreams, but I guess they can be used to promote a sense of emotional well-being or growth.

W: I'm so glad someone brought this up. I can't believe we haven't talked about lucid dreams. Anyway, a lucid dream is a type of dream during which a person feels as though they are awake. By that I mean you're simply dreaming while being aware that you're dreaming. You can think of it as being conscious while dreaming. Does that make sense?

M: Yeah, but how come we don't hear more about them?

W: There are a couple of reasons, actually. I mean, like I said before, it's hard to study any kind of dream.

M: Lucid dreams are pretty rare, aren't they?

W: Uh huh. In fact, I just read an article that said that only about twenty percent of the population have lucid dreams on a regular basis.

M: So what is the purpose of lucid dreaming, then?

W: I guess one example I can give you that's a little more specific is nightmare resolution. A famous case study involved a woman who had just gotten into a car accident, wait, no, she had just gotten divorced.

M: So she was having nightmares or something?

W: Right, night after night, she would have this terrifying dream that she was being swallowed up in a giant wave. But with the help of a psychologist, she was able to have a lucid dream, meaning that she could control it. She learned to change the dream so that instead of getting swallowed up, she would swim and live.

M: I didn't realize there was a way to induce a lucid dream. Is there a standard way of doing that?

- W:** Yes, actually. I mean, there are different methods, but I can share one that was popularized by the lucid dream guy, Stephen La Berge. OK, so first you're supposed to try to memorize a dream you've just woken up from for a couple of minutes. Then you have to do something that you could only really do while you're fully awake, like reading.
- M:** What do you have to do that for?
- W:** Well, the memorization part is kind of like a rehearsal for when you go back to sleep. Anyway, next, you get back into bed and, while you're trying to get back to sleep, say to yourself that you want to remember what you're dreaming the next time you begin to dream.
- M:** Is there any more rehearsal after that?
- W:** I'm not sure what you mean, exactly. After you say that to yourself, you should try to imagine yourself actually lying in bed and having the dream that you were rehearsing before.
- M:** And all that helps you have lucid dreams?
- W:** Yes, it's been found to help.

Mini Test 3

01 Biology

W: Our next topic is mimicry in animals. See, in nature, animals have different ways of defending themselves from predators. Some animals change their behavior to become less appealing to those that are hunting them, such as oh, such as when an opossum plays dead. But others have an evolutionary defense mechanism through which they are able to change their appearance in order to discourage predators. This is called mimicry. OK? Mimicry. But don't confuse mimicry with camouflage. Camouflage is when an animal takes on the appearance, uh, looks like its surroundings, but mimicry refers specifically to the instances when an animal models its appearance after *another organism*. Are we all clear with that? Great, why don't we discuss some more specific types of mimicry then?

Well, then, I guess we can start with Batesian mimicry. Batesian mimicry is when an animal mimics the appearance of another in order to protect itself from predators. The real

distinguishing factor between Batesian mimicry and other types of mimicry is that in Batesian mimicry, the animal that changes its appearance has no characteristic of its own that would discourage predators otherwise. Let me explain further . . . see, it isn't as though animals just randomly pick another animal to mimic. They model themselves after animals that either taste really icky, uh bad, or are poisonous. By looking like a poisonous species, predators are going to pass over them when they are out hunting. Are we all still on the same page? Why don't I give you all an example just to clarify? OK, so let's consider the Brazilian butterfly Pieridae. There's no real reason why a bird wouldn't want to eat one of these guys except for one thing—it looks exactly like a butterfly from the Heliconiidae family. The Heliconiidae are not a species that birds are interested in eating because—well, they taste funky, you know, unusual and not at all tasty. Just by having similar coloration as the Heliconiidae, the Pieridae are able to escape getting eaten. So basically, the tasty Pieridae looks like the not-so-tasty Heliconiidae and thus avoids predation. Pretty cool, huh? Anyway, the case of the Pieridae butterfly was the first time that this type of mimicry was observed, by a man named Henry Bates, hence the name. But don't be fooled, Batesian mimicry occurs in all types of bugs, cockroaches, all different kinds. Scientists haven't completely figured out how animals evolve to have the same coloring and features as other animals, but genetic research has revealed that the patterns of color inheritance is probably influenced by geography. That means that bugs from different areas have different genes to determine which species they mimic. If there aren't any questions, I think we should talk some about Müllerian mimicry.

OK . . . after the discovery of Batesian mimicry, scientists started studying mimicry in all sorts of animals. What scientists noticed, though, were animals that had a defense mechanism of their own, yet they *still* mimicked other species. This was called the Batesian paradox, because it made no sense at all for an organism that was already unappetizing to predators to mimic another animal. Then a German zoologist named Fritz Müller proposed that the reason an organism would do this is so that predators

would learn their lesson about not eating them from *another* inedible species that looks like them. Does that make sense? Here, let me put it this way . . . See, birds and other predators aren't *born* knowing which bugs are good to eat and which ones are going to make them sick or whatever. So when a bug with its own defense mechanism mimics another type of bug, it benefits because then the predator learns *not* to eat them by first trying a different but similar-looking species. And once the predator learns, it's going to avoid bugs that resemble it. Think of it as kind of like a warning pattern that's shared between many bugs. In fact, the group of bugs that share the pattern, which is called a mimicry ring, by the way, usually go through some signal standardization. All that means is that all the animals in the mimicry ring evolve in order to have the same warning signal.

02 History

- M:** This week, we studied the beginnings of agricultural societies in two different parts of the world: the Nile River Valley and Mesoamerica. Now, the reason I wanted to go over that was to provide you all with a foundation for understanding agriculture as we know it today, but when I was reading your reaction papers, it seemed that most of you have confused a lot of the information we went over. For today, let's get everything cleared up by talking about some of the ways that these two cultures differed in their early approaches to agriculture. Can anyone start?
- W:** OK, given the geographic differences between the two, there were some obvious differences in the way that they grew crops.
- M:** What do you mean exactly? Can you give the class an example, maybe?
- W:** Well, I mean, I guess both cultures had to deal with pretty rough terrain. I mean, the Egyptians were out in the middle of the desert, but they had the Nile River as a source of water. So they came up with a system of using the Nile to their advantage by controlling the water. Didn't one of the Egyptian kings actually build a dam or something for irrigation purposes?
- M:** That would be King Menes. And you might remember that later, floodwater from the Nile

was channeled twelve miles into Lake Moeris so it could be used later. So how did the Mesoamericans handle irrigation?

- W:** Well, they were also growing on inhospitable terrain, and unlike the Egyptians, they didn't really have a huge river like the Nile to fulfill their water needs. But didn't they build reservoirs or something?
- M:** I think you might be getting confused here. The Mesoamericans are known more for their extensive canals that would run into areas that didn't get much rain. They also carved terraces out of hills in order to keep the irrigation water from washing all the fertile soil away. What other technique did the Mesoamericans use to improve land and water use?
- W:** They also built islands in the middle of lakes so they could take advantage of the water source.
- M:** That's right. OK, let's move on. Now, in terms of food production, how did these two cultures differ?
- W:** Well, for one, the crops were completely different. In Egypt, they grew millet, barley, and wheat, but that stuff didn't even exist in Mesoamerica. Down there, they grew corn, avocados, and, of course, cacao.
- M:** I'm glad you brought that up . . . in case you all forgot, cacao is the plant that we use to make chocolate now. In fact, a lot of the crops from Mesoamerica are really popular food items now and couldn't be found in Europe before exploration, such as the tomato.
- W:** Sorry, I hope this isn't too off-topic, but I was just wondering if it took a long time for the Mesoamericans to cultivate those food items. I guess it just seems like they're all such an important part of the culture that it must have been around for a long time.
- M:** You're actually not that off-topic because that's another way that these two agricultural societies were different. To answer your question, it took a relatively long time for the Mesoamericans to begin to cultivate food. The Egyptians started cultivating their staple crops as early as 5000 BCE. Meanwhile, according to archeological evidence, the Mesoamericans didn't really get started until 3500 BCE. Additionally, food cultivation in Mesoamerica was closely tied to the domestication of corn. In Egypt, they started cultivating food as soon as domesticated animals from the Middle East were introduced.

W: Wow, that's like, a 1,500 year difference. Why did it take so long?

M: It's probably a combination of many different factors, but most archeologists agree that the infertile and dry lands throughout Mesoamerica probably had something to do with it.

W: That makes sense. Because if you think about it, that meant that the Mesoamericans had to come up with the infrastructure and technology just to be able to use the land. I guess it would take a couple of hundred years to figure out how to do that.

03 Office Hours

W: Hi, Professor Mathis.

M: Sheila! Thanks for coming in. I don't expect this to take long, so don't worry.

W: Um, OK. I'm sorry, but do you mind if I ask why you asked me to come?

M: Have a seat. Look, the reason I wanted to talk to you is because I'm a bit concerned about your performance in our discussion section. I didn't want to put you on the spot in front of the class, and that's why I asked to speak to you privately.

W: Oh.

M: Sheila, you've been a great student so far. You're always prepared when you come to class, and your essays are a delight to read. But in discussions, you never say anything.

W: It's just that, I don't know, it's just so nerve-racking for me. Honestly, I would really like to, but whenever I want to contribute something, it just sounds so dumb in my head. Or someone else says it first.

M: I thought it might be something like that. The problem is this: participation is mandatory, and it accounts for twenty percent of your final grade. Maybe there's something we can do to make you feel more comfortable.

W: Like what?

M: Well, first off, have some confidence in your intelligence. You really don't have to worry that the things you say sound dumb. I assure you, they're not, and I think you'd find that the other students would appreciate your unique perspective.

W: I guess so. It's not just that, though. There's just something about speaking in front of people

that makes me really nervous. I feel as though I get so caught up trying to calm myself down that I really can't even come up with anything to say.

M: The solution to that is easy. Here's what you do—when you come into class just sit down and listen. Don't think about what you should say or when you should say it. Just listen. If you do that, you'll find that you'll form natural reactions to them, and that's what you'll express when it's your turn to talk. Does that make sense?

W: It does, actually. And, to be honest, I've never really tried that.

M: Good. I would really hate for your final grade to be dragged down by your participation, especially since I know that you must have many interesting things to contribute. Also, I guess the whole situation just made me question my abilities as a facilitator.

W: No, it's not that at all. . . well, can I maybe give you a suggestion?

M: Of course!

W: Well, I think it's been much easier for me to participate when you've handed out a list of questions as a guide, instead of just letting everybody rattle off about a random topic.

M: Hmm, you know, I can see where you're coming from with that. I'll think about doing that more often. Well anyway, I hope I've been able to help you.

W: You have. And I promise that I'll make more of an effort to participate from now on.

Practice Test

01 Biology

M: I want to talk about the hunting behavior of sharks, which, due to some new study methods, we've been able to learn a lot more about recently. You know, with all the new data that's been collected, marine biologists are starting to see that what we *thought* we knew about hunting behavior in sharks was completely wrong. See, for a long time, scientists thought that sharks were solitary hunters, like the leopard. But as it turns out, sharks might actually be group hunters, like wolves. Let's look at some of the evidence.

OK, so let me begin by explaining the methodology a little bit, if only to take some time to appreciate what these marine biologists did in the name of science. So basically, a group of scientists took a little boat to Cocos Island, an area in the Pacific Ocean that's about 300 miles off the coast of Costa Rica. Let me just point out, this is, uh, this is one of the most untouched and pristine marine environments left on Earth. It also happens to be the stomping grounds for many different kinds of sharks, making it a *perfect* place for scientists to learn about sharks. Anyway, since the scientists were trying to learn about the hunting patterns of the sharks, they had to make the sharks hunt. So they put out bait to bring the sharks to them. It might sound insane, and they certainly did put themselves in extraordinary danger, but by doing this, they were able to witness firsthand how sharks strike. So what exactly did they observe? One thing they noticed was that after they had initially released the bait, a single shark would first make its way toward the boat and begin feeding. In a matter of mere moments, though, the boat would be *completely* surrounded by sharks. What does this tell scientists? Well, that the other sharks appeared after the first one struck led them to believe that sharks probably have some way of communicating with other sharks to alert them that food has been found. And in fact, marine biologists know that sharks have extremely sensitive hearing, but they haven't completely figured out how it is that they send messages to each other. Moving on now—OK, while this was happening, scientists also noticed that the group was comprised of sharks of diverse age groups and genders. So, there were male sharks, female sharks, baby sharks, adult sharks, and everything in between. Marine biologists guessed that shark hunting groups are usually made up of sharks that are related to each other. Furthermore, they observed that sometimes, the older sharks would hold back some, letting the younger sharks have first dibs on the prey. This sort of suggests that the older sharks were allowing the younger ones to gain some experience and learn how to hunt. Is that interesting or what?

Any questions? Good. As all these sharks were coming up to the boat, the scientists placed tracking devices on many of them. This, of course, let them observe their hunting patterns away from the boat, which gives them a more, I don't know, authentic view into the hunting behavior of sharks. And when they went back and looked at what the sharks were doing out there in open water, they were amazed. Time and time again, they witnessed the sharks displaying the same behavior as they did around the boat. First one shark would strike, then the prey would be surrounded by an entire pack of sharks. Interestingly, their hunting patterns seemed to involve a series of attacks that drove their prey into positions in which they couldn't defend themselves. In one instance, they found *dozens* of whale carcasses washed up on shore. Going over their tracking data, they found that the area had recently been visited by the same pack of sharks that they had encountered earlier. They concluded that they had taken advantage of the whales' unfamiliarity with the region and struck in a series of surprise attacks. The whales were easily intimidated and were cornered into an area, where the sharks had their feeding frenzy.

02 History

W: Like most of the cities in Italy, Venice has a rich history. In modern times, it's mostly known for the canals that link the entire city together as roads do in most other places. But in the past, Venice was a powerful republic. As with Rome, it was . . . well, it definitely was not built in one day; in fact, the rise of the Venetian Republic was an ongoing process that took about five centuries. We can analyze the success of the Venetian Republic in terms of developments of many arenas. However, by examining the growth of trade over the course of Venetian history, the link between political power and trade become pretty apparent. So let's do that . . . Let's begin in the 10th century, when the threat of Norman invasion was looming and challenged Venetian trade routes. See, Norman invasion would have obviously meant

the loss of territory, but the Venetians were equally concerned with maintaining their connections to the south. Think for a moment about where Venice is geographically: it's located in the swampy land in northern Italy, where it hugs the coast of the Adriatic Sea. This position gave them easy access to some places, but in order to maintain their partnerships with the republics closer to the Mediterranean coast, it was imperative for them to knock out the Norman threat. And that's exactly what they did. In defeating the Normans, Venice also gained a friend in the Byzantine emperor, Alexius, who very much appreciated their help in helping defend Byzantine. Alexius I granted Venice exclusive trading rights throughout the Byzantine Empire. Do you all understand the implications of that? It essentially allowed the Venetians to build a monopoly. But the friendliness pretty much disappeared as Venice became increasingly antagonistic toward Byzantine ports.

I don't want to make it seem like it was all Venice here, though. To be fair, I think it's safe to say that the Byzantine emperor also recognized how prosperous Venice was becoming. And the more money Venice made, the greater the threat they posed to the Byzantine Empire. Anyway, the rising tension with the Byzantine Empire led to a series of aggressive strikes that brought the Venetian-Byzantine trade alliance to an end.

The bitterness between the Venetians and the Byzantines was an on-going conflict, but in 1204, it reappeared with a dangerous new facet. This time, the Byzantines had the help of the Genoese. And with the help of the Genoese, the Byzantines recovered their land in 1261. And while the Venetians were now shut out of Byzantine trade, Genoa now had access to the Black Sea markets. Can you understand how big of a blow this was to the Venetians? Remember, the Venetian Republic had built a monopoly by this time, and by being shut out, they lost a lot of money.

Additionally, now there wasn't just the problem of the Byzantines, but also of the Genoese. I think at this point, we see that the Venetians shifted their focus from fighting the Byzantines to fighting the Genoese. And this makes sense if you think about it, because for the Venetians, it was always about trade rights. And after the

Genoese aligned themselves with the Byzantines and reaped all these benefits, they were also the main competition. Is everyone still following?

OK, let's move on to the 14th century, which is when, according to most historians, Venice reached the apex, or it's uh, height of its power. The 14th century was a difficult period throughout all of Italy—people were at war with each other just about everywhere. Venice got involved with some of that, but really, the focus of their antagonism was as it had been for years before, with Genoa. By this time, Genoa and Venice have been at each other's throats for what, like a hundred years. The fighting took a toll on both sides. It was making them both lose money, and I think that they both finally just got tired of fighting and called a truce in 1381. Venice got a better deal in the peace treaty because they pretty much got control of all the sea routes, plus they were able to focus on administering to all the territory that they had gained over the years.

03 Service Encounter

W: Hi, I'm Elaine. I made an appointment to speak with a Financial Aid Counselor.

M: Hi, Elaine. I'm Frank. Why don't you take a seat and we can talk?

W: Thanks so much. Well, the reason I'm here is because I'm having trouble paying for school. I don't necessarily have a problem with my financial aid package . . . as far as I can tell, it's pretty fair according to the information I was sent. It's mostly just that some new expenses cropped up, and I have no idea how I'm going to pay for them?

M: OK, well, you're right. At least in terms of what we've got on file about your situation. Do you mind if I ask what expenses you're having to deal with now?

W: It's just one thing actually, but it's huge. See, my laptop got stolen. I know I can use the library computers, but I'm sure you understand what an inconvenience that is, especially since the library closes at midnight. Although I would love for it to be the case, I'm rarely done by midnight. It doesn't work that way for computer science majors.

- M:** Of course. There's a reason why the university encourages all students to have a personal computer. The libraries are there for convenience, but with everything running off the campus server now, it's pretty unfeasible to ask students to perform without a computer of their own. The good part is that there's actually a program we have to help students buy a computer. The first thing I want to ask you is how you bought your old laptop.
- W:** Oh, that thing. My older sister gave it to me when *she* graduated from college. It was, like, seven years old.
- M:** Good, because the program only applies for the purchase of one computer.
- W:** Oh, OK, so I qualify, then. Can you tell me more?
- M:** Well, basically, it's a loan, but you don't have to start paying it back until you graduate. Also, the university has a partnership with Babbage Computers, so our students get a really good discount.
- W:** That's awesome! Really, that's exactly what I need. So, how do I sign up for this?
- M:** The first step is to order the computer. You go to the company's website, it's www.babbage.com. You pick out the computer you want and when it asks you to pay, you enter the school name. That's going to give you the discounted price. Since you need the loan to pay for it, you have to print out the page that has the price and submit it, along with a completed Computer Purchase Program form, here, at the Office of Financial Aid.
- W:** That sounds kind of complicated. You wouldn't happen to have a detailed instruction sheet or something? I just don't want to forget any steps. I need to get a replacement as soon as possible.
- M:** Of course, all the information is in this packet, along with the Computer Purchase Program form.
- W:** You've been such a great help. Thanks!

04 Philosophy

M: I don't think there's any way we can study ethics and not discuss Socrates and his very famous student Plato. You all are probably at least minimally familiar with their philosophies, whether you know it or not. The truth is that these, uh, these two ancient Greek philosophers posed *so many* important questions that are still

discussed today, even outside of the philosophical realm. So anyway, what I want to do today is kind of put Socrates and Plato side by side and talk about which points they agreed upon and where their philosophies diverged. Do you all know what the Socratic Method is? Yeah, Mary, go ahead.

- W:** The Socratic Method is a form of inquiry, um, questioning that Socrates is famous for using. I mean, I guess he would ask his opponents a series of questions, and in the course of the conversation, expose the problems with their claims.
- M:** That's right. Now, the reason that I bring up the Socratic Method is to show how he put his views about ethics on the table for discussion and criticism. If you read the materials I passed out during the last session, you know that Socrates talks about virtue a lot. And when Socrates talks about virtue, what exactly is he referring to? It's goodness, it's moral excellence, it's . . . well, it's ethics. Anyway, according to Socrates, virtue was something that could be known, and if someone truly knew what virtue was, it would stand up to the Socratic Method. More importantly, by knowing virtue, one becomes virtuous. Do you all understand so far?
- W:** Um, I'm a little confused. I don't really understand what you mean when you talk about *knowing* virtue?
- M:** All right, think back to the emphasis that Socrates placed on educating oneself as the road to enlightenment. At the very beginning of the road is ignorance, and remember that he thought that ignorance of virtue in particular was why people did bad things. At the end of that road is goodness, and virtue is closely tied to that. But really, the thing to focus on here is the idea that by being aware of what virtue is, one is virtuous. This is really the part that applies to ethics, because ethics is essentially the study of what is right and wrong, and why people behave the way they do in relation to the ideas of right and wrong. His take on it seems simplistic to modern readers, especially because his philosophy lacks the element of self-interest. The reason I mention that is because self-interest is a huge part of the way modern philosophy deals with ethics; that is, many modern philosophers acknowledge

that the reason people do bad things is not because they are mistaken or don't know what it is to be good. Rather, at least some part of their bad behavior is caused by the desire to benefit themselves somehow. But like I said, the notion of self-interest wasn't really treated in Ancient Greece. That's one of the things that Socrates and Plato had in common.

With that said, why don't we talk about Plato's take on ethics? Let's see, well, as a student of Socrates, Plato was obviously influenced a lot by him. In fact, most of his work was written as dialogues between Socrates and his opponents, so in that way, he kind of carried on the tradition of the Socratic Method. But I think you'll see that Plato's ideas about ethics were a little more fleshed out than those of Socrates. Plato thought that goodness was an objective form, meaning that it was a more general thing that remained the same even in different cultures or situations. Any questions?

W: How do Plato's ideas about there being some sort of universal form of goodness explain why someone should choose to be good, though?

M: Well, you have to go a little further than that. In really simple terms, Plato thought that if a person acted justly, their soul would be balanced and bring the person great happiness. So, to answer your question, the motivation to be good and just is to be happy.

05 History

W: When we study history, without knowing it, we're reading somebody's interpretation of what happened and why it happened. The way history is written is obviously a very important thing, especially as it relates to how people form their own conceptions of history. With that in mind, today I want to talk about the "frontier thesis," which, as we all know, was formulated by the American historian Frederick Turner. Let's see . . . who can give the class a brief summary of what the frontier thesis is?

M: I'll give it a try . . . it's, um, it's Turner's idea that the single most important factor in the shaping of American society was its unique frontier history. According to Turner, people in the United States gained many traits based on living on the frontier, and the society evolved as the frontier became more developed.

W: OK, you mentioned that Americans gained some particular traits as a result of the frontier life. What are some of those traits?

M: Oh, individualism and self-reliance mostly.

W: Uh-huh, that's right. What are some other traits?

M: Inventiveness, and also, um, materialism.

W: Good. OK, when Turner first published "The Significance of the Frontier on American History" in 1893, it caused a huge storm in the universities. What do you think the controversy was about?

M: Well, I think that it was because it sort of reversed what all the other historians were saying about American society and history.

W: Which was what?

M: That the institutions of the United States were primarily influenced by the English and the Germans.

W: Good. So Turner turned those ideas on their back. He also asserted that it was the Europeans that were affected by American settlement rather than vice versa. Given what we know about how history was being written at the time, why else would such a claim be controversial?

M: Wasn't Turner one of the first historians trained in the United States?

W: Yes, that's right. Before him, most historians went to Europe to study.

M: So, I guess there could have also been an element of discontent with the way Europeans were portrayed. I mean, to suggest that Europe was influenced by America at the time must have been jarring for other historians who might have conceived that the European influence was much stronger.

W: Well, it's true that most historians were trained in Europe, but it wasn't only in Europe that there were strong reactions. The impact of the paper wasn't based on the assumptions of which country was more powerful. It really had more to do with the complete originality of the things Turner said. And remember, Turner's "frontier thesis" did become the model that people used in learning about the development in the United States for at least fifty years after it was written. But Turner didn't necessarily stop with his frontier thesis; in fact, throughout his life he continued to form theories about American history. From your readings, what were some of the ways that Turner "changed his tune," so to speak, from his original theory?

M: Well, one that stuck out to me was how at first he totally glorified people moving out west because it supposedly spoke to the self-reliance and mobility of the American people, but later he wrote another paper where he pretty much flip-flopped on the issue and accused those people of ruining the environment and only caring about themselves.

W: That was a pretty interesting switch, wasn't it? And what solutions did Turner propose for those problems? . . . I mean, Americans becoming distanced from each other and the degradation of the environment.

M: For one thing, he thought that Americans needed to promote community life. He also proposed environmental conservation, such as taking care of the forests instead of cutting down the trees indiscriminately. Oh, and didn't he also stress the importance of the education system?

W: Yes, he did. Essentially, he thought that people didn't really need to explore geographic frontiers. Instead, he supposed that the developing country needed to promote the exploration of educational frontiers.

06 Office Hours

M: Uh, Professor Smith?

W: Yes, David? What can I help you with?

M: You handed back our papers last Friday with comments and feedback, and the truth is, I'm not sure I understand your comments completely. I mean, I received a D minus on my first draft, and well, I don't think that it's, um, fair.

W: Do you have the paper with you?

M: Sure. Here you go.

W: Great, thanks. Hmm, let's see. Ah, yes, I recall this one.

M: And?

W: Well, David, I believe you said some very intelligent things here. You did a great job at applying complicated psychological theories to everyday situations.

M: I really tried to include some meaningful connections.

W: Right, that part you did well.

M: So, on which part did I do poorly?

W: Let me explain something to you. Sure, it's important for the content of a paper, such as the ideas that you include, to be unique. But you must remember that it's the presentation

that is a bit, well, awkward and strained. You seem to jump from point to point without really supporting your thesis. You have to be able to choose one solid idea, and really be able to back it up.

M: Well, isn't it better to have many ideas to give it more depth?

W: Not necessarily. In an academic paper you have to work within the constraints of the rules of academic writing. So therefore, you must pick one idea that you could solidly support with evidence you've learned in class, or other relevant information. This way, you can convince the reader that you know what you're talking about.

M: OK, I think I'm understanding a bit more. So what should I do with my paper specifically?

W: Hmm, let's see. Well, you don't have to do much actually. Just choose one of your ideas to be your main idea, and since the other ones are inter-related, you can use them to support the primary one. Then, well, let's see . . . I see that you switch back and forth between your ideas within your paragraphs, so my advice to you would be to stay put within your paragraphs. For example, in one of your paragraphs, you mention the importance of social acceptance of mental illness. However, within the same paragraph, you introduce social oppression. It just all seems like it's crammed in there.

M: OK, I understand.

W: I graded these first drafts roughly, because I wanted to motivate the students to do well, and I wanted them to come in, as you did, and ask me about my comments. You've done the right thing. Plus, the grades for the first draft of the paper really don't factor into the final grade. I just give them to guide you.

M: Well, that's a relief!

W: Well, just consider my advice when you're doing your revisions, and you should do just fine.

M: Thank you for your time.

W: Of course. OK, David, I'll see you in class tomorrow.

Part 1

Chapter 1 Organizing Speech

Q1 Practice 1

► Step 2 - Sample Response

A fascinating city that I visited in my past was Jerusalem in Israel. I enjoyed myself there because my family originated from Israel. I had always wanted to see the place from where my ancestors came. By traveling there, I was able to witness firsthand the culture of my ancestors. I also enjoyed visiting Jerusalem because I had never visited an area before with so much history. Many of the buildings and places in Israel date back thousands of years. These ancient areas captivated me, and I loved exploring them.

Q1 Practice 2

► Step 2 - Sample Response

For my career, I would choose to be a wildlife photographer. I would prefer this job because I have always been fascinated with how wild animals behave in their natural environments. Photographing them would allow me to observe many different species and capture their behavior up close. Such a career would also enable me to travel to remote parts of the world. I would get to visit a diverse range of natural habitats and observe wildlife in places where most people never go. The experiences that I would encounter would be vast and exciting.

Q1 Practice 3

► Step 2 - Sample Response

A bad situation recently taught me that staying safe is more important than obtaining a goal. I learned this while climbing a peak with a group of friends a couple of weekends ago. We wanted to get to the top so badly that we kept going even though the weather became worse. We made it to the summit. However, by the time we turned around, a blizzard had come in. When we finally got back to camp, we were freezing and exhausted. I learned that some goals are not worth the risk of getting injured.

Q2 Practice 1

► Step 2 - Sample Responses

Opinion 1

I would prefer to live somewhere that is near the mountains. Then I could go for long hikes and backpacking trips. I enjoy going for hikes in the mountains with my group of friends. It is very rewarding to get to the top of a peak and look out over the city below. In addition, I would be able to go downhill skiing as much as I wanted during the winter. Skiing is one of my favorite sports, and I think I would be miserable spending a winter away from the slopes.

Opinion 2

I would prefer to live somewhere that is near the ocean. Then I could learn how to sail, which has been my lifelong dream. When I was little, my uncle took me out on his sail boat and ever since, I have always wanted to sail my own boat by myself. It is very peaceful drifting out among the waves. In addition, I would not ever have to endure harsh winters or snowstorms. I want to stay in a place with mild winters, and maritime climates are generally warmer than alpine climates.

Q2 Practice 2

► Step 2 - Sample Responses

Opinion 1

I prefer to have just a few close friends rather than many friends. First of all, I think it is important to build strong relationships with your friends, and it is difficult to do that when you have a large number of friends. In my experience, the best friendships I have formed are with those few people that I have gotten to know very well. Secondly, I think having lots of friends can be overwhelming. When I have lots of friends around, I find it hard to divide my time between so many people and still have time for myself and schoolwork.

Opinion 2

I prefer to have many friends rather than just a few close ones. First of all, I think it is fun to get to know lots of people, and there is always someone to talk to when you have many friends. In my experience, I have always felt like I had more support available when I had more friends to consult. Secondly, I think having only a few close friends can make you feel isolated. When I am around lots of friends, on the other hand, I find that I am better able to reach out to others and experience many different things.

Q2 Practice 3

► Step 2 - Sample Responses

Opinion 1

I would prefer to work and make money in the summer. This would give me spending money during the school year to go on trips with my friends. For example, last semester, my friends and I took a spring break trip to Europe. It was a remarkable experience, and I could not have afforded it if I had not worked throughout my summer vacation. Also, if I do not have a job during this period, I often get bored. I would rather keep busy at a job earning money than sit around at home with nothing to do.

Opinion 2

I would prefer to take the summer off. This would give me time to rest after a busy school year. For example, last year I worked so hard during the school year that I often did not get enough sleep. It is nice to have a summer where I can sleep late and recuperate. Also, if I do not have to work during this period, then I have time to do things I enjoy. I would rather hang out with my friends, go swimming, and read novels than go to the same job every day.

Chapter 2 Synthesis Activities

Q3 Practice 1

► Step 2 - Conversation

W: Have you heard that they're no longer going to provide us with printer paper in the lab?

M: Yeah, that's too bad. You use the lab all the time to print out your papers, don't you?

W: Yeah, I don't know anyone who prints out stuff that's not school-related. My friends and I are always printing out drafts of research papers or journal articles. I don't understand where the university got this idea that students don't use the printers for schoolwork.

M: Yeah, I have no idea. But at least this'll let them save money to buy more computers. Now more students can use the lab.

W: Maybe, but I'm not so sure. I think lots of students are going to stop using the computers. They won't want to use the lab if they have to bring their own paper.

M: Yeah. That is a hassle.

W: And you remember that lab fee we have to pay at the beginning of the semester? Students aren't going to pay it when they don't use the lab. Which means less money for stuff like new computers.

M: You've got a point, there.

► Step 4 - Sample Response

The announcement says that students must use their own paper to print from the computer lab starting at the end of the month. The woman does not agree with the university's decision. First, she thinks that the university is wrong to conclude that students print materials unrelated to school work. Everyone she knows prints scholarly materials at the lab's printers. Secondly, she thinks using the money saved on printer paper to buy new computers is not a good idea. She feels that fewer students will want to use the lab if they are forced to bring their own printing paper. Therefore, they will not want to pay the lab fees at the beginning of the semester, which means less money for the school to purchase new computers with.

Q3 Practice 2

► Step 2 - Conversation

M: Wow, did you see this announcement?

W: Yeah, they're raising the price of parking tickets from \$35 to \$50. That's a pretty substantial jump, wouldn't you say?

M: Maybe, but I think the change is long overdue. There's definitely a serious problem with students parking alongside the street, not just near fire lanes but also in front of all those shops near campus. I'm sure it's bad for business because it prevents customers from parking there.

W: Yeah, I hadn't thought of that. It would be nice for customers if more spots were available close to the stores.

M: It'd also be great if campus security could make enough money from parking tickets to build a new lot closer to school. The current one is just too far away. It often takes me a half hour to get to class.

W: I know what you mean. It takes me a while, too. I don't know why the university just didn't build a parking lot closer to campus.

M: But now hopefully they'll get the chance to fix that. Then students won't have to waste so much time walking to class.

► Step 4 - Sample Response

The announcement says that the price of parking tickets will be raised from \$35 to \$50. The man supports the decision because he agrees that the university has a problem with students parking alongside the street. He thinks that by parking in front of shops near campus, students are hurting the businesses because they are preventing customers from parking there. He also thinks that raising money to build a new parking lot close to campus is a good idea because the current lot is too far away. It takes him a half hour to get to class. If the lot was closer, students would not have to spend a lot of time walking to class from their cars.

Q3 Practice 3

► Step 2 - Conversation

- M:** Too bad they won't be providing paper copies of the course catalogue anymore.
- W:** Why's that a problem? It'll be posted online. And the university will be saving money because they won't have to pay for printing costs.
- M:** Yeah, but there are plenty of other ways the university could save money. For instance, they could send out emails instead of posting announcements like these.
- W:** True, but registering online is more convenient for students. It'll be easy to just log onto the school network and sign up for classes whenever you've got the time.
- M:** I disagree. I think it's going to be highly inconvenient.
- W:** I don't see how.
- M:** Not everyone's great at using a computer. And many students are going to have to learn how to navigate through the computer catalogue, which will be a challenge. Paper-based catalogues are much simpler to use.
- W:** Well, all right. I suppose you have a point. It is pretty easy to just flip through a paper catalogue.
- M:** Exactly. I bet the registrar's going to be overwhelmed with students who are having problems with this new catalogue system.

► Step 4 - Sample Response

The announcement says that the university will replace paper copies of the course catalogue with an online catalogue. The man thinks that this is a bad decision. He feels that the university can save money in other ways, like sending email announcements

instead of posting them. The man also thinks the online catalogues will be more inconvenient. He mentions that it will not be easy for students to use computers to register for classes. Many will have trouble navigating through a computer-based catalogue. He believes that paper catalogues are much easier to figure out. He concludes by saying that a lot of students will have to visit the registrar anyway because they will have problems with the new system.

Q4 Practice 1

► Step 2 - Lecture

M: Color psychology isn't just for psychologists. Regular people use color all the time to portray or influence particular moods. Colors can be separated into two types—warm colors and cool colors—based on how they influence people. I'll give you a few examples of how they're used to achieve desired effects.

Warm colors—like pinks and oranges—induce feelings of comfort. Now, in some countries, school sports teams paint certain locker rooms pink. Do you know why? Well, many sports teams paint their opponents' locker rooms pink in hopes that it will be so comforting that it will cause the opposing players to lose energy. After all, you don't want to be comforted before an important game. You should be excited and ready for action if you're going to play well. Hence, this is a good example of how color is used to manipulate others. Now, since cool colors make people feel confident, blue is a common clothing color for people like policemen and others in positions of authority. It's a color that's considered to be powerful without seeming menacing. It's no coincidence that blue suits are a popular choice to wear to job interviews, and actually, fashion consultants recommend wearing blue to interviews or new jobs because it serves as an outward display of confidence.

► Step 4 - Sample Response

The reading mentions that there are two types of color—warm colors like pink and red, and cool colors like blue. It says that warm colors cause people to feel warm and comforted, while cool colors inspire confidence. The professor then gives examples of how these colors can be used to influence mood. The professor mentions

how sports teams often paint their opponents' locker rooms the warm color, pink. They do this in hopes that the pink color will be so comforting that their opponents will lose energy. The professor then mentions that people are often advised to wear blue suits to job interviews and new jobs so that they seem more confident.

Q4 Practice 2

▶ Step 2 - Lecture

W: A baboon is one type of animal that uses a highly structured dominance hierarchy. Let's take a closer look at just how baboons use dominance hierarchies within their social groups.

First off, dominance hierarchies in the baboon species are used to keep the group organized and stable. This is done through a ranking system. Each baboon in the group has a specific rank. Those in lower ranks follow the leadership of those in higher ranks. For example, baboons in a group follow the leadership of a dominant male. This individual makes major group decisions—like where to find food—and the lower ranked members follow his lead. This allows dominant individuals to make quick decisions about what's best for the entire group, which could mean the difference between survival and death.

Dominance hierarchies also allow baboons to settle disputes over scarce resources. This is important for baboons that live on the African savanna. On the savanna, food is often scarce. Therefore, a dominant individual exists who can manage aggression and determine how food is distributed. However, baboons that live in the forest have a more relaxed dominance hierarchy because food is more available. Conflicts over food are less likely to occur here, so the role of the dominant male in forest baboon groups is not as clearly defined as that of a savanna baboon's.

▶ Step 4 - Sample Response

The reading says that dominance hierarchies exist to maintain order and resolve conflicts in animal groups. The professor discusses how baboons use dominance hierarchies to maintain order through a ranking system. There is a dominant male baboon in each group, and the lesser ranked baboons follow what he does. The professor then says that dominance hierarchies help baboons manage conflicts over scarce resources.

This is important for baboons on the savanna because food is rarer. Therefore, according to the professor, a strong dominant leader needs to be in control to manage resources and aggression. Conversely, the professor explains that the role of the dominant male in forest baboon groups is less defined because food there is more common.

Q4 Practice 3

▶ Step 2 - Lecture

M: Wegener first noticed that the continents seemed to fit together like a jigsaw puzzle. When you look at a map of the world, you can see a fit between the eastern coast of South America and the western coast of Africa. But this realization wasn't enough to prove his hypothesis of continental drift. However, scientists have found additional evidence which proves that Wegener's hypothesis is accurate.

One type of evidence involves fossil records. Scientists have found fossils of ancient animals distributed widely across the continents, indicating that the land masses must have been joined at some point in prehistory. For instance, fossil remains of one of the first marine reptiles, known as Mesosaurus, have been found in both South America and Africa. This suggests that Africa and South America were once part of the same continent.

It's also true that the geology of the South American and African coasts is remarkably similar, lending further evidence to Wegener's hypothesis. When you fit the two continents together, you can see that distinct rock formations and mineral deposits match up. For example, the same type of sandstone hills that end on the west coast of Africa can be found on the east coast of South America. This same type of sandstone occurs nowhere else in the world so clearly. Obviously, these continents were connected at one time.

▶ Step 4 - Sample Response

The passage first defines continental drift, which says that the continents were once one landmass that broke apart and are now drifting away from each other. It states that evidence of continental drift can be found through fossils and rock formations. The professor explains how scientists have come across fossils of an ancient marine reptile in both South America and South Africa. This led scientists to believe

that the two continents must have been joined at one time. The professor also states that scientists have found that the coasts of both continents have similar sandstone rock formations and mineral types. This further supports the hypothesis that these formations were at one time connected on a single continent.

Chapter 3 Stating Opinions and Summarizing

Q5 Practice 1

► Step 1 - Conversation

- M:** You all right, Jess? You look upset.
- W:** Oh hi, Dave. Yeah, I just checked my semester grade online. I have a C right now in my organic chemistry class.
- M:** A C isn't so bad.
- W:** Yes, but I have to maintain a B average to keep my scholarship.
- M:** Oh. So what're you going to do?
- W:** I don't know. I really need this class for my major.
- M:** Can you just request to take the class as a pass or fail?
- W:** What is that again?
- M:** It means all you have to do is pass the class. It'll show up on your transcript as a pass. However, it won't list a specific grade. Therefore, it won't affect your GPA at all.
- W:** Oh yes, now I remember. The problem is, pass or fail grades don't help improve your GPA either. If I ace this upcoming midterm, I could raise my grade in this class to an A-. That would matter if I choose to take this class as a pass or fail.
- M:** So basically, if you can ace this next test, you can raise your grade?
- W:** Exactly.
- M:** Well, they have free tutoring sessions through the library. Why don't you get a tutor to help you?
- W:** That's an option. But I'm still not sure if they'll be able to help me to understand the material. It's complicated stuff to learn. Plus, I'm usually really busy with my job and other classes.

► Step 3 - Sample Responses

Opinion 1

The woman is currently getting a C in her organic chemistry class. She needs to improve her grade to keep her scholarship. The man suggests that she

either request to take the class as a pass or fail or that she go to tutoring sessions. I think the first option is best. Since she is already busy with work and other classes, adding tutoring sessions to her busy schedule might make her fall behind in other areas. This could end up hurting her GPA even more. Also, if she takes the class as a pass or fail, it will not affect her GPA at all. It will not matter if she gets a C in the class. This will relieve some of the pressure the girl feels.

Opinion 2

The woman is currently getting a C in her organic chemistry class. She needs to improve her grade to keep her scholarship. The man suggests that she either request to take the class as a pass or fail or that she go to tutoring sessions. I think the second option is best. Since she is having trouble with the class, I think it would be worthwhile to schedule study time with tutors who can help her prepare for the tests. This could help her learn the material really well. Also, if she does well on the next test, she might get a good grade in the class. It could raise her GPA. This will not happen, however, if she takes the class as a pass or fail.

Q5 Practice 2

► Step 1 - Conversation

- W:** Hey, Will, are you excited for the field trip next weekend for Professor O'Leary's geology class to the mountains?
- M:** Yeah, I was. But I just found out that my grandfather is in the hospital. My mom and I are flying out to go visit him tomorrow. So I don't think we'll be back in time for me to go on the trip. What time are you leaving again?
- W:** We're all leaving from the student parking lot at nine a.m. on Friday.
- M:** I thought so. I won't be back in town until Friday afternoon. So I won't be able to leave with the class.
- W:** You do know that this class is a big portion of our grade?
- M:** I know, but I don't know what else to do.
- W:** Well, can you catch up with us all on Saturday morning? You know, drive out there by yourself and meet up with us in the mountains.
- M:** I guess so. The drive's not too long, but I don't know the area. I'm afraid I won't be able to find the rest of the class.

W: Well, we'll be on the mountain trail. There's lots of trail signs up there. But I can sympathize with you. I'd be anxious about getting lost, too. Could you explain the situation to Professor O'Leary? Maybe he'd give you an extra credit assignment to make up for it.

M: Possibly. However, I'm not sure if he'll agree to that or not.

► Step 3 - Sample Responses

Opinion 1

The man has to visit his grandfather in the hospital, and he will not be back in time to go on a field trip with his class on Friday. The trip is a big part of his grade. The woman suggests that he either meet up with the class Saturday morning or ask the professor for an alternative assignment. I think it would be better for him to catch up with the group on Saturday. Since there are lots of signs to help him find out where to go, he should be able to locate the class easily. Also, he will not have to worry about whether or not the professor will allow him to do an alternative assignment. It is too risky to depend solely on the professor's kindness.

Opinion 2

The man has to visit his grandfather in the hospital, and he will not be back in time to go on a field trip with his class on Friday. The trip is a big part of his grade. The woman suggests that he either meet up with the class Saturday morning or ask the professor for an alternative assignment. I think it would be better for him to ask his professor for an alternative assignment. Since this is an emergency, his professor will probably allow him to do another assignment. Also, the man will not have to worry about getting lost. It is too risky to try and find his way around as he does not know the area well.

Q5 Practice 3

► Step 1 - Conversation

M: So, have you applied for student housing yet for next year?

W: Yeah, I applied to live in the West dorms. What about you?

M: I haven't applied yet. I'm having trouble with the costs. I just don't have enough money left over to afford to live on campus. But I have to find some way to live in the dorms.

W: Do you have any ideas on how to raise the money?

M: That's what I'm worried about. I can't get a regular job because I have a heavy course load. My schedule's really busy.

W: Have you thought about getting a work-study job?

M: A work-study job?

W: Yeah. It's where you work for the university. In exchange, they'll pay off some of your living expenses.

M: Oh, yeah. I know some people who do that.

W: The best thing is, their hours are really flexible. You could probably work it around your heavy class schedule.

M: Hmm . . . that's definitely an option. I'd still have to work, though. I don't know if I can manage both work and school.

W: Or you could always take out a loan. That way you wouldn't have to worry about working at all. You could just concentrate on school.

M: That's true. Of course, then I'd have to worry about paying it back after I finished school. That's a lot of debt.

W: Well, you'll just have to decide what will work best for you.

► Step 3 - Sample Responses

Opinion 1

The woman needs to live on campus to go to school, but she cannot afford to live in the dorms. The man suggests that she get a work-study job or that she take out a loan. I think she should get a work-study job. It will be better to pay costs off now than later, in my opinion. This option will give the woman the money to live on campus without going into debt. She will not have to worry about paying back a loan when she graduates. In addition, with a work-study job, she will be able to work around her own schedule. This way, the woman will not have to worry about missing class or getting behind on her schoolwork.

Opinion 2

The woman needs to live on campus to go to school, but she can't afford to live in the dorms. The man suggests that she get a work-study job or that she take out a loan. I think she should take out a loan. It will give her the money to live on campus without having to work. This option will allow the woman to concentrate more on her schoolwork. She will not have the added stress of maintaining a job and a heavy course load. In addition, taking out a loan will

also allow her to pay for housing at the beginning of the semester. This way, she will not have to wait until she gets money from working during the school year.

Q6 Practice 1

► Step 1 - Lecture

M: Today I want to talk about minimalism—a prominent movement in American and European art—which emerged around the 1960s. The idea of minimalism was to reduce a work of art to its minimum number of colors, shapes, lines, and textures. Minimalist artists resisted the traditional idea that art had to represent an object or an experience. Instead, they created paintings and sculptures that were unique objects unto themselves—objects that didn't stand for something else. To achieve this effect, minimalist artists used two design techniques in their art.

First, they tended to use materials that were uniform in shape. Take, for instance, Carl Andre's 1969 sculpture "Steel Zinc Plain." This is a perfect example of how minimalist artists chose the simplest, most uniform shapes to piece together a work of art. Andre uses one of the very simplest of geometric structures: the square. He took square plates of zinc and square plates of steel and arranged them in a checkerboard pattern on the floor. So basically, he created what looked a giant checkerboard that could be walked over and stood upon.

Second, minimalist artists often used one kind of material in a repeating pattern. The 1966 piece by Dan Flavin called "Monument for V. Tatlin" clearly demonstrates the use of repetition. In this piece, Flavin uses only one type of material: a pre-made fluorescent tube—you know, those long, glowing tubes used for industrial lighting. He took several of these and arranged them into a miniature monument. The idea was inspired by the Russian artist Vladimir Tatlin's proposed design for a new revolving spiral monument that would be taller than the Eiffel Tower. But in the end, Flavin created a simple sculpture that was nothing like the traditional grandeur of a real monument.

► Step 3 - Sample Response

Minimalist artists reduced artwork to its basic colors and shapes. The professor says minimalist artists created simple, unique objects by using uniform materials and

arranging lots of them in a repeating pattern. The first piece that the professor mentioned was as an example of how minimalists use uniform shapes. In his piece, the artist used square-shaped plates and arranged them in a checkerboard pattern that people can walk on. The second piece the professor mentioned was an example of how minimalists use repetition. For his piece, the artist took several fluorescent tubes and arranged them into a simple miniature tower. This miniature tower was inspired by plans for a grand new monument.

Q6 Practice 2

► Step 1 - Lecture

M: There are many theories out there about what it takes to be an effective leader, but the one attribute that links all these theories together is charisma. Charisma is the ability to inspire enthusiasm, interest, or affection in other people. So basically, the theory of charismatic leadership assumes that all good leaders must have charisma in order to attract followers . . . and according to the theory, charismatic leaders share two common traits.

First of all, charismatic leaders create a compelling vision that appeals to their followers' values, interests, hopes, and dreams. A charismatic leader is not content simply to lead a group along its present course, but strives to reach high goals and ideals. In this sense, Dr. Martin Luther King Jr., a famous American during the 1960s, was a charismatic leader; his vision was this: that all men were created equal no matter their differences. He helped convince people that treating certain Americans unfairly was wrong and attracted a large number of followers who helped accomplish his vision. He was thus able to inspire the American government to pass laws that guaranteed certain rights for all people.

Secondly, charismatic leaders demonstrate their vision through action. They don't just delegate tasks and tell people how to behave, but rather exhibit ideal behavior through their own actions. There was a famous World War II general, named Patton, for example, who once demonstrated this approach to leadership by intervening at the scene of a traffic jam. He pulled up to the jam, and rather than yelling orders, he got out of his jeep and started directing traffic himself. As traffic started to move, he turned the job over to the military

police. In this manner, Patton was able to teach his subordinates . . . in this case, the police . . . through action, and he also gained their admiration.

► **Step 3 - Sample Response**

The professor says that according to the theory of charismatic leadership, all leaders attract followers with charisma and share two common traits. One trait of a charismatic leader is the ability to create a vision that is appealing to his or her followers. The professor uses Dr. Martin Luther King Jr. as an example of a charismatic leader with a vision. His vision was that all people would be treated as equals. He helped convince the American government to pass laws giving everyone certain rights. The second trait of a charismatic leader is the ability to demonstrate vision through action. The professor uses General Patton as an example. He got rid of a traffic jam by directing traffic himself.

Q6 Practice 3

► **Step 1 - Lecture**

W: We would all like to think that we make decisions for ourselves—that we can resist things like advertisements and peer pressure. But as it turns out, the power of conformity—that is, the tendency to be influenced by others within a group—is much stronger than we might imagine. In the 1950s, the American social psychologist, Solomon Asch, showed just how much the pressure to conform can affect our decisions. He conducted an experiment which showed that not only are most people easily willing to conform to a group, they will also compromise their own knowledge to do so.

Asch's experiment involved nothing more than three straight black lines drawn on note cards. During the experiment, he asked a room full of students to announce out loud, one by one, their answers to a series of questions about the length of the three lines. They might be asked which line was longest, which two lines were of the same length, and so on. In reality, only the very last participant to state his answer was ignorant of what the experiment was about. The other students in the room had been previously informed to give the same incorrect answers to the questions, so when the last student's turn came to answer, he had to decide whether to go with the group's

response or to trust what he saw with his own eyes.

Before Asch collected the results of his experiment, he believed that people would stand up against group pressure, that they wouldn't sacrifice their own truths to go along with the crowd. Turns out he was wrong. His results showed that a third of the people tested gave the same answer as everyone else in the room, even though it contradicted the truth they saw before them.

► **Step 3 - Sample Response**

The professor says Asch did an experiment which showed that the pressure to conform to a group greatly influences the decisions that people make. For his experiment, he used cards with black lines drawn on them and asked students to answer questions about the lines out loud. All the students but the last one was told to give the same wrong answer. Asch found that a third of the time, the last student gave the same answer as the rest of the group, even though it was different from what that student had observed. Asch's experiment showed that people are often willing to sacrifice what they know to be true in order to conform to a group.

Part 2

Chapter 4 Test Questions 1 and 2

Q1 Practice 1

► **Step 3 - Sample Response**

My favorite place to go to in my city is the huge park downtown. I love going there because it is a great place to watch people doing various activities. For instance, I can watch people jogging, couples walking their dogs, or children playing at the playground. It is fun to see how they all interact with each other. Also, I enjoy going to the park because I can almost always find someone to play volleyball with. This game is a great way to meet new friends, get some exercise, and take a break from schoolwork.

Q1 Practice 2**► Step 3 - Sample Response**

As a child, one of my favorite books was *Where the Wild Things Are*. It is about a boy who uses his imagination to turn his room into a wild forest where he becomes the king of the Wild Things. I liked the book mostly because of its great pictures. Even though the Wild Things are supposed to be fearsome monsters, they are actually quite comical in the pictures. I also liked the book because the story was simple and easy to memorize. I felt proud because I could recite the story even before I knew how to read.

Q1 Practice 3**► Step 2 - Sample Response**

One teacher who has positively impacted my life was my ninth-grade literature teacher, Ms. Murphy. She helped me to develop a passion for literature. Before her class, I never thought of actively pursuing literature as a course of study. However, Ms. Murphy's lectures made literature so much fun that I decided to study literature in college. Also, Ms. Murphy taught me how to deal with conflicts. Whenever she had a problem, she always handled it rationally rather than losing her temper. By following her example, I was able to handle conflicts better in my own life.

Q1 Practice 4**► Step 2 - Sample Response**

The best advice I have ever received was from my mother. My mother advised me as a young child to take my schoolwork very seriously because it would help me in the future. It turned out to be the best advice that I have ever received. First, concentrating on my schoolwork helped me to achieve good grades, eventually allowing me to receive a college scholarship. I could not have afforded college without it. Plus, my good study habits throughout college enabled me to graduate at the top of my class. I was immediately eligible for all sorts of jobs.

Q2 Practice 1**► Step 3 - Sample Response**

I would prefer to attend a local college. This way, if I encountered any problems, my family would be

nearby to provide assistance. In high school, when I was doing poorly in a class, they were there to give me the advice I needed to pass it. I would want their support in college, also. Secondly, I think I would receive as good an education at a local college as at a national college, at half the cost. I know many graduates of less expensive local colleges who have attained even more success than those from prestigious universities.

Q2 Practice 2**► Step 3 - Sample Response**

I prefer to visit educational places when I travel to new areas. Primarily, I like visiting educational places like museums because I am often curious about the area and the people I am visiting. I think that knowing the history and culture of a place helps me to better understand and appreciate it. I also enjoy visiting educational places because they are often distinctive to an area. In contrast, places for entertainment like movie theaters or amusement parks can generally be found anywhere. Since I can visit places like those at home, I would rather spend my time at places I will not see again.

Q2 Practice 3**► Step 2 - Sample Response**

I firmly believe that parents should be permitted to influence the type of materials that children learn in schools. My first reason for this is because parents are often the best judges of what their children are ready to learn. They are also best aware of the areas in which their children are struggling. Parents' opinions about what their children should learn can be helpful for developing a curriculum. Secondly, children often feel uncomfortable talking to teachers about problems they have with materials. Consequently, it is important that their parents are able to intervene and speak for them.

Q2 Practice 4**► Step 2 - Sample Response**

In spite of today's busy world, I do not think that it is a good idea for people to be constantly active. Being active all the time drains us of our energy. Our bodies need rest just like they need food in order to function

properly. It is important to set aside time to relax and recharge our minds and bodies. Such a busy lifestyle is also counterproductive. Some people believe that by constantly being active, they are getting more done. However, in reality, I think we tend to get things done more efficiently when we take breaks between activities.

Chapter 5 Test Questions 3 and 4

Q3 Practice 1

► Step 1 - Conversation

M: What do you think about that announcement from the English Department? Do you think it's fair to force students to take those pre-graduate classes?

W: I actually agree with the policy.

M: You do?

W: Yeah. Most of the honors students I know plan to attend graduate school anyway. Why not take these pre-graduate classes? I bet they'll be helpful.

M: But are they really necessary?

W: I think so. They sound like a great way to prepare students to excel in graduate school. Many students I know are worried about it. They heard it's hard because students entering into graduate school usually don't know what to expect.

M: I see your point.

W: And many never finish because they weren't prepared for graduate work.

M: Yeah, it'll be good for these students to start preparing for graduate school now.

W: Exactly. Besides, I think these classes will look really good on a graduate school application. Those people I know who have taken pre-graduate classes almost always get accepted into graduate school.

M: Wow, that's great. Especially considering how competitive our English graduate program is.

► Step 3 - Sample Response

The announcement says that it is now mandatory for English students planning to attend graduate school to take pre-graduate courses. The woman agrees with this idea. She says that the classes are a good way to help students succeed in graduate school by preparing them early on. She supports this point by saying that many graduate students drop out because they are

not prepared for graduate level work. She thinks the new pre-graduate classes will help them to know what to expect. Also, she believes that they will give students an advantage on their graduate school applications. She says that everyone she knows who has taken pre-graduate courses has been accepted into graduate school.

Q3 Practice 2

► Step 1 - Conversation

M: Did you hear the bulletin about the new office hours for the business school counselors?

W: Yeah. I suppose that's good news.

M: It's great news. It takes forever to get an appointment with a counselor. I always have to make counseling appointments weeks in advance. It's so exasperating! Now all I have to do is walk right in.

W: But are there going to be enough counselors to handle all the students coming in? They've had problems in the past.

M: It'll be fine. See, now, all the counselors will be available at once during these three times. Before they had to be available for the whole week. And not all counselors work every day.

W: I guess so.

M: Plus, most of us have issues that only take a few minutes to solve. I never have questions that last more than two minutes. So I bet they'll be able to handle a lot of students in three days.

W: Probably. So now when you have a question, you can just show up during office hours.

M: Precisely. It's going to make my life much easier.

► Step 3 - Sample Response

The announcement says that business counselors will now be holding open office hours to answer student questions. The man thinks this is a great idea because he often has trouble getting in to see a counselor. He usually has to wait weeks for an appointment. He also thinks this new policy will solve the problem of counselor availability. Most counselors do not work every day during the week. Therefore, they are not always accessible each day. Now, according to the man, since they only need to be available for three days, all counselors should be available at once. Since most students only have questions that take a few minutes to answer, he feels like these three days will be enough to handle all the students.

Q4 Practice 1

► Step 1 - Lecture

W: Although it once wasn't thought possible, neuroscientists now believe that there are at least two different ways that a damaged adult brain can achieve some amount of recovery.

First, in certain areas of our brain . . . cells that have been lost through damage can be replaced by new ones. In a 1998 study of dead human brain tissue, researchers discovered that neurons, or brain cells, can actually re-grow themselves after they had suffered damage. Neurons that have not been damaged can divide into multiple neurons. This ability to regenerate can occur throughout our lives, allowing areas of the adult brain to recover to a certain degree after serious brain damage. Unfortunately, this ability can only occur in two areas of the brain.

The adult brain also has the unique ability to reorganize itself so that other parts assume the tasks of the damaged area. Take adults who have suffered from strokes, for instance . . . when the brain is damaged by a stroke, patients often lose such functions as motor control, memory, or the ability to speak and understand language. However, researchers have found that often what happens after a stroke is that uninjured—or healthy—areas of the brain will reorganize themselves to perform the same—or nearly the same—functions of the damaged areas.

► Step 3 - Sample Response

According to the reading, an adult brain has two ways to recover from brain damage. The professor explains that the first way is by brain cell re-growth. She says that sometimes an adult brain can re-grow cells that were lost through damage. She says that this can happen when undamaged brain cells divide to form new cells. She then explains the second way the adult brain can recover from brain damage—by reorganizing itself. The professor gives the example of those who have suffered from strokes. Sometimes when patients lose certain functions due to a stroke, the healthy parts of their brains are able to change. They can take over those functions that were found in the damaged parts of the brain.

Q4 Practice 2

► Step 1 - Lecture

M: Probably the most obvious downside of interactive television is that, like all television, it can influence a child's intelligence in a bad way. A recent study showed that children who are exposed to television at a young age score lower on intelligence tests than do other children, leading a pediatrics institution to conclude that children under age two should not be watching television as it could harm them cognitively. Despite this fact, interactive television systems are being made for children as young as toddlers. Studies have now estimated that children as young as a year old are watching over two hours of television a day. So interactive television simply increases the time our children spend in front of the TV, thus harming them in the long run. Interactive television will also allow advertisers to target children in new ways. For instance, certain interactive Internet games have already been developed which advertise products to children as they're playing the games. Products like cereal, chocolate chip cookies, and beverages have all been advertised through interactive games that children can play. This is a problem because children are inherently vulnerable to advertising. They usually accept what they see or hear as fact. With interactive television, because it often works through an Internet connection, advertisers can target children based on what they learn about them—their gender, age, even their behaviors and preferences.

► Step 3 - Sample Response

According to the reading, interactive television can negatively affect children's intelligence and allow companies to target children. The professor expands on this first point by saying that television has been shown to be harmful for children under the age of two to watch. Tests have shown that it can lower intelligence levels. Yet there are many interactive television programs out there made especially for children under two. He also says that interactive television allows advertisers to target young children. They can sell specific products to children based on what they learn about them through the Internet. Children are easily persuaded by these advertisements and accept what they see or hear as being true.

Q5 Practice 1**► Step 1 - Conversation**

- W:** Hi, Brandon. How's that lab report coming along?
- M:** All right, I guess. I've got all the data. There's just one problem. I have no idea how to organize it all. It's really frustrating.
- W:** Have you talked with your professor? I bet she would have some suggestions.
- M:** I'm sure she would. My problem is that I have class during her office hours. I can't just go talk with her about it. And the project is due in a few days.
- W:** Yeah, that doesn't give you a lot of time to speak with her. Couldn't you meet with her another time when you don't have class? I'm sure she could accommodate you by making an appointment.
- M:** Hmm . . . I suppose I could ask her to schedule an appointment outside of office hours. But I'm afraid she might be too occupied with other classes. I'm also extremely busy.
- W:** Well, you might be able to work something out. Or you could just email her your questions.
- M:** True. That'd be a lot easier.
- W:** But it might be hard to clarify what you're having trouble with through email.
- M:** Yeah, and I'd like to be able to show her my data. It's all in my field notebook. I haven't entered it in the computer yet. Like I said, I'm not sure of the best way to organize it.
- W:** Well, I hope you get help somehow. I know you've put a lot of work into this lab.

► Step 3 - Sample Response

The man wants to ask his professor questions about his lab report. However, he has class during the professor's office hours. The woman suggests that he either make an appointment to talk with the professor another time or email the professor his questions. I think he should schedule an appointment with his professor outside of office hours. His professor is probably aware that her students may have class during her regular office hours. I am sure she would be willing to accommodate those students. Also, by meeting with his professor in person rather than through email, the man can fully explain what he is having trouble with. He will be able to work directly with his professor to come up with possible solutions.

Q5 Practice 2**► Step 1 - Conversation**

- M:** So, did you decide to enroll in that creative writing course after all?
- W:** I still haven't decided. I'd really like to, but it's only on Tuesdays from 7 to 10 p.m. And I'm afraid to walk back to my car so late at night.
- M:** Yeah, I know what you mean. I get uneasy walking around campus at night sometimes, too. You know, you can always call campus security and ask for an escort.
- W:** I thought of that, but don't you have to pay?
- M:** No, not at all. It's a free service for students.
- W:** Really? Well, that's good to know. Still, though, I think I'd feel kinda awkward having a security guard walk me to my car. He'd have to do it once a week.
- M:** Yeah, I understand. You wouldn't know the person. Plus, it might be inconvenient to request a security escort once a week.
- W:** That's true. It'd be nice if I had a friend in the class.
- M:** You could always go to the class the first week and see if you know anyone. Maybe someone is walking the same way back as you are.
- W:** Yeah, I could do that. There could be several people in the class who also park in the student lot.
- M:** Then again, you might not see anyone you know. There's still the chance you might have to walk back to your car alone.
- W:** You're right. I'll have to think about it.

► Step 3 - Sample Response

The woman wants to take a creative writing class. However, it is at night, and she does not want to walk alone back to her car. The man suggests that she either ask for a security escort to walk her back to her car or find someone in class to walk with her to the student parking lot. I think she should call campus security and arrange for an escort to walk her to her car after class each week. That way, she will not have to risk walking alone if no one in her class is walking back to the student parking lot. Also, it is important that she have someone to walk with who knows how to handle dangerous situations and who can protect her.

Q6 Practice 1

► Step 1 - Lecture

W: Today, we enjoy tales where an unexpected person becomes the hero of the story . . . but this isn't true of Classical literature. Classicism is the period of Western literature that started during the time of the ancient Greeks and continued until about 1800 BCE. All Western literature written during this time has one characteristic in common: the heroes of the tale are never common or unexpected like today's heroes, but are always noble and of aristocratic birth. This is known as the aristocratic hero. We see the aristocratic hero portrayed again and again in Classical literature. Perhaps one of the first and foremost examples of the aristocratic hero in Western literature is Odysseus from Homer's *The Odyssey*. Odysseus is the perfect example of the aristocratic hero. He's a legendary Greek king who spends ten years trying to get back home to reclaim his throne. We can clearly see that despite the trials Odysseus undergoes, his noble nature is never questioned. In fact, Odysseus is favored by the Greek gods, and the gods of Greek literature hardly ever favor anyone that is not of noble birth. Only aristocratic people like Odysseus could become great Greek heroes.

Twenty-four centuries and several cultures later, we see the exact same type of aristocratic hero written about in plays by William Shakespeare. The heroes of the plays that Shakespeare wrote about include people like Julius Caesar and the English kings Richard III and Henry VI, but rarely is the main hero ever of common birth. What I'm trying to say here is that even though the views of the world had changed drastically since Greek times, the view of the literary hero remained the same: he had to be of noble birth. Even the heroes of Shakespeare's light comedies were members of England's high society.

► Step 3 - Sample Response

The professor says that all Western Classical literature has people of noble birth as its heroes. This is known as the aristocratic hero. The professor says this idea of the aristocratic hero lasted for the entire classical era. She mentions the Greek hero Odysseus as the first example of the aristocratic hero. He is a legendary king that is favored by the gods. The professor mentions that the Greek gods rarely favor characters that

are not noble. The professor then says that this characteristic of the aristocratic hero persisted for thousands of years. She mentions Shakespeare, who lived twenty-four centuries later, but who still focused largely on noble people as his heroes. Even the characters of Shakespeare's comedies were from England's high society.

Q6 Practice 2

► Step 1 - Lecture

M: There are several theories as to why certain ancient cities became prosperous, but one factor that cannot be disputed is the importance of water. The success of ancient cities depended on their water sources, and for this reason, many of the greatest ancient cities that we know of were located near prominent sources of water. Think about the great civilizations of Greece and Rome, both settled along the Mediterranean Sea. Historians suggest that water contributed to the success of ancient cities in two ways.

First off, water allowed certain cities to flourish because of its agricultural use. Having close access to fresh water allowed societies to grow their own food. The Sumerians, one of the earliest known civilizations, were able to settle down and form cities because they built irrigation ditches that transported water from the Tigris and Euphrates rivers to their crop fields. Living near a source of water, therefore, made agriculture possible. And having an agricultural system meant that the Sumerians didn't have to travel long distances to hunt and forage for food, giving them more time to develop arts and culture. It was their close proximity to water that allowed many of these ancient cities to thrive.

Living near water also allowed ancient peoples to develop trade. This was a critical component of civilizations like Greece and Rome because this trade made these cities prosperous. The Ancient Egyptians, for example, used the Nile River to carry valuable cargo, or material goods, from one end of their empire to the other. Eventually, extensive trade networks developed along such water highways and were used to import and export goods between civilizations. In order to participate in and prosper from this trade, it was therefore incredibly important for ancient peoples to build their cities along water routes.

► Step 3 - Sample Response

The professor says that the success of ancient cities depended largely on their location near large water sources. First, building ancient cities near water sources made them successful because water gave people a way to grow food. For example, the Sumerians watered their crops with water from nearby rivers. Because they did not have to search for food, they could devote more time to other things, like developing their culture. Living close to water also allowed ancient peoples to trade with each other. This made many of them prosperous. The Egyptians, for example, used the Nile River to transport goods between cities in their empire. Therefore, it was important for ancient people to build their cities along these waterways in order to trade with other civilizations.

Part 3

Chapter 7 Pronunciation

Stress on content words

► Step 1

1. However, I would definitely like to go to the park on my new scooter.
2. After this annual seminar is over, please do not forget to sign up for the one next year.
3. The small child was uncertain as to whether or not he should raise his hand.
4. I think it is better to keep a calendar in order to remember important dates.
5. My grandparents significantly influenced my happiness as a child.
6. Although I would like to take Saturday off, I believe it is more important that I go to the tutoring session.
7. So far, my experiences with skydiving have been fun and exciting.
8. The professor must conduct lots of research in order to publish his findings.

► Step 2

Even though some may think that fictional books are pointless, I believe that fictional books are a necessity for many people. First of all, fictional books can be used as teaching tools. For example, a lot of the

fictional books I have read involve characters who learn important life lessons. I can apply the lessons these characters learn to my own life. Also, fictional books provide us with a necessary means of escape. Sometimes we require a period away from reality. I feel that fictional books give us just the break we need to allow us to recover from life's difficulties.

Stress on function words

► Step 1

1. However, Roger should know how to wash his own clothes.
2. Actually, I did guess many of the correct answers on yesterday's test.
3. Fifty years ago, my grandparents were married in Hawaii.
4. I am ready to register for my classes next week.
5. Despite evidence to the contrary, George is certain that he will get picked for the part.
6. He is not the one with the cold. I am.
7. I could participate in the game, but I really don't want to play.
8. Should you decide to attend the seminar, you will need to present a report.

► Step 2

1. I know you think I cannot do it, but I really can handle an after-school job.
2. Last year, it both rained and snowed during the month of June.
3. Are you absolutely certain that you cannot make the meeting today?
4. She prefers cleaning her bedroom over cleaning her bathroom.
5. I have so much homework that I do not know where to start.
6. It is impossible to trust anything that my best friend says.
7. Marketing 413 is only for business majors.
8. The instructor taught the girl to play the piano beautifully.

Chapter 8 Stress and Intonation

Changing pitch for emphasis

► Step 1

1. It is a bad idea to wait until the night before a test to begin studying.
2. Teenagers should have certain restrictions on their driver's licenses.
3. Are you sure you do not want to have lunch with me?
4. That is a really large piece of cake.

► Step 2

1. The recreational center will offer a new self-defense course. It will teach young people how to protect themselves.
2. Butterflies are usually active during the day. Moths are more active at night.
3. I prefer not to have homework over the weekends. However, I do not mind having a little bit of homework then.
4. Everyone wants to buy a beautiful house. For this reason, houses that are ugly do not sell very well.
5. The fifth-grader was a very messy worker. Her partner was very organized.
6. The woman bought a new bag at the mall downtown. It had just opened a couple of weeks before.

Commas and series with *and* or *or*

► Step 1

1. The man's chores included walking the dog, doing the laundry, cleaning the bathroom, and washing the car.
2. Recycling campaigns have been very successful in our city, partially due to the friendly publicity from local newspapers.
3. I was not certain whether the text should be placed at the top of the page or in the middle.
4. Young people often experience pressure from outside influences to conform to certain trends, particularly when they get into high school.
5. He could have told his mother that he had spent the evening studying, but it would not have been the truth.
6. The man was not sure whether to pick the striped tie, the green tie, or the purple tie.

Chapter 9 Pausing

► Step 1

1. Although the Greeks were credited with the first Western democracy, neither women nor slaves had the right to vote.
2. During the debate, the woman proved that Jason's argument was flawed, thereby embarrassing him in front of everyone.
3. Those pineapples were, in my opinion, the best fruit that I had ever tasted.
4. Many critics believe that modern movies lack what early movies possessed, namely, a strong plot and good actors.
5. Common pets in American households include birds, cats, and dogs.
6. Nevertheless, I still do not agree that animal testing is worthwhile.

► Step 2

1. His ability to track creatures across long distances enabled the man to compete in an annual competition where contestants tracked certain animals.
2. Many scientists contend that the universe started with a big bang, releasing enormous amounts of energy to create the solar systems and planets.
3. In the last three years, Joe's friends not only supported him during his illness, but they did everything in their power to make life easier for him so that he could recover more quickly.
4. Neela, a foreign exchange student from India, came from a small village in the mountains that depended almost entirely on farming.

Pause and pitch

► Step 1

1. Remember that when the timer rings, it is time to give the baby his bottle.
2. Ultimately, a person's success in life depends on two things: hard work and dedication.
3. Albert Einstein, the scientist known for his strange hair, came up with his theory of relativity in 1915.
4. A college education should be provided for by the government, according to my economics teacher, Ms. Brown.
5. Since she had disobeyed her parents earlier, Emily was forbidden to leave her room for the rest of the night.

6. On the other hand, I do not believe that art should replace reading, writing, and arithmetic as a student's main priorities in school.

Practice Test 1

Question 3

- M:** Hey, Jane. What's going on?
- W:** Well, I saw an announcement in the paper today about Green Acres being shut down. I'm pretty disappointed.
- M:** Me, too. I liked that restaurant. Why are they closing it down?
- W:** They said that it wasn't popular with students, but that's probably because they didn't advertise the restaurant anywhere. I remember seeing exactly two advertisements around campus during the three months that it has been open for business.
- M:** You're right. I didn't know it was there for a long time.
- W:** They're also saying that the cost of the food is too high. It doesn't really seem fair. Obviously, the food is going to cost more because it's healthier for you.
- M:** That makes sense to me.
- W:** I mean, I'm happy to pay an extra dollar or two for my meals if I'm confident that what I'm eating is nutritious and good for me. And I know many students that feel the same way.
- M:** Well, perhaps we'll get lucky and they'll reconsider their decision.
- W:** I hope so. There's no other healthy restaurant like it here on campus.

Question 4

- W:** The vaccination against smallpox is one of the most successful ways vaccines have been used. About 200 years ago, smallpox was a common and deadly disease—if you contracted smallpox, there was a twenty to thirty percent chance that you would die. Yet when doctors introduced a vaccine for smallpox in 1796, it helped the body to develop a crucial resistance against the disease. This resistance occurred through two stages. Initially, the body developed antibodies, or special cells, to destroy the disease. In order to develop these antibodies, a weakened form of smallpox had to be administered to the patient through a

vaccine. Then the patient's immune system could recognize the disease. The weakened smallpox disease was not strong enough to kill the patient, but it was enough to cause the body to generate antibodies—specially designed cells to fight against smallpox. These antibodies were released into the patient's bloodstream and attacked the weakened smallpox disease, destroying it in the process.

After the first stage, the patient's body then stored some of these smallpox antibodies in case of a future smallpox infection. If the patient encountered the more lethal smallpox disease in the future, the patient had the antibodies ready to destroy the disease shortly after infection. In this way, the smallpox vaccine eradicated the disease. Today the smallpox disease has been killed off completely.

Question 5

- M:** Hi, Belinda. How are things going?
- W:** Not so good. I'm really tired.
- M:** You look tired. What's the problem?
- W:** Well, things with my roommate Samantha are getting worse.
- M:** What do you mean?
- W:** Remember how she was talking on her cell phone really late at night?
- M:** Yeah. I thought you had asked her to stop.
- W:** I did. She stopped for a while, but she's started doing it again. I haven't been sleeping well all of this week because of it.
- M:** Well, why don't you go talk to the resident advisor for your dorm room floor?
- W:** Well, I thought about that. The problem is, our R.A. is really strict. And Samantha has already gotten in trouble before with the R.A.
- M:** Really? What about?
- W:** Samantha's former roommate reported her to the same R.A. last year. I'm afraid that if I report Samantha again to the R.A., then Samantha will get in trouble.
- M:** I see your point. Although I do think that Samantha deserves to get in trouble for not stopping her behavior after she's been asked. Still, I understand that she's your friend.
- W:** Yes, she is. I just don't know what to do. I've got to get some sleep.
- M:** Have you thought about just switching rooms, then?

W: Yeah, but I'm not thrilled with the idea of having to pack up all my stuff.

M: It might be a lot of trouble. But if it means you get a good night's sleep, it could be worth it.

W: Maybe you're right. Thanks for the advice.

Question 6

M: Today we're going to discuss language divergence—how one language can diverge into multiple languages. It's generally believed by linguists that all the languages of today originated from a common proto-language thousands of years ago. A proto-language is the ancestor of modern languages. Now, as time passed and people began to split into different tribes, this original proto-language began to evolve independently in each tribe. The process of language divergence has begun. When a language begins to diverge like this, it usually goes through two key stages: first, it separates into multiple dialects, and eventually these dialects become two or more separate languages.

Dialects occur when one language begins to be altered into two or more versions. This may occur when people of one language adapt existing words to talk about new concepts. These alterations in language form what are known as dialects, different variations of the same language. Now, dialects are not yet separate, different languages. They're simply different versions of one language. For example, compare the speech of people in the United Kingdom to the speech of Americans. They're speaking the same language—English—but differently. Although they pronounce words differently and use different terminology, they are speaking different dialects of English.

Eventually, as time elapses, dialects can become so dissimilar from one another that they become their own individual language. French and Spanish are good illustrations of this. Each of these languages is different from the other. A Spanish person would not generally understand a French person without knowing the other's language. However, if you look attentively at both languages, you'll find that they do have many similarities. This is evidence that Spanish and French both evolved from one common language: a proto-language. Therefore, we can say that French and Spanish originated from the same language.

Practice Test 2

Question 3

W: Hi, Wallace. How's it going?

M: Not so great since they announced that the publications class was cancelled.

W: Oh yeah, I heard about that—were you planning on taking it?

M: Yes, I was. It was the last class I needed to graduate.

W: I'm really sorry.

M: Yeah. I mean, I realize that Professor Thomson is on extended leave, but I know of another person that could easily teach it.

W: Oh really? Another professor?

M: No. Actually, it's a former student of Professor Thomson's who took the publications class last year. She's a graduate student now, but I know she'd make a great student teacher.

W: Does she know a lot about publishing?

M: She probably knows more about publishing than most of the professors.

W: Didn't they say that not enough students were interested in the class, too?

M: Yes, that was the official announcement from the committee, but I know of at least ten other students besides myself that were planning on taking that publications class.

W: That is upsetting . . . I can understand why you're angry.

M: Well, I'm hoping that if I talk to the right people, I can convince them to reverse their decision.

Question 4

W: There are actually a couple of physiological differences which allow male songbirds to produce more complex songs than those of female songbirds.

First, there's a difference in the song-producing parts of songbird brains. It all comes down to a part called the robustus archistriatalis, or RA. This is an area of the brain responsible for song production in birds. As it turns out, the size of the RA in male songbirds is significantly larger than those in female songbirds. In zebra finches, the RA is at least five times larger in males than in females. So male birds simply have a better ability to produce songs because they have bigger song-producing mechanisms.

There's also a difference in the amount of a hormone, or chemical substance, found in the brains of male and female songbirds. This hormone is produced outside of the brain in many species. However, the male songbird's brain is able to produce this hormone on its own. In past studies, portions of male songbirds' brains were observed to produce this hormone. Hence, male songbirds have more of this hormone present in the brain, accounting for their more elaborate songs. And just to show that these hormones play a major part in birdsong, experiments have revealed that when this hormone is inserted under the skin of baby female songbirds, they too develop more elaborate songs.

Question 5

- M:** Hey, Jill, you look stressed out—what's going on?
- W:** Oh . . . hey. Yeah, I'm stressed. There's a big group project coming up next week in one of my classes. I'm expected to speak in front of a room full of other students.
- M:** Oh, that's right. You hate speaking in front of crowds.
- W:** Yeah, it makes me really nervous. I always do badly.
- M:** Well, is there any way that your group could do all the presenting for you? I mean, you could do most of the research and writing for the project. Then you would've done a fair share of the work, and could just let other members of your group do the speaking.
- W:** Well, I've considered it. I'm pretty sure that the professor would notice, though. It could hurt my grade, even if I did a lot of the research.
- M:** Yeah, you don't want to hurt your grade, that's for sure. How about you just do a lot of preparation for the speaking?
- W:** What do you mean?
- M:** Well, get your speaking portion ready far in advance. Then just practice it a lot until it's basically second nature to you. That way, you'll know it by heart and won't have to worry about messing up.
- W:** It's a good idea, but I've done that in the past and it just hasn't worked. I still get really nervous and mess up.

M: Well, I don't know what else to suggest. I hope you can figure it out. Good luck, Jill.

W: Thanks for the recommendations. I'll let you know how it goes.

Question 6

M: On our planet, we have a small quantity of plants that are carnivorous—rather than getting all their energy from sunlight, these plants actually consume insects. Carnivorous plants have evolved unique methods of trapping insects. They then digest them and get their required nutrients from the insects' bodies. So why don't we see these types of plants growing everywhere? Scientists have a theory about this. They believe that carnivorous plants require a special kind of environment in which to thrive: carnivorous plants must inhabit areas where the soil does not have many nutrients, and they must inhabit places with lots of moisture.

OK, first, carnivorous plants seem only to flourish in environments like swamps, where the soil quality is very poor. Oftentimes carnivorous plants that are cultivated by humans die, and scientists believe this is because they are usually given too many nutrients. Now, most plants require lots of nutrients in the soil to grow. However, carnivorous plants appear to be exactly opposite because they get their nutrients from the insects they catch, so they don't need lots of nutrients from the soil. Carnivorous plants seem to compensate for a lack of soil nutrients by getting their nutrients from their prey.

In addition, these plants need a lot of moisture in the air—they grow best in areas with high humidity: this makes sense when you think about the environments where these carnivorous plants evolved. Scientists have also observed that carnivorous plants that are allowed to dry out often die (although there are some exceptions to this rule). In fact, many of these plants require moisture in order to trap insects. For example, the pitcher plant uses moisture to drown its insect prey. So generally, carnivorous plants need a great deal of moisture if they're going to grow well.

Chapter 1 Organizing Information

01 Medical Science

M: Now, the book also addressed laser vision correction surgery, right? Let's talk about this part because, well, I don't feel that the book was entirely accurate in this area. So I want to correct some misunderstandings you may have about laser vision correction surgery.

First off, I've got good news for anyone who wants to undergo laser vision correction surgery. In general, the cost for the procedure is decreasing. One expert that I know said that laser vision correction surgery on average has decreased by thirty percent in recent years. The procedure is still going to cost some money, but not nearly as much as it used to. This is because of two factors. First, the costs for basic equipment are lowering because technology is becoming more available. Also, there are more laser eye surgeons out there, so the competition is rising. Now doctors are being forced to compete in order to get patients, and more competition almost inevitably results in lower prices.

The book also made it sound like there were all of these post-operative issues and problems, right? Now this was just ridiculous. There are only a few known cases where someone's cornea became, you know, detached, and guess what they were doing? Really extreme stuff—for instance, one guy was climbing Mt. Everest when his cornea became detached; apparently, the high altitude created a pressure difference or something. Oh, and as for the healing time, well, you can't tell how someone is going to heal, but still, average healing time really isn't that long—two or three days, at most. The post-operative concerns really aren't greater than any other surgical procedure.

Finally, the book's last point was the length of time that the corrective procedure was effective for. It's extremely uncommon for people to have to go back in just months or even years after their surgery. In fact, we have a number of cases where the corrective procedure has lasted over twenty years, so it's not really fair for the book to claim that the procedure is only good for a limited time since there's lots of evidence that suggests otherwise. So on all three points, the book was pretty much unclear or just plain inaccurate. The equipment's already pretty inexpensive, and it's just getting

cheaper, post-operative problems really aren't that big of a deal and it looks like the procedure will last for several years after surgery. I personally think we'll be seeing the laser vision correction surgery become a lot more popular in the next few years.

02 Education

W: Now, I want to address a debate among universities today. An increasing number of universities have shifted their focus away from research and toward better teaching methodologies. Basically, these schools are encouraging their faculty to focus on teaching methods rather than on research methods. I think this is a good thing. Let's talk about why.

Colleges are frequently concerned about their place within national ranking systems, but today's ranking systems are now more concerned with teaching. Many believe that ranking systems focus entirely on research—you know, publications, new discoveries in a field, stuff like that. Granted, this is the way rankings used to be, but now most ranking systems are starting to pay attention to how a university teaches its students. So the idea that a college's ranking is based mostly on its research used to be true, but not so much anymore. Also, nowadays public intellectuals—professors famous for their accomplishments—a lot of them are focusing more on teaching what they know to people rather than on conducting a whole lot of research. They're the type of professors who make their knowledge accessible. A professor's chance of becoming a public intellectual is far more likely if he or she makes a special effort to make research relevant to the public. That's what good teachers do. They take material and make it not only understandable but also interesting. In a way, these types of public intellectuals are teaching the public through their work. It's far more important to create more materials that can teach the public than tons of materials that only a choice few can understand. It's all about quality, not quantity. In other words, you don't need professors producing lots of difficult-to-understand, academic research—you need them to produce materials that the average person finds engaging.

Finally, those who spend more time on teaching become better teachers. One popular idea about

universities is that research is directly related to the quality of education. Now, I am a professor—take it from me, my ability to teach you guys and my ability to conduct research are entirely unrelated. One of my fellow colleagues in the department—I won't name names—he's a great researcher and he produces some of the most incredible work in his field, but the guy . . . I've sat through several of his lectures and he, well, he just really can't deliver an engaging lecture. In many cases, research and teaching are entirely unrelated. Ultimately, I think it's better for both the students and the university to have professors focus on teaching methods. Essentially, the university is here to help you guys learn, right? So it's our job to teach you.

03 Environmental Science

M: In many countries, stores have been encouraging people to bring their own reusable bags to carry groceries for years now. However, this idea of reusable shopping bags is just becoming popular in other countries, and I'm really glad they're finally getting around to pushing for this because, actually, there are a whole lot of benefits that will occur if we get rid of plastic grocery bags. First, there's the huge issue of waste—I mean, think about the plastic grocery bags that the store gives you. How many people save those? At my house, we have a lot of them collected, so any more that we get end up getting . . . we just throw the extra bags out. And you know where all of that ends up . . . that's right, it goes straight into landfills. Also, a lot of bags don't even make it into landfills—instead, they end up littering the environment. This makes it easy for animals to get caught up in the bags. Also, the bags take several years to decompose . . . sometimes, it could take up to 1,000 years. It's just not a good situation. Plastic bags are a huge source of waste and, well, they are not necessary. Besides environmental benefits, there're also the financial considerations that we have to factor in when we talk about getting rid of plastic bags. Now, granted, plastic bags only cost one cent—that's not much at all. However, that can add up significantly when you're talking about a busy grocery store that serves thousands of people in

a day. Considering that every person uses three or four bags, you're looking at a noticeable bunch of money at the end of the day, right? If we started to discard plastic bags and adopt reusable bags, then there's a good chance that the cost of groceries would go down a little bit, since grocery stores will no longer have to pay for thousands of bags each week.

Finally, we would save a lot more petroleum and natural gas if we got rid of plastic grocery bags. You might not know this, but each year it's estimated that 380 billion plastic bags cost the world 1.6 billion gallons of petroleum. So basically, we're using our precious nonrenewable resources to create bags that many people only use once or twice before throwing them away. In contrast, renewable bags will save us billions of dollars in natural gas and petroleum, allowing us to use the money and these resources for more worthwhile purposes.

So really, there are many good reasons to discontinue the use of plastic grocery bags. It would significantly benefit the entire world in environmental and financial ways.

04 Psychology

W: OK, so the inevitable question arises: what is an effective method parents can use to discipline their children? How do you tell a young person unable to understand complex language that a particular act is wrong? As I'm sure some of you remember from your childhood, spanking is a pretty common way to discipline a child, but is it effective and, more importantly, is it a good practice? In my opinion, it's not. To start out with, simply spanking children doesn't really teach them morals. If a child misbehaves and I spank him, the justification is that he will learn that his behavior is wrong and will stop doing it. This is incorrect logic, though—I mean, you're not sitting down and explaining to children which actions are right and wrong. Instead, you're spanking them on the bottom and expecting them to discover the moral connection themselves. For children that are just learning how the world operates, expecting them to make this kind of inference is just . . . well, it's not reasonable. In addition, spanking really isn't a better disciplinary

tool than other punishments like time-outs. The fact of the matter is, all the studies that child psychologists have performed have pretty much concluded that, well . . . spanking isn't more successful at all. In actuality, it's probably a lot less successful. At least with time-outs, children have a time to think about what they've done and remember not to do it in the future. This isn't true with spanking—usually the children forget about the spanking just five minutes after it has happened. Time-outs are actually far more successful for long-term behavior correction.

Additionally, when children are spanked, they don't comprehend it as a punishment, but instead learn that it is all right to use violence to resolve a situation. Parents that spank children understand it as a quick solution to a problem because with a simple spank on the bottom, the children learn to behave, or so the reasoning goes. But spanking is not a universal punishment, and children don't always make the connection between the spanking itself and their bad behavior. Since the children don't recognize the association between the two, they merely comprehend that the parent is using violence to express anger. And since parents are the first people that children learn from, they are more likely to use violence to communicate their own anger in future situations.

So really, all of the conventional wisdom about spanking is pretty much inaccurate. Spanking is, well . . . it's kind of ineffectual. It doesn't benefit children at all; and parents really shouldn't be practicing it any more, with the knowledge we have now.

Chapter 2

01 Zoology

M: Why don't we revisit the topic of zoos, which I think have gotten a pretty bad reputation lately. Obviously, whenever we're working with animals, we have to ask ourselves if we're really doing what's best for them. And when it comes to zoos, I think they are beneficial to animals in several ways.

For one thing, zoos are an incredibly effective tool for protecting endangered species and helping them breed. Take the California condor, for

example. In 1987, there was only one of these birds left in the wild. Faced with the possible extinction of the species, scientists implemented a captive breeding program. These programs basically encourage endangered animals living in zoos to breed. Then after they have reproduced, they are reintroduced to the wild. To make a long story short, the program was very successful: the scientists had no problems getting the birds to breed in captivity. Now, the population of the bird has increased to about 330. Without zoos, the California condor would have probably disappeared quietly from the face of the Earth.

Next, opponents of zoos say that they harm animals by removing them from their natural habitats. Well, in defense of zoos, I have to mention that many modern zoos have a "natural habitat" philosophy. What this means is that all of the zoo's exhibits are designed to resemble the real habitats that animals come from.

Just last week, for example, I read about a zoo in North Carolina that has a "natural habitat" philosophy: The zoo has already built a sprawling thirty-seven-acre exhibit on animals of the African plains. Here the animals enjoy all the same comforts they would in the wild, and they can receive aid from zookeepers if they ever need it. So really, now animals in zoos are more comfortable and safer than ever before.

Finally, zoos provide us with the best way to study animals because they allow us to observe creatures that we wouldn't encounter otherwise. I mean, seriously, how many times have you seen a silverback gorilla in your backyard? Probably never. However, thanks to zoos, we can view these and many other types of animals, live and in the flesh. Trust me, as someone who has studied animals for a good portion of his life, I can say with certainty that even if there are tons of books relating to zoology, really, nothing beats seeing a creature in real life.

There was a time when zoos weren't as developed as they are now, but I don't think that should keep people from visiting newer facilities. I think that when we learn the facts about zoos, it's pretty obvious that they are actually beneficial to animals.

02 Paleontology

W: Then there's the woolly mammoth, a prehistoric elephant-like animal that's now extinct. Mammoths create many difficulties for paleontologists because, well . . . it's hard to really explain how the woolly mammoth became extinct. One of the most accepted theories today is that mammoths went extinct because of a combination of climate change and overhunting. I mean, it is true that we've seen this happen with a lot of other animal extinctions. However, after taking all of the facts into account, the explanation that mammoths went extinct from just these factors isn't very logical. First off, there's no evidence which even suggests that the changing climate negatively affected mammoths. Don't get me wrong, mammoths clearly weren't suited for life on the equator in extremely warm environments, but who's to say they didn't just move up north to Arctic regions. That's where we find a lot of their skeletons—closer to the poles, of course. It's just not clear that the environmental change would have affected them enough to push them into extinction. As far as predators are concerned . . . other than human tribes, woolly mammoths really didn't have any natural predators. Woolly mammoths were the size of elephants, so most predators weren't large enough to hunt them. It's highly improbable that even the great saber-toothed tigers would have been able to take down a mammoth. I mean, saber-toothed tigers were the size of modern-day lions, and it's not too common that you hear about lions killing full-grown, healthy elephants, correct? However, more importantly, recent evidence has revealed that the bite of saber-toothed tigers was fairly weak. The bite of a saber-toothed tiger is estimated to be about one-third the strength of a lion's. So there's no simple way that the saber-toothed tiger's large teeth could have pierced a mammoth's thick skin. This suggests that saber-toothed tigers did not frequently hunt woolly mammoths, and therefore they weren't a significant factor behind the woolly mammoth's extinction. Additionally, there is no rational reason why human tribes would have needed to hunt mammoths extensively. It's probably correct that humans could've used mammoths to create many different objects. Nevertheless, this doesn't mean that they were overhunted to extinction simply because

they were good to hunt. There were many other animals that could have been hunted to create the same type of objects—animals like buffalo, giant sloths, or bears, for example. These creatures also would have been a lot easier to hunt than an enormous mammoth.

So, the whole theory that mammoths went extinct simply from climate change and overhunting has a lot of problems. I'm not certain why mammoths became extinct, but this particular argument is hard to believe, when you look at the bigger picture.

03 Geography

M: So basically, a dam restricts the normal flow of water and has a lot of negative side effects. Sometimes, in order to reverse these side effects of dams, we'll release a lot of water from the dam at one time—in other words, we'll flood the river. But rather than solving the problems introduced by the dam, this flooding process is actually extremely bad for the river. Since dams kind of collect the silt and don't let it run downstream beyond the dam, the river below the dam doesn't get many of the nutrients. Some think flooding a river would introduce more silt into the river, but it doesn't really fix this. Sure, flooding lets a bunch of silt out from the dam, but the increased flow of the river just carries the silt away and in some cases, the larger flow of the river . . . it can actually remove more silt from the bed of the river below the dam. That's clearly not good for the river, since silt has a lot of nutrients important to life in and along the river. Flooding the river also destroys natural sandbars. At first, you'd think that flooding the river would restore natural sandbars—after all, a large flow of water does carry lots of sand. However, actual tests have shown that it just doesn't work like this. Once again, we have an unusually large amount of water running down a river at once, and it turns out that sandbars aren't restored, but in many cases they're totally wiped out. See, the flow of the river is so great that the sandbars just get worn down during the flooding process and rather than restoring sandbars and the habitat, it actually wears them down significantly. Again, clearly not good. Finally, flooding a river also destroys the plants along its banks. We might assume that this would

help establish plants along the river's banks. At first, it seems like this could occur—I mean, you're moistening the soil along the bank and stuff—but the reality of the situation is that it just doesn't work like that. In fact, it's quite the opposite—what basically happens is that the river just uproots a lot of the plants already established along the bank and does nothing to help establish new ones.

Looking at the actual results of these flooding procedures, it's pretty apparent that flooding the river below a dam actually harms the river quite a bit. From removing silt to eroding sandbars to uprooting plants on the river's bank, artificial flooding just ends up hurting rivers.

04 Education

M: OK, let's take a few minutes to discuss a subject I'm sure all of you are pretty familiar with . . . college tuition. Pretty much every way you calculate it, the cost of college is increasing dramatically for students. And it's continuing to get more and more expensive for the average student to pay for an education. Now, let's talk about why it might be a good idea to get rid of college tuition altogether because, after all, it's a growing concern for everyone sitting in this room. You guys might not be aware of it, but several people are just choosing to avoid college altogether and pursue a career instead. You want to know why this is the case? It's because students who attend public colleges currently pay over \$5,000 every year on average. That translates to approximately \$23,000 in total costs to attend a four-year public college. Now that's a lot of money—it's not just pocket change that you can work off in a short time or pay off by working a part-time job. Private colleges are even more expensive. The cost of a four-year private college has recently increased to over \$30,000 per year. That's over \$120,000 for four years! However, if college tuition was completely eliminated, almost all high school students would be able to attend at least a four-year public college.

In addition, numerous students who end up leaving college early claim that financial burdens were one of the biggest considerations in their choice not to finish their degree. A study taken several years ago showed that a little over half of people

who attended a four-year college actually graduated six years later. To give you a better idea of why this is such a problem, statistics show that one in every four freshmen who attend college drops out in the first year. If we could eliminate college tuition, it would help many of the people who attend college to actually graduate. Then we would have a significantly more educated population who could better contribute to our society.

Finally, if you all graduate—I don't mean to frighten you, but your typical college graduate ends up with an average of \$19,000 in debt—that's enough for a down payment on a house. You'll probably be paying an average of \$200 per month for over ten years. I bet you could think of many more worthwhile ways that you could be spending your money if college tuition was eliminated.

So, the cost of college is discouraging numerous students from getting a college degree. And many of the well-paying careers require a college degree to work in them. Isn't it pretty obvious why this is such a problem?

Chapter 3 Making Connections

01 Global Issues

M: Nowadays, everywhere you look, you can find organic food. It's become very popular in recent years and more and more people are switching to organic produce. However, I think that people have a lot of misconceptions about organic food. The truth is, organic food isn't really that great after all. To start with, organic food is supposed to be really wonderful for health because it doesn't expose people to artificial chemicals. That doesn't mean they don't use natural chemicals. In fact, many organic farmers use a pesticide called rotenone. It comes from plants, which is why it's classified as a natural chemical rather than artificial. And let me tell you, the effects of this chemical, as far as I can tell, are just as bad as any artificial pesticide. According to reports, it's highly toxic to humans and has even been linked to Parkinson's disease. Organic farmers should be a lot more forthcoming about this information, as it could seriously affect the buying public.

Next, let's talk about the effects of organic farming on the environment. Research shows that organic

farms produce twenty percent less food than conventional farms, so organic farmers have to prepare a lot more land in order to produce the same amount of food. So, basically, what a lot of them do is go out and cut down forests, which leaves us with a completely different environmental problem. Deforestation can lead to decreased biodiversity because it takes away the homes of animals, as well as erosion. I think it's good to cut down the number of chemicals we put into the ground, but we can't just ignore the other environmental ills that organic farming brings about.

Lastly, I think it's very misleading to say that buying organic food helps out small-time farmers. Let's be honest now: since organic foods became so popular, all of the big corporations are trying to produce organic as well. In fact, since 1982, most of the small organic farms have been bought by huge companies. Why don't we see big name brands on organic foods then? Because they sell the food through their sister companies. The next time you buy organic, take a look at the label. Chances are, it didn't come from a small farm at all.

I imagine that in the future, we will continue to see more organic products popping up in our local supermarkets. However, when it comes to this issue, I think it's worth considering all of the facts: organic farming is undoubtedly less beneficial than supporters of the movement make it seem.

02 Technology

W: As engineers, we're constantly on the lookout for new sources of energy, correct? Many alternatives to gasoline have been suggested, and one of the more popular alternatives is the idea of using hydrogen cells as a new source of energy. Although hydrogen cells sound beneficial, there are several reasons which suggest that hydrogen's really not an efficient energy source.

First of all, hydrogen isn't readily available in a pure form. One of the most common sources of hydrogen is water, but we can't use water by itself to create fuel. Water is not made up of hydrogen only; it is also made up of oxygen atoms. However, we need a pure form of hydrogen in order for it to work as energy. You cannot get this with just water. So, even though hydrogen might technically

be located in a number of areas around the world, it's not really available in a form that we can just immediately use.

Hydrogen would also be very dangerous to place into vehicles. Many people criticize the use of gasoline in vehicles because it is flammable. Well, let me tell you, hydrogen is one of the most flammable elements we know of—I mean, we make bombs out of hydrogen. If you had a truck of hydrogen fuel cells and it got into an accident on the road, you would have a massive explosion and gasoline, by comparison, is pretty safe. Sure, gasoline is flammable, too, but it won't explode . . . it will just burn. To claim that hydrogen is safer is just really misleading.

On the surface, it also seems like hydrogen is more efficient to use in cars than gasoline is, but in actuality, it's a lot less efficient. Remember how I said before that hydrogen is not really available in a pure form? Well, we can get hydrogen into a pure form, but to do so requires a lot of energy. The end result is that gasoline ends up being far more efficient than hydrogen, when you take into account the amount of energy it takes to get hydrogen as it exists in the environment into a form we can use in our vehicles. So again, to maintain that hydrogen is more efficient than gasoline is misleading—it doesn't consider the purification process, and this process requires a lot of energy.

The facts speak for themselves: hydrogen is not as available as it might seem, since it exists in unusable forms. It isn't safe at all and, well, it's not as efficient as gasoline when you look at it more logically. We definitely need to find alternative sources of energy, but hydrogen cells don't look like they're the solution.

03 Criminology

M: It seems like you can't go a single day without hearing about some case of identity theft sweeping the nation. It is often portrayed by the media as a huge problem. However, there are a lot of misperceptions about identity theft and when you look at it, well, it's not as big of a problem as the media make it out to be.

The biggest concern for many people is that their information is out there in so many places. You'd think it would frequently be at risk of being stolen. However, the fact is . . . well, this information is

actually very rarely ever stolen. There are literally millions of databases with consumer information on them, and a very, very small percentage of these databases actually makes it into the hands of identity thieves. So . . . all that information that is supposedly being stolen constantly? Well, the amount of data that thieves steal is really insignificant. Identity theft is not as common as people think it is.

Next, we hear a lot about how our information can easily be misused by thieves. In reality, the data that the thieves actually get is pretty negligible—usually, it's just a small, insignificant bit of information about a person. For instance, you may have heard a few weeks back about a huge firm losing information about one million people. Well, what they didn't tell you is that the lost information just had a few minor details about the people—basically, their names, their addresses, and what kind of electronic products these people had bought in the last five years. Now, if you're an identity thief, what can you really do with that kind of information? Not much, right? What I'm saying is that . . . well, it's very uncommon that thieves get enough information to open a credit card account in someone else's name.

Many companies that deal with money are also creating safeguards to prevent identity thieves from stealing someone else's savings. They've adjusted their policies in the past few years to prevent this kind of identity fraud. For instance, say someone has your personal information and is trying to empty your savings account. Most of these companies will first make the person come in and sign something to prove he is who he says he is. So having money stolen is not likely at all, even if thieves have your information.

In the end, identity theft is a pretty overblown concern. The amount of data stolen is relatively small, most of the data that is stolen isn't usable, and companies are adjusting policies to safeguard your identity.

04 Business

W: OK, while we're on the subject of government intervention, let's quickly address the minimum wage. It turns out that there are many people who are against having a minimum wage at all.

However, the logic that they use to argue against it just doesn't hold up when you analyze it. So let me explain why these common arguments don't work and why we should keep the minimum wage.

Now the first thing I want to point out is that minimum wage laws do not raise unemployment rates. You see, one common misperception about the minimum wage is that it makes workers too expensive for small businesses. However, when you look at the actual rates of unemployment before and after minimum wage laws are passed, you'll see this just isn't valid. Basically, when a minimum wage law is passed, the unemployment rates don't go up or down—they remain pretty steady. This suggests that even small businesses can adjust to minimum wage laws without much trouble. So the fact of the matter is that minimum wage has no impact, positive or negative, on employment rates.

Now, it's true that many companies do move their manufacturing operations to foreign countries, but this has nothing to do with minimum wage laws. In fact, most countries that these companies move into already have minimum wage laws. So the companies still have to pay the workers they hire a certain amount of money. The reason companies move is because of the cost of living in foreign countries. If the cost of living there is high, foreign companies won't move there. However, if the cost of living is low, then owners of foreign companies believe it would benefit them economically to move there. In other words, the fact that companies move to foreign countries has nothing to do with minimum wage laws and everything to do with the cost of living.

Finally, the fact that certain companies will buy machinery to do work that a human worker could normally do has absolutely nothing to do with the minimum wage. Even businesses in countries without minimum wage laws typically choose machines over workers if it means saving money. A company is going to try to save money wherever it can, and if that means buying automated machines over hiring workers, then that's probably what it's going to do. Minimum wage doesn't increase or decrease the likelihood of a company to adopt technology at all.

OK, so to recap, the problems of a minimum wage do not outweigh its benefits. Economically,

the minimum wage doesn't affect a country in a negative way. So, there's really not that much of a reason to get rid of the minimum wage.

Practice Test 1

M: Depression, as you all probably know, is a growing concern in today's world. By nearly every account, rates of depression are increasing dramatically, and the field of psychology is struggling to deal with it. There's still a lot of debate over how we should treat depression, but many doctors are prescribing medication to depressed people. I, on the other hand, strongly believe that medication is not the answer.

I think one of the biggest problems here is that people often mistake the cause of depression. Doctors think that depression is generally caused by chemical imbalances in the brain. This idea is way too simplistic, I feel, because there are lots more factors that play into depression. Really, any sort of negative experience can set off depression in a person—maybe it's the death of a spouse, or a brother, sister, or parent. At any rate, experiences are by far the most common cause of depression, not chemicals. Yet medications are designed to treat chemical imbalances, not to help someone through a depressing situation.

This brings up another common misperception of medication—that it's the best way to treat depression. In support of this idea, clinical trials are most often cited. However, I just really want to emphasize this—medications are just a short-term solution that artificially makes the patient no longer feel depressed. Medications are generally not effective over the long term. Often what happens is that the medication will work for a while, but over time it will begin to wear off. The person is left feeling as depressed as he did before. So to say that medication is the best treatment is pretty shortsighted and, well . . . inaccurate. Therapy, as opposed to medication, allows the patient to address the root of their depression and come to terms with it. Medication merely helps them suppress and ignore it.

So, finally, people that prefer medication argue that it's less disruptive than therapy or other

treatments. Since the patient only has to take a few pills, it's easier for them to carry on with their day-to-day life . . . or so the argument goes. Unfortunately, the side effects of medication can be really, really disruptive—medications can interrupt sleep cycles, affect your appetite, all sorts of things. People react differently to different medications, so we really have no idea how bad the side effects will be for a person. There are also many side effects that we can't foresee in short clinical trials. To suggest that medications don't disrupt someone's life is misleading.

When you consider all of these factors, it's pretty clear that medication is not the best treatment for depression. I would advocate a different type of treatment for those suffering from depression.

Practice Test 2

W: I want to clear up a little debate that's been going on recently. You've all probably noticed the appearance of organic fruits and vegetables in supermarkets, right? Well, people tend to believe that organic produce is healthier than traditionally grown produce. After all, that's why they purchase them. However, contrary to popular opinion, traditionally grown produce isn't any less healthy than organic produce is.

There's this common belief that the chemicals used on traditionally grown produce are harmful to us, but in reality, your typical vegetable or piece of fruit in a supermarket contains just a tiny amount of chemicals. Produce is always washed before going to the market, and then it's washed again when it's put on the shelves. On top of that, most people wash their fruits and vegetables before they eat them, too. All of this washing, it removes pretty much all of the chemicals that you might find on produce. And even if the produce wasn't washed all of these times, it would still probably be OK for you to eat—see, these chemicals haven't even been shown to be harmful to humans in huge doses. Either way, you're not likely to ingest harmful chemicals from traditionally grown produce.

In addition, in order to protect the environment from being negatively affected by these chemicals, there

are lots of laws that limit the type and amount of chemicals that can be used on produce. In fact, really strict laws will penalize farmers if they happen to pollute any water sources with their chemicals. There are also very few recorded instances of agricultural pollution and, in general, farmers are extremely careful with this kind of thing. The concerns about chemical pollution are understandable, but they're not very likely to occur.

Finally, the chemicals of traditionally grown produce don't have much of an effect on the environment around them. They are designed to target only specific weeds and insects, not other plants and animals in the area. Studies have even been performed which have proven that these chemicals are not that harmful to the surrounding ecosystems. Now I will admit that farms that are not managed properly can have a huge impact on the surrounding areas, but this goes for organic and traditional farms alike. The chemicals themselves really don't make a farm's environmental impact any worse at all.

When you look at all of the factors involved, you'll realize that the chemicals used on traditionally grown produce are virtually harmless to all but certain pests. So the next time that you're all out shopping for food, don't worry about choosing traditionally grown produce over organic produce. They're both just as good.

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READING / LISTENING / SPEAKING / WRITING

Answer Key

Reading

Note: Graphic organizer answers are suggestions only and may not match students' answers exactly.

Preview Test

- | | | |
|---------|---------------|---------|
| 1. (A) | 2. (B) | 3. (D) |
| 4. (A) | 5. (B) | 6. (D) |
| 7. (B) | 8. (A) | 9. (A) |
| 10. (C) | 11. (D) | 12. (A) |
| 13. (D) | 14. (A, E, F) | |

Chapter 1 Fact Questions

01 Astronomy

Earth's Atmosphere vs. Titan's Atmosphere		
Earth	Both	Titan
<ul style="list-style-type: none"> Evaporation of water produces atmospheric events ITCZ exists along equatorial regions 	<ul style="list-style-type: none"> Atmospheric forces result in inter-tropical convergence zone 	<ul style="list-style-type: none"> Evaporation of methane produces atmospheric events ITCZ exists along middle and polar regions

1. (B) 2. (A) 3. (D)

Summary: The passage compares and contrasts the atmospheres of Earth and Saturn's moon, Titan. The Earth's atmospheric conditions determine cloud formation, precipitation, and wind direction. On Titan, methane vapor behaves in a way similar to water vapor on Earth. Due to the moon's lower temperatures, methane on Titan coalesces into a liquid, which then becomes a vapor and mirrors the behavior of water on Earth. Unlike the concentration of clouds and precipitation along the Earth's equatorial region, however, the liquid methane on Titan moves toward its poles, where it is then deposited as precipitation. By studying the evaporation of methane and its formation into clouds on Titan, scientists can hone their understanding of atmospheric science.

02 Environmental Science

Preventing Water Pollution with Soil Analysis		
Problem	Solution (step 1)	Solution (step 2)
Harmful bacterial contaminants are polluting water sources	Soil samples are taken from areas and evaluated for concentrations of bacteria	Experts return to high-risk areas and help owners take preventative measures against contamination

1. (B) 2. (D) 3. (A)

Summary: The passage explains how some governments have recently developed testing methods to prevent bacterial contamination of lakes, rivers, and oceans. These methods are being employed to identify likely sources of water pollution and determine where preventative measures are needed, especially in the agricultural industry. By analyzing soil samples for high concentrations of bacteria, experts can then take measures to stop contamination before it occurs.

03 Business

Equity Theory		
Definition	Application	Criticisms
Individuals act to correct perceived inequities in relationships with others	To help managers better understand employees' motivations	Fails to account for aspects of personality that may influence choice to correct inequity
		Does not address how individuals act in response to relationship with system or institution

1. (C) 2. (A) 3. (A)

Summary: The passage discusses equity theory. Equity theory attempts to explain the behavior of individuals by arguing that they strive toward equilibrium in certain situations. Individuals seek to fix inequities that they perceive in their relationships with other people. It has been used as a tool for business management to help employers understand their employees. However, it fails to consider quirks in personalities or feelings of unfair compensation among fellow employees within a system. These weaknesses highlight the impractical aspects of equity theory, such as oversimplification.

04 Biology

Thermoregulation	
Types	Explanation
Changing rate of metabolic heat production	By making muscles move and burn energy, hypothalamus can generate heat
Adjusting heat exchange between organism and environment	By adjusting the size of blood vessels near surface of skin, hypothalamus can control amount of heat lost to environment
Cooling with evaporative heat loss	By using sweat or other liquids on skin, terrestrial mammals can use evaporation to decrease temperature
Relocation or hibernation	By practicing certain behaviors, mammals can control heat lost or gained from environments

1. (A) 2. (D) 3. (C)

Summary: The passage describes how mammals have developed a sophisticated nervous system to control their internal temperature. Thermoregulation allows for temperature regulation through a series of physiological responses controlled by the hypothalamus. The hypothalamus can signal the muscles to metabolize substances to produce energy and can cause blood vessels to constrict to reduce heat loss. Because of thermoregulation, mammals can maintain a relatively constant temperature in warm and cold conditions alike. This allows for freedom from the environmental conditions that affect other animals like reptiles, but it requires a great expenditure of energy.

05 Environmental Science

Flood Control	
Methods	Explanation
Levees	River banks enlarged to contain floodwater
Damming	Floodwaters collected in reservoir and released in slow, controlled manner
Channelization	Alters riverbed or diverts river into new channels to increase flow and volume

1. (C) 2. (D) 3. (D)

Summary: The passage describes ways in which humans have tried to artificially control the flooding of rivers in the modern era. During the spring and summer months, heavy rains or melting snow that has accumulated in the mountains cause flooding. Over the centuries, people

have tried to manipulate rivers and the environments around them to minimize flooding in their communities. People attempt to mitigate the effects of flooding through levees, dams, or channelization. However, these measures restrict the deposit of sediments, or are costly and harmful for the environment. By controlling construction within the floodplain and managing debris in areas prone to flooding, we can adapt to rivers' natural behavior.

06 Art History

The Lithographic Process			
Steps			
Special crayon marks a design on the surface of plate	Plate is treated in acid bath to fix marked design on plate	Plate is immersed in water—marked portions repel water, other parts soak it up	Plate is removed from water and inked—marked portions absorb ink, water-soaked portions repel it

1. (B) 2. (D) 3. (D)

Summary: The passage discusses the process of lithography. Discovered in the 1790s, lithography is unlike other printmaking techniques in that it has not had such a long development toward its modern adaptation. Printmakers use a grease crayon to draw a design on a plate of limestone or aluminum. The plate is then treated with acid, saturated in water, and inked. Parts of the plate soaked in water repel the ink. When the plate is pressed onto paper, only the greased parts soaked in ink print on the page. By changing the concentration of components in the grease crayon, the amount of ink taken by the plate can be manipulated. One can also change the tone of ink on an image, a technique not possible through other printmaking methods. The process is cheaper and less labor-intensive than other printmaking techniques and quickly gained popularity.

Chapter 2 Negative Fact Questions

01 Photography

Daguerreotypes vs. Calotypes		
Daguerreotypes	Both	Calotypes
<ul style="list-style-type: none"> • Developed on metal plate • One of a kind • Fragile • Clear details 	<ul style="list-style-type: none"> • Revolutionized photography • Reduced exposure times • Made photographs available to the public 	<ul style="list-style-type: none"> • Developed on paper • Used negatives • Multiple copies could be made • Blurred images

1. (A) 2. (C) 3. (D)

Summary: The passage describes two early, very different photographic processes that broadened the scope of photography. Previously, developing photographs had been a long and tedious process. Daguerreotypes, invented in France, were very clear and detailed. They were developed on metal plates and were one of a kind. However, the mercury fumes used to form a latent image were hazardous to the health of the photographer. Calotypes were developed on paper and were faintly blurry. They used negatives and were able to be reproduced multiple times. Calotypes were less fragile than daguerreotypes, making them more popular among travelers. Concepts from both processes are still used in modern photography today.

02 Geology

The Effects of Temperature on Elevation	
Cause	Effects
Increase or decrease in temperature can affect elevation by changing density and buoyancy of crustal rock	Higher temperatures cause higher elevations as heat reduces density and increases buoyancy
	Lower temperatures cause drop in elevation as density thickens and decreases buoyancy

1. (C) 2. (D) 3. (B)

Summary: A new study has shown a correlation between the temperature of the Earth's crust and elevation. Scientists had previously thought that variations in crustal rocks were the reasons for elevation and buoyancy in certain areas. Heat in the Earth's crust increases elevation, while cold decreases it. Observing temperature, composition, and crustal rock thickness allows scientists

to study other heat sources that may affect elevation, such as hot spots in the Earth's mantle that melt and create magma. By monitoring changes in elevation, scientists can detect changes in the Earth's surface, which may signal impending natural disturbances.

03 Architecture

Architectural Styles of Le Corbusier		
International	Expressionism	Brutalism
<ul style="list-style-type: none"> • Radical simplification of form, rejection of ornamentation • Use of glass, steel, and concrete; transparency • Honest expression of structure and acceptance of industrialized mass-production techniques 	<ul style="list-style-type: none"> • Distortion of forms for emotional effect • Curving of geometry • Subduing of realism • Borrowing of natural forms • Use of mass-produced materials 	<ul style="list-style-type: none"> • Use of rough hewn concrete, stone, stucco, and glass • Striking repetition of angular geometrics, rough unadorned concrete, blatant irregularities • Building's function displayed in some manner in exterior construction

1. (C) 2. (B) 3. (D)

Summary: The passage discusses Le Corbusier, one of the greatest modernist architects of the twentieth century. He used different styles of architecture throughout his career. In his earlier years, he used the international style. It rejected ornamentation and favored transparency to let in more natural light. After WWII, Le Corbusier used expressionist, and then Brutalist styles in his designs. Brutalism features angular shapes, irregularities, and rough, unadorned concrete. For example, Le Corbusier's La Tourette exhibits a stark design on the exterior and it dominates the surrounding landscape.

04 Environmental Science

Mountaintop Removal Mining	
Advantages	Disadvantages
<ul style="list-style-type: none"> • Cost-effective • Faster than underground mining • Companies pay fewer employees • No risk of cave-ins • Creates land for stores, schools, etc. 	<ul style="list-style-type: none"> • Explosions damage home foundations • Dust from explosions contains harmful sulfur • Fewer jobs for mining community residents • Water contamination • Toxic slurry ponds can break loose of dams and flood communities

1. (C) 2. (A) 3. (D)

Summary: The passage discusses the large amount of controversy surrounding mountaintop removal mining. This form of surface mining creates a flat plateau that sits far below the hills that surround it. Although mountaintop removal mining allows more coal resources to be harvested in a shorter amount of time, the environmental and personal impact is extremely high in areas where it is practiced. Dust and debris that result from the destruction of the mountain pose health risks to people living close by. Also, the valley fills that are created from the remains of the mountain have buried almost two million meters of streams that have become contaminated. Acidic water that is high in magnesium accumulates in groundwater systems, which results in polluted water for those living in nearby communities.

05 Linguistics

Dunstan Baby Language	
Benefits	Criticisms
<ul style="list-style-type: none"> • Caregivers reported less stress, more sleep, and higher self esteem • Closer bonds and more easily calmed babies • Taught on DVDs for repeated viewing at leisure 	<ul style="list-style-type: none"> • No methodology for the research • Language experts argue that it is not in IPA and phonemes of sound reflexes have no meaning • Babies may be conditioned to make sound reflexes by receiving attention when sounds are made

1. (B) 2. (C) 3. (D)

Summary: The passage discusses Dunstan Baby Language, which operates on the belief that babies make five sound reflexes to indicate their needs. Through her empirical studies, Priscilla Dunstan claimed that these sounds are produced by a baby in response to a need, such as hunger, tiredness, or flatulence. However there is no concrete data proving that Dunstan's theory is valid. Critics claim that no methodology was given for the research and that the sounds babies make may not be construed as language. Furthermore, babies may be conditioned to make these sounds by their caregivers.

06 Psychology

The Availability Heuristic	
Definition	Roles
People tend to judge probability of a situation by how easily they can think of incidences or examples	Assists people in making decisions and judgments through reasoning
	Trustworthy when used objectively

1. (D) 2. (B) 3. (D)

Summary: Heuristics are learned or inherent rules that explain how people make decisions, form judgments, and solve problems. The availability heuristic is based on people's judgment of a situation's probability based on what is easily recalled from memory. For example, because people more easily recall airplane catastrophes, they may believe that flying carries a higher risk than driving. Also, parents may perceive that the risk of child abduction is higher than it actually is due to media coverage. Another instance is employees who believe that they are more protected against employment termination than they really are. The recollection of some information may be baised because people's knowledge is based only on their experiences and those of others they know.

Chapter 3 Inference Questions

01 Business

Productivity	
Causes	Effect
Good employee attitudes arise from well-managed companies and motivation	Improved productivity
Rewards and incentives engage workers in developing ideas to make a company successful	

1. (C) 2. (C) 3. (A)

Summary: According to the passage, developing good employee attitudes and offering incentives can improve a company's productivity. Well-organized companies and motivation from employers create good attitudes among workers, which engage workers and make them want to be successful in their jobs. Some companies may set their sales quota low so that most salespeople can attain

that quota, which makes them feel useful and needed. Financial incentives and merchandise rewards can also improve employee productivity. Incentives can be in the form of employee retirement plans or stocks. An employee's hard work caused by these incentives and rewards leads to an increase in productivity.

02 Psychology

Blind Studies		
Single-blind	Both	Double-blind
<ul style="list-style-type: none"> • Researchers know full details of experiment • Experimenter effects can influence results 	<ul style="list-style-type: none"> • Participants do not have information about experiment • Attempt to reduce bias in research • Participants placed in control group or experimental group 	<ul style="list-style-type: none"> • Researchers and participants do not know to which group participants belong • Almost no experimenter effects

1. (A) 2. (B) 3. (B)

Summary: According to the passage, single-and double-blind studies address the problem of bias in research. Any prejudice of researchers or participants could influence the results of an experiment. In these experiments, participants are either part of a control group, in which they are unexposed to a particular treatment, or are part of an experimental group, in which they are exposed to the treatment in the experiment. Single-blind studies do have a flaw. Researchers may give simple cues to participants that may lead to inaccurate results. Double-blind studies withhold information not only from the participants, but also from researchers, which lessens the possibility of bias from the researchers or the participants.

03 History

The Hellenistic Age	
Scientific Achievements	Artistic Achievements
Astronomer determined that Earth is smaller than sun and planets revolve around sun	Colossus of Rhodes and Winged Victory of Samothrace sculptures created
Scholars determined Earth's circumference and size of objects using concepts from geometry	Alexandria's palaces and structures including Pharos, a huge lighthouse

1. (D) 2. (A) 3. (B)

Summary: According to the passage, the Hellenistic age produced many achievements in the arts and sciences. The city of Alexandria's research library and museum attracted many prominent Greek scholars. Astronomers also came to study the heavens in the museum's observatory, which led to the conclusion that the planets, in fact, revolve around the sun. Scholars developed concepts and built formulas to determine the size of certain objects such as the Earth. There are many examples of art achievements in the Hellenistic age, which included, among magnificent palaces and structures, a statue honoring a naval victory against those who threatened the Greeks' freedom.

04 Environmental Science

Habitat Fragmentation	
Effects	Example
Localized extinction	New England cottontail rabbit is vulnerable to predators due to loss of habitat
Edge effects	Forest animals are impacted due to change in ecosystem and climate

1. (A) 2. (C) 3. (D)

Summary: According to the passage, habitat fragmentation causes species extinction and edge effects in habitats that have been broken down into smaller patches of land. These patches are typically the result of rural development or agricultural practices. Because predators can adapt more easily to changing environments, their prey become more susceptible to attack, which makes localized species extinction more likely. The edge effects of habitat fragmentation influence the climates between the edge and the interior of a fragmented habitat. If animals that live in these habitats do not migrate, they often face localized extinction.

05 Art History

Kapa Making Process			
Step 1:	Step 2:	Step 3:	Step 4:
Cultivation and harvest of trees	Stripping and softening of bark	Beating of bark fibers into cloth	Dyeing, decorating, and scenting of cloth

1. (B) 2. (C) 3. (A)

Summary: The passage discusses how Hawaiians in the eighteenth century made material called kapa out of tree bark. The process of making kapa required diligence that began with the cultivation of wauke trees. Once the trees were gathered, the kapa makers used serrated shells to cut the bark off the stalk. After the inner bark was scraped off and soaked in water, the softened strips were pounded with mallets, then dyed and scented. Though kapa making became a lost art for several generations, there has been a recent resurgence in making kapa materials using traditional methods.

06 Biology

Diversity in the Cambrian Seas	
Theory	Support
Organisms in Cambrian Period more diverse than modern organisms	Rapid evolution of organisms during Cambrian Explosion
	Chengjiang Biota fossils site classified into more than 120 species and ten phyla, in addition to a number of fossils that could not be categorized
	Burgess Shale fossils revealed characteristics not seen in modern organisms

1. (A) 2. (B) 3. (C)

Summary: According to the passage, seas in the Cambrian period of Earth's history were teeming with new forms of life. Recent discoveries at two fossil sites determined that the organisms were more diverse than modern animals. The Cambrian Explosion, an evolutionary phenomenon that occurred during a short period of time, resulted in a large number of complex multi-celled organisms. Fossils embedded in mudstone at the Chengjiang Biota have led to the discovery of numerous species, some of which cannot be identified using modern biological classification systems. Furthermore, fossils found in the Burgess Shale revealed an extensive amount of overlap with the species found at the Chengjiang Biota. One organism that lived during the Cambrian period was the *Marella*, which had two spines and twenty-six body segments, each of which had a pair of branched appendages to help it move.

Chapter 4 Rhetorical Purpose Questions

01 Business

Identifying Problems in Business	
Solutions	Explanation
Watch for deviations from norm	Past experience can identify changes in success
Note behavior	Changes in employee, management, and customer behavior can reveal problems
Study performance of competition	Success of competition can help company stay competitive

1. (B) 2. (B) 3. (A)

Summary: The passage describes ways that managers can identify potential problems in their businesses. First, by recognizing particular trends that may negatively impact the business, managers can avoid problems. Next, they should also be aware of any deviations from the norm. Managers can also counteract potential problems by understanding people's motivations for acting in a certain way. Finally, managers should also study the competition for signs of potential problems in their business. Identifying potential problems faced by a company is an intuitive process that cannot be made clear with simple equations.

02 Environmental Science

Genetic Alteration	
Method	Details
Sterile males	Introduce sterile males to a pest population to hinder their reproduction
Crossbreeding	Introduce chemical changes that make plants resistant to pests
	Introduce physical changes to a plant to hinder pest population
Biotechnology	Alter genetic makeup of plant to bolster defense against pests

1. (C) 2. (D) 3. (D)

Summary: The passage discusses how plant genetics has played a significant role in combating pests. Some plants are bred selectively to create heartier, healthier plants. By crossbreeding plants, geneticists can introduce new strains that produce a chemical repellent to protect them from pests. Alternatively, sterile males may be introduced to pest populations to reduce their reproduction. Finally, biotechnology can alter a plant's genes to make it resistant to pests virtually overnight. Plant genetics can help deter pests and avert food shortages.

03 Economics

Behavioral Economics	
Topic	Aspects
Behavioral economists attempt to understand how and why consumers make decisions	People are rational in decision-making to increase utility
	Situation can change how a person perceives or frames certain choice
	Non-rational decisions are made despite knowing otherwise

1. (D) 2. (B) 3. (D)

Summary: Behavioral economics seeks to explain how and why consumers make certain decisions. It was originally closely tied to the field of psychology and attempts to analyze consumer behavior. Behavioral economics acknowledges that consumers are rational in their decisions, although those decisions may not be economically sound. For example, many people give money to charity although they do not benefit materially from it. Also, people make choices based on how certain situations or products are framed. For instance, companies changed the framing of aspirin once it was found to ease a variety of ailments. In addition, consumers sometimes make irrational decisions based on misperceptions, such as the belief that making more money increases happiness. The reality is once a certain level of wealth is reached, the amount of happiness felt from earning more money diminishes.

04 Business

The Levinson Model
Cycles
Individuals in early adulthood try different careers to discover what they like
Those in mid-adulthood make work primary focus and attempt to excel in workplace
Late adulthood gives people financial security to focus on things outside of career

1. (A) 2. (D) 3. (A)

Summary: By extensively surveying a number of professionals from different occupations, Daniel Levinson identified a series of cycles that individuals go through. The Levinson model, while unable to generalize individuals' ambitions entirely, can describe how they approach their careers throughout their life. For example, in early adulthood, people dabble in a number of different careers and experiences. In their thirties and forties, people tend to pursue a career they find interesting and renew contact

with old acquaintances. While the cycles may be somewhat valuable to managers, not everyone follows them, like in the case of Bill Gates, who defies the Levinson model by focusing on one thing throughout his life.

05 Architecture

Differences in Architectural Styles	
Romanesque	Gothic
Semi-circular archways	Pointed archways
Barrel vaults	Ribbed vaults
Long halls, buttresses, no windows	Flying buttresses outside structure, ornate windows

1. (D) 2. (C) 3. (D)

Summary: The passage describes differences between Gothic and Romanesque styles of architecture. Gothic architectural style borrowed several elements from the earlier Romanesque style and became the preferred style for the building of cathedrals and churches. The use of pointed arches makes Gothic architecture appear more vertical, and the use of ribbed vaults allowed for more architectural freedom when spanning square areas. Flying buttresses in Gothic architecture set it apart from the Romanesque. They were an important architectural advance in that their weight distribution allowed for the insertion of ornate windows. Elements of Gothic architecture appeared in Romanesque buildings long before it became part of the mainstream.

06 Biology

Genetic Therapy		
Steps		
Source of genetic disease is pinpointed by comparing patient's gene against normal gene		
Vector cell engineered to carry repaired genetic material is injected into patient's body		
Problems		
Bodies already exposed to virus as vector may destroy cells carrying new DNA	Patient may feel discomfort at site where vector is introduced	Viral vectors may regain ability to cause disease after entering body

1. (A) 2. (D) 3. (C)

Summary: Genetic therapy directly alters DNA to treat genetic diseases. As doctors cannot prescribe medication or perform surgery to repair genes, the genetic structure must be manipulated directly. To bypass the immune

system, scientists create a vector, which contains the corrected genetic data. Because they are pathogenic and spread easily through a person's body, viruses are the most common vectors. It is introduced into the patient's body, where it can replicate unhindered by the immune system. While some genetic diseases may be cured through genetic therapy, possibilities such as viral vectors recovering their ability to cause diseases mean that genetic therapy remains a complex and experimental field.

Vocabulary Review 1

- 1. (D) 2. (B) 3. (A)
- 4. (C) 5. (D) 6. (B)
- 7. (A) 8. (C)
- 9. (A) 10. (B) 11. (A)
- 12. (D) 13. (A) 14. (C)
- 15. (D)
- 16. hazardous 17. contaminated
- 18. ailments 19. correlation 20. preventative
- 21. (A) 22. (D) 23. (E)
- 24. (C) 25. (B)

Mini Test 1

01 Environmental Science

- 1. (A) 2. (D) 3. (A)
- 4. (C) 5. (B) 6. (B)
- 7. (C) 8. (D)

02 Business

- 1. (C) 2. (B) 3. (D)
- 4. (A) 5. (D) 6. (B)
- 7. (D) 8. (B)

Chapter 5 Vocabulary Questions

01 Literature

The Style of Ernest Hemingway	
Characteristic	Example
Very simple and emotional	Wrote that big emotions do not come from big words
Often included courage and bravery	<i>The Old Man and the Sea</i>
Exploration of lives of the elderly	"A Clean, Well-Lighted Place"

- 1. (C) 2. (A) 3. (B)

Summary: According to the passage, Ernest Hemingway had a unique style of prose. He used simple, terse language that often reflected his own personal experiences. His writing style was free of any wordiness or embellishment. One of his favorite topics was the human condition in times of strife. Through his work, he expressed his belief that any struggle could be overcome with courage, perseverance, honor, and dignity. Hemingway also wrote about loneliness and the elderly in stories such as "A Clean, Well-Lighted Place." The story depicts an old man seeking refuge in a clean, well-lit café as a metaphor of the desire for happiness and order.

02 Marketing

Pretesting vs. Post-Testing		
Pretesting	Both	Post-Testing
<ul style="list-style-type: none"> • Occurs before ad is broadcast on radio or television • Can help prevent wasted money 	<ul style="list-style-type: none"> • Used in advertising • Attempt to analyze effectiveness of an ad 	<ul style="list-style-type: none"> • Occurs after ad has been broadcast • More accurate

- 1. (D) 2. (C) 3. (A)

Summary: The passage compares pretesting and post-testing in advertising. Both methods assess advertising in order to most effectively reach consumers. Pretesting occurs before the advertisement is aired. Advertisers ask people whether or not a certain ad conveys its intended message, and they utilize people's responses in testing possible alternative ads. Post-testing occurs after an ad has been aired. Advertisers use feedback from recall tests to determine how memorable a particular advertising technique was. While some favor pre-testing because it can identify problems before an ad is aired, others favor post-testing because it is based on real findings, rather than on a simulated situation.

03 Biology

Sugar Consumption	
Theory	Support
Avoiding foods with sugar will lead to longer life	Sugar consumption increases insulin production, which can cause diabetes and other diseases
	Study showed that lack of glucose in worms led to longer lifespan
	Stiff sugar-protein bonds can cause organs to deteriorate

1. (C) 2. (C) 3. (C)

Summary: The passage discusses the degenerative effects of sugar on the body. Three key pieces of evidence support this claim. First, while cells in the body require a consistent supply of glucose in order to function optimally, an influx of glucose can cause insulin imbalances and diseases. Second, an experiment done on worms showed that limiting sugar extended their longevity. It is believed that this extended lifespan could apply to humans. Last, sugar-protein bonds that are produced by sugar consumption affix themselves to veins, ligaments, bones, and arteries, which has a negative effect on organs and leads to the deterioration of bodily functions.

04 Environmental Science

<i>Naegleria fowleri</i>	
Causes	Effect
Stagnant water in residential supplies	Outbreak of <i>Naegleria fowleri</i> amoeba
Presence of a bacteria in municipal water supplies	
Increased water temperatures in public recreational areas	

1. (D) 2. (C) 3. (C)

Summary: The passage discusses the outbreak of *Naegleria fowleri*, a rare amoeba that was found in freshwater sources throughout the United States. It attacks the central nervous system, causing coma and death to ensue. The *N. fowleri* outbreak was linked to water stagnation, natural propagation, and sudden changes in the environment. The amoeba can live in stagnant water, even in homes. It can also live in high-volume wells and municipal facilities. Bacteria found in these wells fed the *N. fowleri*, which allowed the amoebas to propagate and invade water supplies. The presence of *N. fowleri* was also found to be linked to environmental disturbances such as disruptions in biodiversity, land clearings, or fluctuations in water temperatures.

05 Astronomy

Jovian Planets		
Definition	Example	Characteristics
Planet that contains gases and ice instead of solid ground	Jupiter	Contains mostly hydrogen and helium, has reddish surface
	Saturn	Has yellow color caused by clouds of frozen ammonia in atmosphere
	Uranus	Has dull blue color caused by methane in atmosphere
	Neptune	High concentration of methane gives bright blue color, weather causes bands

1. (A) 2. (C) 3. (B)

Summary: This passage discusses the Jovian planets, which share similar compositions. Jupiter, Saturn, Uranus, and Neptune consist mainly of hydrogen and helium, with traces of methane, water, and ammonia. Jupiter's magnetic field comes from its thick layer of metallic liquid hydrogen lying under tumultuous clouds of molecular hydrogen. Saturn's dense covering of ammonia clouds render the red colors of its atmosphere invisible. Uranus's atmosphere is relatively featureless, appearing a solid bluish-green color due to the dominant presence of methane. Neptune has dynamic wind patterns presumably because of its heat, which allows its clouds to rise higher in the atmosphere.

06 Art History

Diego Velázquez's Artistic Career
Stage 1: Studied as an apprentice, learned perspective and proportion
Stage 2: Created portraits of royal family, began to use more vibrant colors to represent royalty
Stage 3: After traveling to Italy, studied Renaissance art and began using realism alongside many green colors
Step 4: Created his masterpiece, which was typical of Baroque period art

1. (C) 2. (A) 3. (B)

Summary: According to the passage, Diego Velázquez was one of the most prominent Spanish painters in the 17th century. His career went through four stages. The first began as he apprenticed under an artist who believed in the importance of realism. After studying proportion and perspective, Velázquez began producing compositions of kitchen scenes from everyday life. His life later became intertwined with that of the court. He began to use brighter colors in contrast to the austerity of scenes

he had painted previously. After spending time in Italy, he returned and began to use more greens and adhered to realism. Last, in a style called *manera abreviada*, Velázquez's style became bolder and sharper.

Chapter 6 Reference Questions

01 History

Ancient Egyptian Writing		
Steps		
For years, Ancient Egyptian written language remained a mystery to linguists	Rosetta stone was discovered, containing same edict written in three different languages	By analyzing Coptic and Ancient Greek passages, linguists were able to understand ancient hieroglyphs

1. (D) 2. (A) 3. (A)

Summary: For many years, the meaning of letters engraved on ancient Egyptian ruins was unknown. French explorers found the valuable Rosetta Stone in 1799, which was eventually translated by British scholars. Although its message was relatively mundane, the three languages on the tablet allowed translators to effectively decode the ancient Egyptian hieroglyphs. Its value in providing insight into ancient Egyptian culture resulted in the term "Rosetta stone" becoming an idiom that today refers to a key to a decryption process or puzzle.

02 Environmental Science

Fertilizers	
Types	Function
Nitrogen	Used by the plant to produce chlorophyll
Phosphorous	Aids in transport of energy in the plant
Potassium	Allows plant cells to produce proteins, starches, and sugars

1. (A) 2. (A) 3. (C)

Summary: An important part of maintaining a healthy garden is to ensure that the proper amounts of nutrients are in the soil. Nitrogen, phosphorous, and potassium all play important roles in ensuring plants yield hearty flowers,

fruits, and vegetables. Nitrogen helps plants produce chlorophyll, but at high levels can actually hinder the growth of fruits and vegetables. Gardens can also be supplemented with phosphorous, which can maximize the rate of plant growth and maturation. Potassium can also be added to soil, which plays a key role in a plant's cellular functions. Many fertilizers have a combination of all three chemicals, or they can be applied separately.

03 Literature

Magical Realism	
Feature	Explanation
The Other	A character that is outside of society
Evolved Duties	Reader must accept alternate reality in order to decode text
History, culture, and geography	Essential to creating a reality
Dreams and imagination	Used to express authentic subjective experience
Post-structural influence	Non-linear story-telling
Magical element	Forces people to reexamine realities

1. (C) 2. (D) 3. (C)

Summary: The passage discusses a genre of literature called magical realism. The term was first coined by a German art critic. There are six features common to all magical realism works. First, it is always told from the perspective of "the Other." For example, in "The Shape of the Sword," the main character is a traitorous soldier who feels isolated from his peers. Second, magical realism requires readers to involve themselves in evolved duties, which underscores a primary concern of magical realists. Third, it emphasizes history, culture, and geography as a way to portray reality. Fourth, it includes characters' dream sequences and private thoughts as a method of expressing the subjective human experience. Fifth, it is influenced by a post-structuralist style of writing. Finally, all works feature a magical event.

04 Astronomy

Eris and Pluto		
Eris	Both	Pluto
<ul style="list-style-type: none"> • Larger than Pluto • Grayish color 	<ul style="list-style-type: none"> • Contain methane ice • Eccentric orbits • Tilted orbits 	<ul style="list-style-type: none"> • Mostly made up of nitrogen ice • Reddish color

1. (D) 2. (A) 3. (B)

Summary: The passage discusses dwarf planets. With the establishment of criteria that definitively describe a planet, Pluto is no longer considered a proper planet. In order to be considered a dwarf planet, an object must orbit around the sun, have a spherical shape, not have cleared its orbital neighborhood, and not be a satellite. Dwarf planets have different sizes, but are very similar. For example, Pluto and Eris have similar physical and chemical composition. Also, while each planet orbits on one plane, Pluto and Eris both have orbits that are slightly inclined.

05 History

The Role of Muckraking in American Society	
Definition	
Journalism that exposes social injustices to promote reform	
Goals	Example
Expand social services and improve conditions	Led to prison reforms, child labor laws, and environmental conservation
Increase public concern and awareness	Meat Inspection Act passed after <i>The Jungle</i> was published

1. (C) 2. (B) 3. (D)

Summary: The passage discusses muckraking, which is when journalists expose important social issues to the public. While the writing of muckrakers was sometimes published with sensational titles in the tabloids, their main goals were to publicize social injustices and promote change. Many politicians aligned themselves with causes covered by muckrakers. However, some, namely President Roosevelt, criticized those who exposed some of his political allies, claiming that the muckrakers were biased in their coverage. Although there were some difficulties, the effectiveness of muckraking is obvious by the number of social reforms that occurred, such as the regulation of meat processing in the United States.

06 Theater

Breaking the Fourth Wall	
Definition	
Eliminating division between audience and actors	
Effects	Explanation
Creates humor	Emphasizes important point
Creates element of surprise, which makes things funny	Audience more directly involved and forced to evaluate story in new way

1. (B) 2. (C) 3. (A)

Summary: The passage discusses breaking the fourth wall in theater. The fourth wall is the invisible wall that separates the audience from the actors on the stage. The relationship between the actors and the audience was often overlooked in drama. Theater conventions in the past were to never break the division between them. In modern drama, breaking the fourth wall breaks up the practice of fictional continuity and forces the audience to become more than mere observers. It can be used to add a comical effect or emphasize a particular view or issue. Breaking the fourth wall has become so common that some critics worry about it losing its effectiveness if it is not used discriminately.

Chapter 7 Sentence Simplification Questions

01 Philosophy

Representative Realism		
Theory	Criticism	Conclusion
People cannot know the world, only perceptions of it through senses	Nothing is certain since senses provide subjective information	People cannot prove objects exist
	Support People can agree upon an object's properties by using senses	Conclusion People can prove object exists

1. (D) 2. (D) 3. (B)

Summary: John Locke developed a philosophy called "representative realism" that was hailed for its method of dealing with difficult issues in a simple way. He believed that people do not perceive the world as it is, but as it appears to their senses. Because senses can be fooled, representative realists feel that differences in subjective perception are corrected by people sharing their perspectives to come to a common idea of an object's properties. Locke developed an explanation of how people deal with the confusion of subjective perception, but critics feel his theory does not prove the existence of our world.

02 History

The Accomplishments of Archimedes	
Accomplishments	Solution
One of the greatest mathematicians of all time	Perfected a method for measuring areas, volumes, and surfaces
Help defend Syracuse	Invented impressive war machines
Practical inventions for the king	Invented irrigation method
Prove a goldsmith cheated the king	Discovered that displacement of water could measure volume and density

1. (A) 2. (C) 3. (A)

Summary: Archimedes was one of the greatest mathematicians in history, albeit relatively unknown. He lived in the city of Syracuse, which was a point of contention between the battling powers of Rome and Carthage. During his lifetime, Archimedes was famous for designing weaponry to defend Syracuse, including a machine used to sink ships by thrusting weights from a wall, and a pump that used a crank and a screw. Historically, he is most known for discovering a method of using water displacement to determine the density of a material, although he was proud of his work that showed the relationship between the surface area and volume of a cylinder circumscribing a sphere.

03 Music History

Scott Joplin
Achievements
Popularized ragtime during his lifetime
Synthesized popular and classical music
Elevated folk music to a classical form

1. (C) 2. (C) 3. (B)

Summary: Scott Joplin developed an original genre of American music in the early 1900s called ragtime, which was a synthesis of African-American folk with classical European music. Joplin hoped ragtime would become as popular as the classical music in which he had trained, but this potential was not realized until long after his death. It was not until the mid 1970s that ragtime finally gained a reputation for beginning the major period of innovation in American music that continues today.

04 Business

Psychological Pricing	
Theories	Support
Pricing strategies work because consumers take shortcuts in calculation	Studies show consumers pay more attention to left-hand side of a price
Important even to sellers who do not use fractional pricing	Could lose sales by not understanding its effects
Pricing strategies are effective even though they work against consumers' interests	Even luxury retailers use psychological pricing to prevent image of discounts
	Consumers do not always make rational decisions
	Subconscious factors play important role in spending decisions

1. (B) 2. (B) 3. (D)

Summary: Psychological pricing is a technique used by marketers to improve sales by using certain numbers in the price of an item. Studies have shown that sales of an item rise disproportionately when the price is displayed in certain ways. By displaying a fractional price that ends in nine or five, such as \$4.95, consumers believe the item to be a good deal. Marketers found that prices ending in zeros, like \$5.00, gave shoppers the impression that the item was more exclusive, or of higher quality. Though there may be no difference between two items priced so differently, a shopper will buy an item based on subconscious rationalization and self-justification, even if the decision makes no sense.

05 Psychology

Imprinting		
Definition	Theories	Support
Animals have innate tendency to respond to external stimuli	Imprinting is permanent and occurs early in life	Newly hatched birds treat first moving object they see as their mother
	Imprinting does not have to be permanent and can occur in adults	Some birds eventually mate with own species

1. (A) 2. (C) 3. (B)

Summary: The phenomenon of imprinting is a form of learning in which animals react to external stimuli. Konrad Lorenz researched the tendency of geese raised in an

incubator to treat him as their mother as opposed to those raised by their natural mother. He noticed that geese raised by humans tended to modify their behavior so dramatically that, later in life, the geese refused to mate with their own species. Lorenz's research led to speculation in problems of human developmental psychology, social pathology, and even philosophy.

06 Literature

The Call of the Wild	
Point	Support
Human mistreatment of dogs	Thornton has good relationship with Buck
	Strength of relationship suggests human-dog relationship is as compelling as call of the wild
Metaphor for human experience	Buck represents humans, because the story is told from his perspective
	Buck's transformation into pack animal is treated as positive
Violence and savagery in novel are not necessarily negative	Return to the primitive is portrayed as highest destiny of both humans and dogs

1. (D) 2. (C) 3. (A)

Summary: Jack London's 1903 novel *The Call of the Wild* is more than an indictment of the savagery with which dogs were treated in the North. The book follows the journey of Buck, a dog taken from a life of leisure and comfort to one of beatings, hard work, and wilderness. *The Call of the Wild* can be read literally as the story of Buck's transformation from a pet to an almost wild animal. However, the novel offers an interesting counterpoint in which the dogs represent human characteristics. Read in this way, *The Call of the Wild* is a compelling story of humans and animals struggling to reach their full, natural potential.

Chapter 8 Text Insertion Questions

01 Nutrition

Vitamin A	
Problem	Solutions
Many children lack vitamin A, which causes health problems	Give vitamin A supplements
	Fortify foods with vitamin A
	Consume more food sources with vitamin A

1. (C) 2. (B) 3. (D)

Summary: A large percentage of the world's children are deficient in vitamin A, which leads to greater risk of disease, infection, and even blindness. The World Health Organization (WHO) is trying to control the problem through fortification of foods. This will help children derive vitamin A from a greater variety of food sources. By using common foods as a medium for vitamin A, they hope to eradicate the deficiency as a world health problem.

02 Psychology

Control Beliefs	
Categories	Explanation
Pessimistic view	See everything as their fault and do not consider exterior factors
Optimistic view	Believe negative results are out of their control and do not blame themselves

1. (A) 2. (B) 3. (D)

Summary: Psychologists believe people hold pessimistic (negative) or optimistic (positive) views of the level of control they have over circumstances in their lives. People who blame themselves for negative events are considered fatalistic and often feel helpless in difficult situations. Some people ascribe negative events to things outside themselves that can be changed or controlled. These people sometimes think too highly of themselves and risk becoming narcissistic.

03 Biology

Radioisotopes vs. Microelectrodes		
Radioisotopes	Both	Microelectrodes
Releases radiation to assess microbial activity	Used to study microbial activity	Uses an electrical current to measure microbial activity
Used in medical tests like the PET scan	Useful in tiny environments	Detects metabolic processes in microbes

1. (C) 2. (A) 3. (B)

Summary: The majority of Earth's living biomass is made up of microscopic organisms called microbes. Detection of these minute life forms is vital to scientists and doctors because of their pathogenic effects in humans and their ability to render an environment uninhabitable. Scientists use radiation and electrical currents to detect and observe microbial activity.

04 Biology

The Boom-and-Bust Cycle		
Definition	Explanation	Examples
Cycle in which populations experience rapid growth and decline	Populations grow when there is plenty of food, leading to increase in predators, which then lowers population	Lemmings thrive in areas with lots of food, but decline once area is exhausted
		Rabbit populations go up when lynx populations are down and go down when lynx populations are up

1. (D) 2. (B) 3. (D)

Summary: Changing environmental conditions cause perpetual boom-and-bust cycles in populations of plants and animals. When conditions are good, a particular species produces large numbers of offspring and the population increases. Conversely, when predation is high, many members of the species die to feed another species. Or if food becomes scarce, the species will have to emigrate from the area. Either of these situations lead to diminution of the species that will last until conditions improve and survival is easier.

05 Medicine

Balance Disorders		
Types	Description	Solution
Vertigo	Feeling of spinning	MRI tests can diagnose balance problems
Disequilibrium	Falling to one side	Doctors may treat disorder associated with balance disorders
Labyrinthitis	Ear disorder that causes balance problems	Some medications can help patients with balance disorders

1. (B) 2. (D) 3. (A)

Summary: Balance is a complex system in which the ears, brain, eyes, and skeleton of a person work in conjunction to maintain the person's orientation to objects around them. When there is a disruption to any part of that system, we say the person is out of equilibrium. Because the system is so complex, doctors have trouble alleviating the discomfort of people when such disruptions occur.

06 Botany

Cycads		
Definition	Theory	Support
Plant known as living fossil that has been around for millions of years	Cycad pollinates not through wind but through bugs	Cycad attracts thrips by using push-pull pollination

1. (B) 2. (D) 3. (A)

Summary: Cycads are primitive plants that have survived on Earth for at least 250 million years. Scientists have been studying the markedly unique way these plants attract thrips, the plants' only pollinators. Thrips feed on pollen until during the plants' reproductive cycle. Then, the cycad emits high levels of beta-myrcene. The chemical reaches levels that thrips cannot survive, so the insects leave the plants, carrying pollen with them. In cooler times, beta-myrcene levels fall, and thrips return to the plants, spreading the pollen among the cycads. This process is viewed as an intermediate evolutionary stage of plants called "push-pull pollination." Over time, plants have evolved their capabilities in order to be sustainable species.

| Vocabulary Review 2 |

1. (B) 2. (D) 3. (A)
 4. (B) 5. (C) 6. (A)
 7. (D) 8. (C)
 9. (B) 10. (A) 11. (D)
 12. (A) 13. (B) 14. (D)
 15. (A)
 16. prominent 17. perseverance
 18. innovation 19. emulate 20. sensational
 21. (C) 22. (E)
 23. (B) 24. (A) 25. (D)

Mini Test 2

01 Zoology

1. (C) 2. (A) 3. (B)
 4. (B) 5. (C) 6. (B)
 7. (D) 8. (A)

02 Linguistics

1. (A) 2. (A) 3. (B)
 4. (A) 5. (B) 6. (D)
 7. (C) 8. (A)

Chapter 9 Prose Summary Questions

01 Zoology

Testing Canine Intelligence	
Round 1	Round 2
Researcher shuffled pots, gave visual cues toward a pot that did not contain ball	Pots controlled with wires, dog given no visual cues
Dogs chose pot to which researcher gave special attention	Dogs usually chose pot that contained ball
Conclusion	
When not influenced by visual cues, dogs can display problem-solving ability	

1. (A, B, D)

Summary: A scientific study in Budapest looked into the intelligence of dogs. Researchers found that dogs are capable of solving simple problems and that they are open to learning from their human masters. They also found limitations in dogs' ability to find a ball when a human tried to hide it from them. The dogs would respond to cues from the human, rather than simply follow the location of the ball. The researchers found evidence that dogs are strikingly similar to human infants in their levels of intelligence, but the studies were not conclusive enough to be certain.

02 Music History

Troubadours and Trouveres		
Definition		
Groups of French musicians that were geographically separate but artistically similar		
Points		
Their work drew upon common tradition that emphasized love and situations concerning love	Made use of instruments in songs more popular	Their songs were not documented extensively; unclear if works were primarily musical or lyrical

1. (B, C, F)

Summary: Troubadours and trouveres were musicians in 12th- and 13th-century Europe. They produced some of the only music of the time that was not liturgical, Christian chants. These musicians sang love songs in a way that was more emotional and declamatory than the chants, which focused on worship and verse. The compositions included simple declarations of love, discordant verses on love, and stories of romantic encounters. The differences between a troubadour and a trouvere were regional, mostly related to the languages they spoke. Because the music of these musicians was passed down orally, music historians have difficulty in studying the songs as they were sung. The lyrics remain, but the music itself has been lost.

03 Medicine

The Appendix	
Observations	Conclusion
Researchers found that biofilm allowed colonies of helpful bacteria to live in appendix	Appendix may store helpful bacteria and keep them on reserve for intestinal tract
When intestines are emptied entirely, helpful bacteria quickly re-inhabit tract	

1. (A, B, D)

Summary: The appendix in humans is markedly different from those found in other animals, which makes it difficult to understand the function of the organ. Doctors believe it is helpful in protecting the intestines from harmful bacteria, even though the appendix does not secrete anything into the intestines. Helpful bacteria are known to inhabit the intestines, and doctors have discovered that the appendix releases these into the intestines when helpful bacteria have been entirely flushed out. Research into the appendix is important for third-world or developing countries, where intestinal diseases are very common.

04 Psychology

Personality Disorders	
Type	Explanation
Biological	Genetic traits inherited from parents can increase likelihood of personality disorders
Psychological	Early traumatic experiences can make people more prone to personality disorders
Social	Experiences with others, especially during upbringing, can alter personality and lead to personality disorders
Sociocultural	Larger cultural environment can impact development and increase possibility of personality disorders

1. (A, C, D)

Summary: Psychologists have long debated whether people develop personality disorders because of heritable traits passed down from their parents or because of social effects on their personalities. Research has been done exploring the connection between personality disorders and childhood abuse, but the results may have been distorted by the way in which people taking part in the test were selected. However, psychologists concluded that borderline personalities like extreme narcissism may be caused in part by the way a child is raised. Because personality disorders are so broad and difficult to diagnose, any notion of how they are caused will be very hard to prove.

05 Computer Science

Giant Magnetoresistance		
Definition	Impact 1	Impact 2
Magnetic resistance leads to significant electrical resistance	Sensitive sensor heads can be used in drives, shrinking them considerably	GMR basic principles still in use and has greatly impacted size of laptop computers

1. (A, B, F)

Summary: In 1988, Albert Fert and Peter Grünberg discovered a relationship between electricity and magnetism called Giant Magnetoresistance (GMR). Their discovery has caused a lasting shift in the way data is stored on computers. Because GMR allows for far greater sensitivity of disk-reading sensors, the size and bulkiness of hard drives have drastically decreased. Fert and Grünberg found a way to allow data to be stored on magnetic material only a few atoms thick, which allowed engineers to design sensors that could discern such tiny strips of information. This discovery has let computer designers

make smaller, more mobile computers than they otherwise would be able to make.

06 Science

Plumpy'nut	
Definition	
An alternative to powdered milk as possible treatment for children suffering from malnutrition	
Advantages	
Plumpy'nut can be produced elsewhere and transported	Mothers can give children Plumpy'nut and treat malnutrition without having to keep children in hospitals for weeks

1. (A, B, F)

Summary: A new product called Plumpy'nut is being used to fight malnutrition in Africa. Before Andre Briend invented Plumpy'nut in 1999, humanitarian organizations had been using powdered nutrient supplements to remedy the adverse effects of malnutrition. There were two problems with these products: they had to be mixed with clean water in hygienic conditions, and once mixed, they were prone to spoilage. Plumpy'nut is an effective alternative to these products, as it does not spoil and does not require clean water.

Chapter 10 Table/Chart Questions

01 Computer Science

Phishing		
Problem	Solutions	Explanation
Phishers steal information of Internet users	Education	Many websites teach computer users how to identify and avoid phishing scams
	Legislation from government	Governments are beginning to convict phishers in order to prevent future scams

1.

Concept	Statements
Education	<ul style="list-style-type: none"> • Online tutorials help users identify phishing scams. • Users can verify a website using the address bar. • Businesses state that they do not ask for personal information.
Legislation	<ul style="list-style-type: none"> • Conviction of phishers can prevent future scams. • Phishers are caught and fined or placed in jail.

Summary: With the widespread use of computers for banking and shopping, police and government agencies have noticed increased incidences of phishing. Phishing is a new type of fraud, in which the criminal impersonates a trusted company, financial institution, or website in order to steal personal information from computer users. After an individual's banking information has been appropriated, the criminal can use it to make purchases or transfer money into another account. Authorities have warned consumers to disregard emails from companies unless they are sure the email is genuine. The problem has become so great that many countries have begun to impose stiff penalties for phishing scams.

02 Business

Mergers	
Types	Explanation
Horizontal	Two companies in same industry combine to form one company
Vertical	Company purchases another company involved in different stage of sales or production
Conglomerate	Companies operating in separate markets combine

1.

Type of Merger	Statements
Horizontal	<ul style="list-style-type: none"> • Companies having similar products become one enterprise. • A small or giant impact on a sales market may result.
Vertical	<ul style="list-style-type: none"> • Companies are involved in different aspects of sales or production. • The manufacturing costs for a merged company are reduced.
Conglomerate	<ul style="list-style-type: none"> • The companies have unrelated products.

Summary: Business mergers are important ways that companies restructure in order to improve their profits, competitiveness, and costs. They may merge with another company in order to better compete against rival companies. Another type of merger involves a company merging with one of its major suppliers, which allows the purchase of materials or supplies at base costs. Sometimes, a company will merge with one in a different business. Mergers allow a business to concentrate on one aspect of its operations while the partner company focuses on its own. In general, the larger the companies that are merging, the greater the effect on market share.

03 Literature

The Early Short Story vs. the Modern Short Story		
Early	Both	Modern
<ul style="list-style-type: none"> • Wealthy, literate audience • Commoners portrayed as buffoons • Characters not developed 	<ul style="list-style-type: none"> • Use of few words 	<ul style="list-style-type: none"> • Available to masses through print • Commoners were worthy characters • Highly developed characters and settings

1.

Time Period	Statements
Pre-19 th century	<ul style="list-style-type: none"> • Written as entertainment for those of high social rank • Generalization of characters
Post-19 th century	<ul style="list-style-type: none"> • Popularized through periodical media • Highly developed settings and characters • Was considered a distinct genre of literature

Summary: The short story has evolved from folk tales and fables to a literary genre accepted by academics. The most important characteristic of a short story is its brevity, which allows an author to publish a complete story at once, rather than in installments, like some novels. One of the first recognized collections of short stories was Geoffrey Chaucer's *The Canterbury Tales*, which told the tales of people taking part in a pilgrimage. Chaucer used short tales to describe people of different socioeconomic groups, usually in a very satirical manner.

04 Psychology

Conflicts	
Types	Explanation
Direct aggressive behavior	Hostility toward another person in conflict
Passive aggressive behavior	Indirect expression of feelings in conflict
Nonassertive behavior	Avoidance of conflict or accommodation of other person

1.

Conflict Style	Statements
Direct Aggression	<ul style="list-style-type: none"> • Often humiliates other person • Can negatively impact both people involved • Often creates anger in other person
Passive Aggression	<ul style="list-style-type: none"> • Fakes kindness to avoid confrontation • Communicates anger through subtle hints
Nonassertive Behavior	<ul style="list-style-type: none"> • Sometimes leads to positive outcome • Avoids problem until it goes away

Summary: Psychologists have defined three unsuccessful ways of dealing with conflict. Direct aggression involves a person becoming verbally abusive or showing other signs of hostility. This type of confrontation will often escalate into violence if both parties use direct aggression. In passive-aggressive behavior, a person may behave amiably to the face of the person with whom they have a problem while they spread rumors and speak negatively behind their back. There is still aggression in passive-aggressive behavior, but the aggressor goes about it in a roundabout way. Nonassertive behavior involves complete avoidance of a problem, or source of conflict. Rather than seeking resolution to a problem, a person might put on the pretense of comfort, or of not being bothered.

05 Anthropology

Political Orders	
Types	Explanation
Bands	Entire community discusses issues and comes to resolution
Tribes	Families deal with small problems, sodalities handle problems affecting whole community
Chiefdoms	Chief has power over many small villages, families deal with smaller problems

1.

Political Order	Statements
Bands	<ul style="list-style-type: none"> • Adapt political structure to small, unstructured societies • Require that punishments be approved by each individual member • Does not form any system of hierarchical leadership
Tribes	<ul style="list-style-type: none"> • Create familial organizations that handle major issues • Inhabit one area and form basic political structures
Chiefdoms	<ul style="list-style-type: none"> • Base governmental organization on central political leaders • Consist of numerous villages connected through a governmental system

Summary: Societies with a small population have a different conception of government than the massive nations of today. Smaller groups of people have an easier time settling a dispute. Groups of people that forage for wild food are usually mobile and rarely have more than 100 individuals. These groups organize into bands, where individuals speak with one another to reach a consensus on a problem. As people began to stay in one location and farm, larger groups lived in one place, and decisions about the welfare of the people grew more difficult. This led to the development of tribes and chiefdoms. Chiefdoms are usually a collection of villages with a single person as leader, whereas tribes are only one village or group.

06 Art History

Black Figure Technique vs. Red Figure Technique		
Black Figure	Similarities	Red Figure
<ul style="list-style-type: none"> • Incised designs • Very static, flat figures • Many geometric patterns • Few intricate details • No overlapping 	<ul style="list-style-type: none"> • Popular narrative themes • Contrasting images and background 	<ul style="list-style-type: none"> • Painted designs • Natural figures that showed movement • Few geometric patterns • Many intricate details • Use of overlapping

1.

Technique	Statements
Black Figure Technique	<ul style="list-style-type: none"> • Designs could not overlap on the pottery • Geometric patterns were a popular design • Designs were cut into the clay before firing
Red Figure Technique	<ul style="list-style-type: none"> • Movement and images were more natural • Profiles did not have to be shown flat • Designs were painted on the vessel • Allowed more intricate compositions

Summary: Much of what we know about ancient Greek culture has been learned from studying two types of pottery. Black figure glazing was a technique used to depict silhouettes of heroes, battles, and mythology in black against a red background. This technique required that shapes to be colored be incised into the clay. Red figure glazing, on the other hand, allowed potters to outline figures and shapes. This technique gave the artists the ability to be more intricate, creating more life-like contours of anatomy. After the advent of the red figure technique, black figure pottery all but disappeared.

| Vocabulary Review 3 |

- 1. (D) 2. (B) 3. (A)
- 4. (D) 5. (A) 6. (C)
- 7. (C) 8. (A)
- 9. (A) 10. (B) 11. (C)
- 12. (B) 13. (A) 14. (D)
- 15. (C)
- 16. overwhelmed 17. lasting 18. third-world
- 19. hostility 20. capacity
- 21. (C) 22. (E) 23. (A)
- 24. (D) 25. (B)

| Mini Test 3 |

01 Computer Science

- 1. (A, C, D)

02 Anthropology

- 1. (A, B, D)

03 Literature

1.

Type of Literature	Statements
Parody	<ul style="list-style-type: none"> • Its main purpose is to provide comedy. • Authors choose to imitate a person or circumstance.
Satire	<ul style="list-style-type: none"> • Writers use it to incite change or reform. • Sarcasm and irony are the main tones used. • The primary purpose of the author is to criticize.

04 Environmental Science

1.

Area	Statements
Transportation and Residential	<ul style="list-style-type: none"> • Are controlled primarily by individuals • Include vehicles and home appliances
Commercial and Industrial	<ul style="list-style-type: none"> • Are determined by businesses and managers • Include businesses, schools, and factories • Are working toward more efficient systems

| Practice Test |

01 Psychology

- 1. (B) 2. (C) 3. (D)
- 4. (B) 5. (A) 6. (B)
- 7. (A) 8. (B) 9. (C)
- 10. (B) 11. (A)
- 12.

Type	Statements
Decay	<ul style="list-style-type: none"> • Is signified by a complete loss of certain memories • Is proven to occur when experiences are not recalled over time
Interference	<ul style="list-style-type: none"> • Is characterized by either proactive or retroactive memories • Occurs when trying to locate specific, isolated events • Happens in the storage or retrieval area of the mind
Cue-Dependent	<ul style="list-style-type: none"> • Indicates an absence of the necessary cues to retrieve memories • Can be aided by reminders of past experiences

02 Art History

- 1. (A) 2. (D) 3. (A)
- 4. (B) 5. (A) 6. (C)
- 7. (A) 8. (C) 9. (A)
- 10. (B) 11. (C) 12. (C)
- 13. (A, B, E)

03 Astronomy

- 1. (B) 2. (A) 3. (D)
- 4. (D) 5. (D) 6. (C)
- 7. (A) 8. (C) 9. (B)
- 10. (B) 11. (B) 12. (C)
- 13. (A, C, E)

04 Music

- 1. (A) 2. (B) 3. (C)
- 4. (D) 5. (C) 6. (B)
- 7. (D) 8. (D) 9. (B)
- 10. (A) 11. (C) 12. (D)
- 13.

Jazz Era	Statements
1930s	<ul style="list-style-type: none"> • Music called swing was popular in dance halls and on the radio. • People appreciated the distraction jazz gave from the Depression.
1940s	<ul style="list-style-type: none"> • A small group of musicians recognized this type of jazz as an emotional, abstract art form. • The harmony had a more minor-key sound. • Bebop, the basis for modern jazz, developed.

05 Biology

- 1. (C) 2. (D) 3. (A)
- 4. (B) 5. (D) 6. (D)
- 7. (A) 8. (C) 9. (A)
- 10. (C) 11. (C) 12. (C)
- 13. (C, D, F)

Listening

Note: Graphic Organizer answers are suggestions only and may not match students' answers exactly.

Preview Test

01 Psychology

1. (C) 2. (A) 3. (B)
4. (D) 5. (B) 6. (C)

02 Art History

7. (B) 8. (B) 9. (B)
10. (C) 11. (B) 12. (C)

03 Service Encounter

13. (B) 14. (A), (C) 15. (C)
16. (B) 17. (A)

Chapter 1 Main Idea Questions

01 Astronomy

Mercury vs. The moon		
Mercury	Both	The moon
Scarps – raised areas resembling wrinkles that are caused by shrinking of its surface after cooling	Craters – round holes on the surface caused by meteorite impacts	Flat, dark areas covering the surface that are caused by lava flow in the moon's history

1. (C) 2. (B)

Summary: The professor compares the surfaces of the moon and the planet Mercury. The professor first mentions that the moon contains maria, which are dark, flat areas caused by lava flow in the moon's early history. The professor then says the surfaces are similar because of the craters that each has. Finally, the professor mentions the unique scarps on Mercury, which are raised areas that look like wrinkles.

02 History

Roman Public Baths	
Definition	Role
Public areas for bathing and socializing	Led to better hygiene
	Became enjoyable part of daily social life
	Provided source of entertainment and fitness
	Gave people place to discuss politics

1. (D) 2. (A)

Summary: The professor discusses the role that public baths played in Roman culture. First, the professor briefly mentions the increase in hygiene before moving on to the way the baths became a part of daily life. The professor then mentions how the baths included areas to exercise, giving the culture a source of entertainment and fitness. Last, the professor says that the baths were important centers for political discussion.

03 Office Hours

Problem	Solution
Student wants to get credit for computer program she will write for summer trip	Professor suggests independent study, offers to sponsor project

1. (A) 2. (B)

Summary: The student visits the professor because she wants to get credit for creating a program for an archaeology trip during the summer. The professor describes what is necessary for the project to be approved and offers to sponsor the project for the student. The student will view the online checklist and gather the correct materials.

04 Service Encounter

Problem	Solution
Student locked out of dorm room	Look for RA with key to let him in
	Find custodian who might have key

1. (B) 2. (D)

Summary: The student has locked himself out of his room and asks the desk employee how he can get back into his room. The desk employee discovers that the key is missing and says an RA has it. She then suggests that the student find the RA or find a custodian that might have a key.

05 Business

Outdoor Advertising	
Example	
Billboards	Transit advertising
Advantage	Disadvantage
Seen by many people	Cannot control who sees ad.
Opportunity for creativity	Can be very expensive

1. (B) 2. (A)

Summary: The professor discusses the advantages and disadvantages of outdoor advertising. He says that this kind of advertising is seen by a lot of people. However, it is also harder to control who sees the ad. The professor then says that these advertisements can be very creative. However, he adds that creativity can be very expensive to accomplish.

06 Film Studies

Early Animation Devices	
Type	Explanation
Phenakistoscope	Static pictures on a wheel, slit to view pictures
Kinematoscope	Improved by enlarging cabinet or housing
Praxinoscope	Drum instead of wheel, used mirror to steady image

1. (C) 2. (D)

Summary: The professor describes three devices used in early animation. The first was the Phenakistoscope and consisted of pictures drawn on a disc and viewed through slits. The next was called the Kinematoscope and improved upon the Phenakistoscope by adding a cabinet. Last, the Praxinoscope used a drum instead of a wheel and used mirrors to keep the image steady.

07 Office Hours

Problem	Solution
Student wants to use CD for his paper	Can use lyrics and briefly describe music
Student wants to use video for his paper	Do a presentation to show video

1. (D) 2. (A)

Summary: The student goes to see the professor to ask about using a video and a CD in a paper. After clearing up some confusion, the professor says that the student can reference the music on the CD in the paper. However, with the video, the professor suggests that the student do a presentation to show the video itself.

08 Service Encounter

Problem	Solution
Student left backpack in library and it is now locked	Officer contacts another officer, who finds backpack

1. (C) 2. (C)

Summary: The student visits the campus security office late at night because he has left his backpack in the library, which is now closed for the night. The officer checks the lost and found and contacts the other officers to try to find it. They finally contact an officer who is still in the library, and the backpack is found.

09 Sociology

Davis and Moore's Principles of Stratification	
Theory	Example
Some jobs have higher salaries to encourage people to do difficult jobs	Doctors must receive training and spend a lot of money to prepare, high salary is reward
	Teachers are as necessary as doctors, though reward is the job itself instead of large salary

1. (B) 2. (D)

Summary: The professor discusses a theory of stratification by Davis and Moore. The theory says

that some jobs have more rewards to encourage people to do them. The professor first discusses a doctor as an example of a difficult job that has a high salary. The professor then discusses a teacher, which is also a difficult and necessary position, but does not pay well. The professor explains that this happens because the act of teaching is a reward in itself and does not require a higher pay.

10 Biology

Koch's Germ Theory of Disease	
Requirement	Result
Organism must be present in sick subject, never in healthy subject	Koch applied his postulates to identify cause of tuberculosis
Pure culture must be grown	
Healthy animal should be infected and become sick	
Blood sample must match original culture	

1. (A) 2. (B)

Summary: The professor describes Koch's Germ Theory of Disease and his postulates. The postulates require the following: the organism to be present in all cases of the disease, a pure culture to be grown, disease in a healthy animal to be caused by the culture, and similarity in blood samples to exist between the original culture and a sample from the infected animal. The professor describes how Koch's postulates aided him in discovering the specific organism that causes tuberculosis.

Chapter 2: Detail Questions

01 Art History

Great Depression Photography		
Cause	Effect	Support
Great Depression	Government became involved in arts	FSA hires photographers to document events
	Realism in photography	Emotion of migrant mother in Dorothea Lange photo

1. (B) 2. (D) 3. (A)

Summary: The professor explains that during the Great Depression, photographers began to take photos of real people in difficult situations. A government program hired photographers to take pictures, and many photographers focused on farmers who migrated to California because their farms had been destroyed by dust storms. These photos went on to influence later photographs.

02 Business

Traditional Theory vs. Interactionist Theory		
Traditional	Both	Interactionist
<ul style="list-style-type: none"> • Conflict is always harmful • Conflict can be avoided through scientific management • Conflict hinders productivity 	<ul style="list-style-type: none"> • Proper management of conflict increases productivity 	<ul style="list-style-type: none"> • Conflict can be beneficial • Conflict is unavoidable • Conflict should be managed to reduce harm and increase benefits

1. (A) 2. (B) 3. (A), (D)

Summary: The professor describes two views of conflict in organizations. Frederick Taylor thought conflict was harmful at work and hindered productivity. He believed that managers could avoid conflict through proper use of scientific management. Conversely, Robbins's interactionist view proposed that conflict can also have enormous benefits to an organization. He says that conflict is unavoidable and can be managed in ways to raise productivity.

03 Office Hours

Problem	Solution
Department head does not think class would be popular	If student can get thirty classmates to send letters then department might approve it

1. (A) 2. (C) 3. (C)

Summary: The student thinks that nature writing would make a good class. The professor said she had tried to get it approved in the past, but that the department head did not think the course would be popular enough. The professor says that if the student can get thirty students to send letters to the department head, then he would probably approve the class.

04 Service Encounter

Problem	Solution
Student feels he is wasting meals with current meal plan	Purchase plan with fewer meals per week
	Purchase meal points, which are more flexible

1. (D) 2. (A) 3. (C)

Summary: The student wants to change his meal plan because he has a hectic schedule and is not using his current plan to its full potential. He first settles for a plan with fewer meals. However, he still thinks that he will be wasting meal credits. The employee suggests "Meal Points" that will allow him to buy meals when he needs to.

05 Astronomy

Formation of Earth's Atmosphere			
Step 1	Step 2	Step 3	Step 4
Sun's particles blow hydrogen and helium gases into space	Volcanic activity releases CO ₂ , nitrogen, and water vapor into atmosphere	Earth cooled and water vapor condensed, forming precipitation	Algae and plants absorb carbon dioxide from atmosphere and release oxygen

1. (B) 2. (B), (C) 3. (B)

Summary: The professor explains how the Earth's atmosphere was formed. First, solar wind blew the hydrogen and helium gases into space. Next, activity from the Earth's interior released water vapor, carbon dioxide, and nitrogen into the air (outgassing), creating a hot, dense atmosphere. Once the Earth cooled, water vapor condensed into precipitation. Once algae and plants evolved, they absorbed carbon dioxide and released oxygen into the atmosphere.

06 Zoology

Gorillas vs. Chimpanzees		
Gorillas	Both	Chimpanzees
<ul style="list-style-type: none"> • Small group size • One male in each group • Dominance relies on brute force 	<ul style="list-style-type: none"> • Male-dominated groups • Similar DNA 	<ul style="list-style-type: none"> • Large groups (50 or more individuals) • Several males in group • Dominance can depend on intelligence

1. (B) 2. (D) 3. (A)

Summary: The professor discusses the similarities and differences between gorillas and chimps. These animals share similar DNA and live in male-dominated societies. However, gorilla groups are smaller, consist of only one male per group, and rely on strength to determine the leader. Chimp groups are larger, can consist of several males per group, and have been known to rely on intelligence to determine the leader.

07 Office Hours

Problem	Reason	Solution
Student has not been doing well on tests; feels study guides do not reflect test questions	Student has been depending too much on study guides	Use study guide in conjunction with notes
		Fill out study guides in-depth

1. (A) 2. (B) 3. (D)

Summary: The student goes to the professor to discuss questions on the test that were not in the study guide. The study guide only briefly listed the key topics. The professor informs the student that she should also use her class notes to study for tests rather than relying on the study guide, as it is not an in-depth list of everything that will be on the test.

08 Service Encounter

Problem	Solution	Actual Cause of Problem
Student thinks steel cable broke on weight lifting machine	Students who break gym equipment must pay fee and fill out form	Pin holding weights together fell out

1. (C) 2. (C), (D) 3. (B)

Summary: A student approaches a gym employee and says she may have broken the weightlifting machine. She thinks she will have to pay for it completely, but the employee tells her the school's insurance will cover it. She has to fill out a form and pay a fee. The employee walks over to the machine and realizes that it is not broken. A part that holds the weights together has fallen out, and just needs to be re-inserted.

09 Psychology

Facial Feedback Hypothesis	
Emotions are activated by facial expressions	Studies show emotions not activated solely by facial expressions
	Brain sends signal to part that controls facial movement
	Facial expressions exaggerate or suppress emotions

1. (B) 2. (D) 3. (B)

Summary: The professor explains that the facial feedback hypothesis states that our emotions are activated by the expressions we make during an emotional situation. Tests of this hypothesis showed that facial expressions do not cause emotions to happen, but that they can exaggerate or suppress an emotion that a person is already experiencing.

10 Geography

Thomas Malthus's Theory	
Definition	Refutation
Population increasing at such a rate that planet will no longer sustain us, resulting in massive famine and death	Worldwide famine did not occur
	Wealthy countries have decreasing population rate
	Technology has made it possible for world to sustain current population

1. (A) 2. (C) 3. (B)

Summary: Thomas Malthus predicted that the population would increase until there would not be enough resources for everyone. He predicted catastrophes such as worldwide famine, and believed the only way to reduce population growth was through massive human suffering. He also thought that the wealth of economically developed countries would encourage their inhabitants to have more children. Both of his predictions were false.

| Vocabulary Review 1 |

- | | | |
|-------------|------------|------------|
| 1. (B) | 2. (C) | 3. (B) |
| 4. (C) | 5. (A) | 6. (A) |
| 7. (A) | 8. (B) | |
| 9. (A) | 10. (D) | 11. (B) |
| 12. (D) | 13. (C) | 14. (C) |
| 15. (D) | | |
| 16. midterm | 17. hectic | 18. stress |
| 19. RAs | 20. rounds | |
| 21. (C) | 22. (B) | 23. (D) |
| 24. (E) | 25. (A) | |

| Mini Test 1 |

- | | | |
|---------|---------|---------|
| 1. (A) | 2. (C) | 3. (C) |
| 4. (B) | 5. (A) | 6. (C) |
| 7. (B) | 8. (C) | 9. (B) |
| 10. (A) | 11. (C) | 12. (B) |
| 13. (C) | 14. (D) | 15. (B) |
| 16. (B) | 17. (A) | |

Chapter 3 Function Questions

01 Psychology

Kohlberg's Theory of Moral Development		
Pre-conventional	Conventional	Post-conventional
Individual only thinks of "right" in regard to self	Begins to consider "right" in relation to how society sees right and wrong	Begins to develop ideas of right and wrong without regard to society

1. (D) 2. (C) 3. (A)

Summary: The professor discusses Lawrence Kohlberg's Theory of Moral Development, which is separated into six stages that fall into three categories. In the pre-conventional stages, people only consider themselves. In the conventional stages, people develop moral reasoning. In the post-conventional stages, people begin to do something because they know it benefits society.

02 Philosophy

Objectivism vs. Solipsism		
Objectivism	Both	Solipsism
<ul style="list-style-type: none"> Reality is independent of our minds Our sensory perceptions prove its existence 	<ul style="list-style-type: none"> Metaphysical roots 	<ul style="list-style-type: none"> Reality is manufactured by our minds Cannot be proven because senses are manufactured

1. (C) 2. (A) 3. (C)

Summary: The professor compares objectivism and solipsism. She says that objectivists believe that a world exists outside of the mind, while solipsists believe that nothing exists outside of how we perceive it. In addition, objectivism says that our senses prove the existence of things outside of the mind, while solipsism argues that our mind creates those senses.

03 Office Hours

Problem	Solution	Aspect
Student wants experience teaching before graduation	Student should take independent study course	Design lesson plans
		Help professor teach

1. (B) 2. (C) 3. (C)

Summary: The student visits the professor's office to discuss her concerns about her future in teaching. The professor responds by giving two different suggestions. The first is that she just simply not worry about it. However, when the student continues to ask for advice, the professor suggests that she consider doing an independent study course.

04 Service Encounter

Alumni Health Insurance	
Advantage	Disadvantage
Offers complete vision, dental, and medical coverage	Requires expensive deductible and co-pay before coverage begins
Covers all major medical procedures	Does not pay for minor things like prescriptions
Easy to qualify for	Policyholder may be paying for coverage not ever used

1. (C) 2. (C) 3. (A)

Summary: The student visits the university health office to find out about health insurance. The woman explains that it is available for any student who has graduated, and then mentions a policy that costs \$50 dollars a month and requires a \$1,000 deductible and \$45 co-pay on prescriptions. The student feels that this policy would not be beneficial due to its high cost.

05 Business

Magazine Advertisements	
Advantage	Disadvantage
More creativity with ads	Infrequent print dates
Established readership base	Limited customer base
Specialized markets	Advertisement competition

1. (A) 2. (D) 3. (A)

Summary: The professor discusses three advantages of magazine advertising: the ability for advertising creativity, an established readership base, and specialized markets. However, he also mentions three disadvantages. He cites infrequent production, limited customer bases, and advertising competition as a few reasons why these types of ads may not always be the most beneficial.

06 History

Positive vs. Negative Effects of the Transcontinental Railroad		
Positive	Both	Negative
<ul style="list-style-type: none"> • Many new towns created 	<ul style="list-style-type: none"> • Introduction of livestock 	<ul style="list-style-type: none"> • Death of bison • Change in lifestyle for Native Americans

1. (A) 2. (B) 3. (A)

Summary: The professor discusses ways in which the railroad affected the American West. He first says that it made new towns possible. He then discusses the large-scale deaths of bison across the region. He goes on to explain the effects of the railroad on the Native Americans, and finally discusses the changes that occurred by bringing livestock into the area. While the railroad had some negative effects, it also shaped the West's history.

07 Office Hours

Problem	Solution
Information	Make timeline and choose most important information
Sources	Academic sources: journals, research publications, educational websites
Organization	Logical order of what reader needs to know
Time	Set goals; work hard

1. (A) 2. (B) 3. (C)

Summary: The student goes to see the professor in order to discuss an upcoming research paper. The professor suggests narrowing down the sources by using a timeline to figure out the most important events. He then suggests using academic sources, such as journal articles. He also proposes working in an order that builds on what the readers know, slowly introducing them to more information.

08 Service Encounter

Problem	Solution
Bookstore will not buy back textbook	Use university textbook trading website
Student wants money in exchange for textbook	Select "straight buy" option when creating profile

1. (A) 2. (D) 3. (B)

Summary: The student goes to the university bookstore for the textbook buyback, but the bookstore employee informs him that not all of his books can be bought back. He asks the employee if there is anything else that can be done. The employee responds by telling him about an online textbook trading website. She explains how it works, what is required, and what some of its disadvantages are. She also tells him how to use the website.

09 Environmental Science

Nuclear Waste Disposal				
Problem				
How to dispose of dangerous nuclear waste				
Solution				
Make more stable (vitrification)	Store in bunkers	Bury or submerge	Make less radioactive (transmutation)	Send into space

1. (A) 2. (A) 3. (A)

Summary: The professor discusses the problem of disposing of nuclear waste with the class. He begins by discussing processes of making the waste more stable. He then discusses storing waste underground. Last, he discusses submerging the waste in the ocean, burying it in remote areas, and sending it into space.

10 Art History

Methods of Sculpture	
Method	Explanation
Modeling	Adding material to frame usually made of metal
Casting	Beginning with core and using mold to create piece
Assembling	Putting pieces of other things together to make art
Carving	Taking large piece of material and carving shape out of it

1. (C) 2. (D) 3. (C) 1. (A) 2. (D) 3. (C)

Summary: The professor discusses four different methods used to create sculptures. Modeling is an additive process that adds a material to a core. Casting, also additive, involves adding material to a mold. Assembling puts materials together to create a sculpture. Carving, the only subtractive method mentioned, takes pieces away from a large piece of material.

Summary: The professor defines direct selling as the selling of a product to the customer, without the help of a store, for example. He also relates the different sales methods that comprise direct selling, including using phone calls, seminars, and demonstrations. The first method involves the seller calling consumers to offer a product. Seminars are presentations that discuss the benefits of a product. With the final method, sellers demonstrate how a product works.

Chapter 4 Stance Questions

01 Economics

Stagflation		
Definition	Example	Cause
Combination of stagnant economy with inflation	The oil crisis of 1973	OPEC stopped exporting oil to US
		Oil companies decreased production
		Price of gasoline rose and US gas companies did not increase profits

1. (A) 2. (D) 3. (B)

Summary: The professor discusses the effects of stagflation with the class. He uses the 1973 oil crisis, when OPEC raised prices by four times their original amount. He describes how decreased availability results in inflation, and how in stagflation, production decreases. He also demonstrates how this caused prices to increase.

02 Business

The Direct Sales Model		
Way to sell products directly to customers without using retail stores or middlemen		
Phone Calls	Seminars	Demonstrations
Call potential customers, present product information	Present lecture or speech about product, emphasizing strong points	Show people how well product works, answer questions, sell to customers

03 Office Hours

Problem	Solution
Student does not believe she can finish project on time because studio is always full	Choose alternate time to go to studio
	Switch studio times with another student

1. (B) 2. (A) 3. (A)

Summary: The student has been sick with the flu and has missed several days of class. She goes to her professor to discuss her sculpture project, which she is concerned she may not be able to complete by the deadline. The professor gives two recommendations. First, she should go early in the morning when the studio is not crowded. Second, she can switch studio times with another student.

04 Service Encounter

Problem	Solution 1	Concern	Solution 2
Student did not receive expected package	Check to see if package was delivered to another dorm	Visiting each dorm will take a long time	Call each dorm to see if they have package

1. (B) 2. (C) 3. (D)

Summary: The student goes to the campus mail center to see if it has a package that he has been expecting. He is expecting to receive his birth certificate. The employee there says that she does not have the package, and recommends that he check with the other dorms on campus to see if it was delivered to one of them by mistake.

05 Environmental Science

Nature's Removal of Pollution	
Method	Explanation
Rain out	Pollution falls back down to Earth when it rains
Sedimentation	Particles heavier than air fall back down due to gravity
Photodissociation	Sunlight breaks chemical bonds
Oxidation	Oxygen combines with particles of pollution; falls to ground with rain

1. (D) 2. (A) 3. (B)

Summary: The professor talks about ways that nature removes pollution from the air. One way is called rain out, which is moisture pulling pollution to the ground. She also talks about sedimentation, or the settling of particles due to gravity. In photodissociation, the sun breaks the particles' chemical bonds, making them harmless. Oxidation occurs when oxygen combines with something else and it is then caught and taken to the ground.

06 Business

The Hawthorne Effect	
Theory	Refutation
Showing employees attention can improve productivity	One test indicated breaks caused increased productivity
	Another test showed no increase in productivity
	Third test had other factors that may have been responsible for increased productivity

1. (B) 2. (A) 3. (C)

Summary: The professor's lecture reviews the experiments that explored the Hawthorne Effect theory. He discusses the initial experiment, in which lighting was changed to see if this affected worker productivity. It didn't seem to matter, so researchers thought attention given to workers affected productivity. Researchers then did other experiments, such as changing the rooms workers were in and giving them breaks. These experiments seemed to disprove the Hawthorne Effect.

07 Office Hours

Problem	Solution
Student wants to be professor's research assistant	Student must complete application, provide references, write exam, give interview, and go through probationary period

1. (C) 2. (B) 3. (C)

Summary: The student comes to the professor to ask about an ad for a research assistant she had posted in the campus newspaper. The professor describes the conditions, expectations, and what kinds of qualifications she requires for the position. The student describes his prior experience working in a laboratory, as well as his education in chemistry. The professor also describes what the study will research.

08 Service Encounter

Problem	Solution
Student missed work study deadline but wants to continue working in admissions office	File petition with the office to attempt to bypass rule about work study
	Look for another job that does not require work study

1. (A) 2. (D) 3. (B)

Summary: The student accidentally missed the deadline to apply for work study. The student has a job in admissions that she enjoys, but she is concerned about losing it after the employee mentions that most of those positions are reserved for work study students. The employee suggests that she fill out a petition for exception, which would allow her to keep her job if granted. The employee then describes what the form requires.

09 Anthropology

The Overkill Theory	
Theory	Support
Increase in population caused humans to kill too many animals, which forced them to find other food sources	Species extinction followed human civilization progress
	Extinctions occurred worldwide rather than in concentrated areas; only population growth was consistent
	Other food sources took more time to gather, hunt, or prepare, so must have been done out of necessity

1. (A) 2. (D) 3. (D)

Summary: The professor discusses what factors caused the development of broad-spectrum collecting. He focuses on the overkill theory, which he supports. He talks about the progress of human civilization and the corresponding extinction of different species of animals, and how it impacted what foods were available to people, as well as other possible indications of the theory's accuracy.

10 Biology

Animals Using Medicine	
Theory	Support
Animals have learned certain medicinal plants help them recover from or prevent illness	Monkeys chew certain leaves to get rid of intestinal parasites
	Bears chew plants and use juice to get rid of parasites on fur
	Lemurs eat soil to stop poison in bamboo from killing them

1. (C) 2. (A) 3. (A)

Summary: The professor discusses animal intelligence, particularly in the area of animals using medicines. Some students are skeptical, but she gives them a number of examples to support her claims, including the habits of monkeys and bears that eat medicinal leaves.

| Vocabulary Review 2 |

1. (C) 2. (D) 3. (D)
 4. (B) 5. (A) 6. (D)
 7. (A) 8. (C)

9. (B) 10. (B) 11. (A)
 12. (B) 13. (A) 14. (B)
 15. (C)
16. predict 17. verified 18. devise
 19. particle 20. diverse
21. O 22. S 23. S
 24. S 25. O

| Mini Test 2 |

1. (B) 2. (D) 3. (B)
 4. (C) 5. (D) 6. (B)
7. (B) 8. (A) 9. (A)
 10. (C) 11. (A) 12. (D)
13. (A) 14. (C) 15. (B)
 16. (D) 17. (D)

Chapter 5 Organization Questions

01 Business

The Product Life Cycle	
Stage 1: Development and introduction	Description: Product is developed and company loses money
Stage 2: Growth	Description: Product gains reputation and begins to make money
Stage 3: Mature	Description: Product is at height of money-making potential
Stage 4: Decline	Description: Product fails to make money and is no longer made

1. (D) 2. (B) 3. (D)

Summary: The professor discusses the product life cycle, a series of stages every product goes through. She talks about each stage in order: the product development and introduction stage, the growth stage, the mature stage, and the decline stage. She describes the characteristics of each phase and compares each phase of the product life cycle with corresponding phases of a human's life cycle.

02 History

Dance Halls	
Definition	Effect
Large halls where groups of people went to join dance craze	Concepts of entertainment changed to include large groups of people
	Moral judgments became less strict in America

1. (B) 2. (B) 3. (D)

Summary: The professor discusses dance halls. They were large venues where people could gather and dance. Dance halls grew in popularity with the latest dance crazes of the times. He then moves on to discuss some effects of the dance halls. He says that they changed people's view of entertainment and helped change some moral concepts.

03 Psychology

Two-Factor Theory of Emotion		
Theory	Support	Refutation
Physical conditions can lead brain to create emotions	Racing heart can be interpreted as nervousness when actual cause is certain food	Physical arousal is not necessary to produce emotion

1. (A) 2. (D) 3. (C)

Summary: The professor's lecture is about the Two-Factor Theory of Emotion. He discusses the two factors separately and gives an example for each. He first describes how physical conditions can create emotions. He then describes how the mind can create emotions by interpreting situations in different ways.

04 Literature

Structuralism	
Definition	Example
By simplifying literary work down to most basic structure, value can be determined through originality or lack of it	<i>Romeo and Juliet</i> uses very similar structure to many other famous stories in literature and therefore is not original

1. (C) 2. (A) 3. (B)

Summary: The professor begins the lecture by asking the students to consider any unique classic literature, and then she uses this to explain structuralism. Structuralism, she says, is the idea that if a story is not unique in its basic structure, it is not important. The professor shows how structuralists view *Romeo and Juliet*, stating that they would not like it, since it is not unique. Structuralists see no value in works that follow established patterns.

05 Astronomy

Saturn's Rings	
Topic	Point
What Saturn's rings are made of	Small particles that orbit the planet
	Particles are made of frozen water that can be as large as a snowball
	Particles formed a ring pattern after bumping into each other over time

1. (B) 2. (A) 3. (B)

Summary: The professor discusses the rings on Saturn. He begins by asking the students to guess what the rings are made of. He reveals that they are made of tiny ice particles. After a student asks why the particles form rings, he discusses that collisions with other particles keep the rings thin.

06 Environmental Science

DDT	
Advantage	Disadvantage
Reduced malaria cases	Loses effectiveness quickly
Made yellow fever less of a threat	Harms other animals, stored in oils and fats and can harm the environment
	Harmful effects can move up food chain through biomagnification

1. (D) 2. (D) 3. (A)

Summary: The lecture begins with the professor discussing the invention of DDT in the 1940s and its subsequent uses. She then talks about all the negative results of using the pesticide, including its long-term effects on animals and gradual ineffectiveness. She also explains the positive points of DDT usage, such as reducing the threat of malaria and yellow fever.

07 Sociology

Game Theory and the Nash Equilibrium	
Theorie	Example
Game theory: views strategies as games in relation to others	Tag: strategies must change in relation to different actions
Nash equilibrium: Strategies can reach an equilibrium	Prisoner's dilemma: prisoners can reach equilibrium by doing same action

1. (D) 2. (B) 3. (A)

Summary: The discussion begins with a definition of game theory, which is a series of games that have been analyzed to study human interactions under certain conditions. It is primarily used to understand all possible strategy choices under those conditions. The professor also discusses the Nash equilibrium. This occurs when no player has an advantage. The professor uses the prisoner's dilemma as an example.

08 Education

Paulo Freire's Theory of Education	
Theory	Support
Students are partially responsible for education; student-teacher relationship should involve dual roles	Personal story about sitting in class not learning until focused
	Use of project to allow students to teach each other and learn themselves

1. (C) 2. (A) 3. (A)

Summary: The lecture focuses on Freire's ideas about education. The professor begins by talking about her own experience learning: she realized one day that she had to take an active role in her own education. Friere's theory about education says that teachers should be like students, and students should be like teachers. The professor explains that, in order to put this theory into practice in her classes, she asks students to do presentations.

09 Biology

Genetic Diversity		
Cause	Effect	Example
Lack of genetic diversity in animals	Animals susceptible to disease	Cheetahs have difficulty surviving because of reduced genetic diversity
	More deformities	
	Vulnerability of species	

1. (D) 2. (A) 3. (D)

Summary: The professor introduces the idea of genetic diversity and its effects on animals. He discusses three major results of a lack of genetic diversity: susceptibility to disease, increased incidence of deformities, and an overall decrease in the species' ability to survive. He uses cocker spaniels and cheetahs to back up his points about the negative effects of a lack of genetic diversity.

10 Art History

The Black Death and Art			
Cause			
The Black Death			
Effect			
Sombre colors in art	Art focused on death or morbidity	Realistic settings, figures, or subjects	New art movement called "Art of Dying"

1. (D) 2. (C) 3. (B)

Summary: The professor discusses the ways in which the Black Death impacted art during the 14th century. She talks about the morbid nature of the work, the somber colors that characterized it, and the use of death as a central theme. Two artists in particular, Triani and Giotto, created works that were typical of the era. Finally, she discusses "The Art of Dying," a school of art that reflected the church's outlook on death.

Chapter 6 Content Questions

01 Business

Tall Management Structure	
Disadvantage	Example
Poor communication such as distortion of commands	Employees interpret information differently than they should
Long time for decisions and orders to pass to all levels	Slow to respond to market changes
Having many managers is expensive	Middle managers are first to get laid off when company downsizes

1.

	Yes	No
Managers hide information from other managers.		✓
The extensive hierarchy of managers is very costly.	✓	
Managers make different decisions at different levels.		✓

Summary: The professor talks about the "tall" management structure and its main disadvantages for companies. A tall management structure is one in which a company has many levels of organization, particularly many levels of managers. The three main disadvantages she talks about are the distortion of commands; the long time needed for decisions to pass to all levels, and the expenses of having so many managers.

02 Environmental Science

Off-Site Management vs. On-Site Management		
Off-Site	Both	On-Site
<ul style="list-style-type: none"> • Examples: zoos, botanical gardens, aquariums • Focuses on preserving individual species separately • Can preserve endangered species and then reintroduce them later 	<ul style="list-style-type: none"> • Aim to preserve species from extinction • Protects both plants and animals 	<ul style="list-style-type: none"> • Examples: national parks • Preserves species together as part of natural environment • Can preserve more species, including ones that have not been discovered yet

1.

	Off-Site	On-Site
Uses aquariums	✓	
Preserves individual species	✓	
Keeps animals in natural habitats		✓
Uses national parks		✓

Summary: The professor introduces the problem of how humans can protect the diversity of plant and animal species on Earth. He compares two methods. Off-site management, like zoos, takes species out of their natural environment and seeks to protect them as individuals. On-site management, like natural parks, seeks to protect the natural environment and all the species in it. Each has different advantages.

03 Office Hours

Problem	Solution
Student wants practical experience in environmental science	Volunteer with local environmental group
	Do independent study project while volunteering

1.

	Yes	No
The student should find a local environmental group.	✓	
The student needs to find a sponsor for her project.	✓	
The student needs to take a class on designing a project first.		✓

Summary: The student asks the professor how she can get practical experience in the environmental science field. The professor responds by telling her she can volunteer with a local environmental group. The student says she is too busy. In response; the professor suggests that the student do an independent study project and get credit for the experience as a volunteer.

04 Service Encounter

Problem	Solution
Student wants to balance time for job and classes	Drop three or more classes and focus on work and remaining classes

1.

	Yes	No
The student is getting lower grades this term.	✓	
The student might lose his scholarship.		✓
The student needs to work at least twenty hours each week.	✓	
The student wants to graduate on time.	✓	

Summary: The student visits a counselor to ask for advice on how to balance time for his job and classes. The student explains that he needs to work a minimum of twenty hours per week and that he is taking six classes to graduate on time. The counselor suggests he drop three or more classes and focus on work and on doing well in his remaining classes.

05 Philosophy

Montaigne's Thought	
Influence	Result
Criticism of extreme positions	Influenced rise of "positive skepticism," a new form of criticism of authority
Promotion of moderation and tolerance	
Rejection of absolute moral positions	

1.

	Yes	No
Inspired other skeptics		✓
Left his job as a lawyer	✓	
Moved to a different country		✓

Summary: The professor explains that Montaigne lived during a time of terrible wars and retreated to the countryside. She adds that he wanted to know himself in order to ask questions about society. He did three things that influenced the development of a new form of criticism called "positive skepticism." She says these were criticism of extreme positions, support of moderation and tolerance, and rejection of absolute moral positions.

06 Sociology

Societies		
Type		
Hunter/Gatherer	Horticultural	Agrarian
Feature		
Very mobile	Sometimes mobile	People settled in one place
Obtained food through hunting and gathering	Obtained food from crops, hunting, and gathering	Obtained food through agriculture
Little division of labor	Some division of labor	Specialized division of labor

1.

	Hunter/Gatherer	Horticultural	Agrarian
Has professionals			✓
Prefers to move around	✓		
Most people do same job	✓		
Plants some crops		✓	

Summary: The professor talks about society as the most complex form of social organization. He discusses three types of societies: hunter/gatherer, horticultural, and agrarian. He explains how each type differs based on three dimensions. These are mobility, subsistence patterns, and division of labor.

07 Office Hours

Problem	Solution
Student wants to take class but has not completed prerequisite	Professor will let her take course on trial basis, she can audit it at the same time

1.

	Yes	No
Audit the 101 class	✓	
Get permission from her advisor		✓
Talk with the professor regularly	✓	
Take a test		✓

Summary: The student asks the professor if she can attend his class. He says that she needs to complete the prerequisite course first. She tells him about her plans and previous education to try to convince him to let her into the course. The professor agrees to let her take the class on a trial basis.

08 Service Encounter

Situation	Problem	Solution
Student wants to work for school newspaper and get paid as freelance writer	School cannot afford to pay another staff member	Employee suggests student work freelance first and paid position may open up in future

1.

	Yes	No
To make money	✓	
To get experience	✓	
To write about sports		✓
To build a portfolio	✓	

Summary: The student is looking for a job at the school newspaper as a paid freelance writer. The employee says that they do not pay such writers, which makes the student disappointed. The employee tries to convince the student to work for the paper as an unpaid freelance writer while suggesting that he might get hired for a job in the future.

09 History

The "Gospel of Wealth"	
Theorie	Refutation
People get what they deserve. If they work hard, anyone can become rich.	Not everyone can become rich. People are different.
If government lets wealthy control their money, they will give to the poor.	Large-scale giving did not happen. Government programs helped poor more.

1.

	Yes	No
Governments should let people get rich by reducing taxes.		✓
The wealthy are responsible to help others improve themselves.	✓	
Philanthropy can eradicate poverty without the help of the government.	✓	

Summary: The professor talks about what some thought about wealth and poverty at the end of the 19th century. He discusses Carnegie's "Gospel of

Wealth," which said that the poor could improve themselves and that philanthropy was the best solution to poverty. Then the professor refutes both points, saying that not everyone has the ability to be rich and that government programs were more successful in alleviating poverty.

10 Astronomy

Lunar Water	
Theory	Support
Likely there are underground deposits of water on moon	Clementine found evidence of underground water at lunar south pole
	Lunar Prospector found indirect evidence of water ice in both lunar polar regions

1.

	Clementine	Lunar Prospector
Searched both poles		✓
First to find evidence of water	✓	
Crashed into crater		✓
Detected hydrogen		✓

Summary: The class discusses the possibility that there may be water on the moon. They agree that it would have to be frozen and located underground at the poles. The professor points out that two spacecraft looked in those areas and found evidence of water; however, no one has yet been able to prove that there is water on the moon.

Chapter 7 Inference Questions

01 Philosophy

Objectivism	
Axiom	Key Point
Primacy of Existence	An objective reality exists independent of consciousness
Law of Identity	All objects that exist have an identity
Axiom of Consciousness	People are conscious and thus able to learn

1. (B) 2. (D) 3. (A)

Summary: The lecture is about a philosophy called Objectivism. The professor discusses three axioms, which describe the Objectivist belief about reality. The first is the Primacy of Existence, which says that there is an objective reality that exists aside from consciousness. The second axiom is the Law of Identity, which says that everything has an identity. The third is the Axiom of Consciousness, which says that people are aware of existence and the identities of objects.

02 Linguistics

Sapir-Whorf Hypothesis	
Theory	Support
Grammatical structure of language influences behavior and thinking of speakers	Hopi people had no tenses to express time, thought to be related to conception of time as cyclical

1. (A) 2. (B) 3. (B)

Summary: The lecture is about the Sapir-Whorf theory of linguistic relativity. The theory proposes that the way people act and think is determined by their language. The professor supports the theory by talking about the Hopi language and culture. From that, some researchers found that the grammatical structure of the language, which did not include tenses, may have affected how the people who spoke that language conceived of time.

03 Office Hours

Problem	Aspect	Solution
Student does not understand comments on paper	No logical link between sentences	Explain further to clarify
	Used "institution" as synonym for "business"	Be careful of language
	Only mentioned precedents	Apply precedents to Cineweb

1. (A) 2. (D) 3. (C)

Summary: The conversation takes place between a student and a professor. After receiving his graded paper, the student is confused about the professor's comments. The professor tells the student that he

has to be more logical. The professor also says that the student must be careful about his word choice. Finally, the professor tells the student how to adequately support his ideas.

04 Service Encounter

Becoming a Recognized Club			
Step 1	Step 2	Step 3	Step 4
Create constitution that includes membership lists and details about organization	Submit constitution to Student Activities Office	Wait to hear if application gets approved or denied	If accepted, receive organization packet

1. (D) 2. (A) 3. (C)

Summary: The conversation takes place between a student and an employee of the university. The student wants to reserve a room for her juggling club, but she cannot because the club is not registered with the university. Then the employee explains the process for becoming a recognized organization. The student must submit a constitution and have it approved.

05 Geology

Volcanoes	
Type	Explanation
Cinder cone	Steep-sided volcano created when cinders accumulate around the crater
Composite volcano	Large volcanoes reinforced by hardened lava in the sides
Shield volcano	Large volcanoes formed when liquid lava flows cool over large distances
Lava dome	Grow from the inside because lava rarely escapes

1. (A) 2. (B) 3. (B)

Summary: The lecture is about four different types of volcanoes. The professor explains that cinder cones are created when violent eruptions emit lava. The lava hardens into pieces called cinders that build up around the crater. Composite volcanoes are much larger and are strengthened by lava that hardens in cracks in the side of the cone. Shield volcanoes are formed by liquid eruptions that harden over large distances. Lava domes are formed from within, and lava rarely escapes the volcano.

06 Art History

Andy Warhol's Contribution to Pop Art	
Definition	Contribution
Art movement focusing on appealing or familiar themes	Influenced others to think of mass-produced items as art
	Promoted idea that art can be mass produced by working in artistic "assembly lines"
	Promoted pop art as legitimate art form in galleries

1. (A) 2. (C) 3. (D)

Summary: The professor discusses three ways in which Andy Warhol influenced the pop art movement. First, Warhol's ideas that mass-produced items could be art influenced other artists of the movement. Second, Warhol also promoted the collaboration of artists as a way to mass produce art. This was also a key idea of the movement. Finally, Warhol participated in an exhibit that helped legitimize pop art and forced people to redefine art.

07 Office Hours

Problem	Reason	Solution
Student's participation grade was lower than expected	Says irrelevant things in class	Stay on topic
	Speaks at least 3 times per class, instead of responding to classmates	Listen to others and only speak when it addresses comments directly

1. (A) 2. (D) 3. (B)

Summary: The conversation takes place between a student and her professor. The student approaches the professor because she is unhappy about her low participation grade. The professor explains to the student that he seeks quality over quantity and gives her some tips for raising the grade. First, he tells her to add only relevant comments. Also, he asks her to try to interact with the other students instead of just speaking in order to get a high grade.

08 Service Encounter

Problem	Solution	Conclusion
Student's reservation of practice room cannot be found	Employee could find record in her file	Student must return home to find reservation slip
	Student could provide reservation number	
	Student could provide confirmation slip	

1. (B) 2. (C) 3. (B)

Summary: The conversation takes place between a student and the building manager of the music department. The student had a reservation, but the manager cannot locate the information and is therefore unable to allow the student to use the practice room. The student suggests different ways of recovering the information, but ultimately, he has to go back to his room to retrieve the confirmation sheet.

09 Business

Mass Production	
Advantage	Disadvantage
Extremely efficient	Inflexible for design changes
Eliminates human error	Requires a lot of money up front

1. (C) 2. (A) 3. (C)

Summary: The lecture is about mass production. First, the professor gives a brief history of this type of production, debunking the myth that the assembly line was invented by Henry Ford. Then he talks about some of the advantages and disadvantages of mass production. The advantages are that it is faster and eliminates human error. The disadvantages are that it is inflexible and requires a lot of money.

10 Psychology

Lucid Dreaming			
Definition			
Dreaming while being aware you're dreaming			
Step 1	Step 2	Step 3	Step 4
Try to memorize a dream you've had	Do an activity that requires full wakefulness	Get into bed and tell yourself to remember next dream you have	Visualize yourself in bed having dream previously rehearsed

1. (A) 2. (C) 3. (B)

Summary: The lecture is about lucid dreams. First the professor defines these dreams as ones in which dreamers are conscious of their actions and behaviors. The professor explains how to induce a dream like this. The process involves remembering a dream and going to sleep again to try to control the dream.

I Vocabulary Review 3 I

1. (C) 2. (D) 3. (A)
 4. (A) 5. (C) 6. (B)
 7. (C) 8. (D)
9. (B) 10. (C) 11. (C)
 12. (C) 13. (A) 14. (D)
 15. (B)
16. course 17. evaluation 18. customary
 19. twofold 20. institution
21. plume 22. facilitate 23. venue
 24. dynamic 25. external

I Mini Test 3 I

1. (C) 2. (B)
 3. (B) 4. (D)

5.

	Batesian	Müllerian
Animals undergo signal standardization		✓
A bug with no defense mechanism models itself after an inedible species	✓	
Groups of unrelated animals form mimicry rings		✓
First observed in the Pieridae butterfly	✓	

6. (D) 7. (A)
 8. (D) 9. (B)
 10.

	Egyptian	Mesoamerican
Built in the middle of lakes		✓
Took longer to cultivate food		✓
Manipulated a major river to provide water	✓	
Grew millet, wheat, and barley	✓	

11. (D) 12. (B) 13. (D)
 14.

	Yes	No
Arrive at the section well prepared		✓
Take time to listen to what the other students say	✓	
Create a list of topics or questions to bring up during the section		✓
Be confident in her academic ability	✓	

15. (D)

Practice Test

1. (D) 2. (B) 3. (A)
 4. (B) 5. (B) 6. (D)
 7. (A) 8. (C) 9. (B)
 10. (A) 11. (A)

12.

Events	Yes	No
The Venetian Republic was invaded by the Normans.		✓
The Venetian Republic became trade partners with the Genoese.		✓
The Venetian Republic defeated the Genoese in 1381.		✓
The Venetian Republic allied with Genoa against the Byzantine Empire.		✓

13. (B) 14. (A) 15. (A)
 16. (C) 17. (C)
 18. (C) 19. (B) 20. (B)
 21. (A) 22. (B)
 23.

	Plato	Socrates	Both
When virtue is truly known, one is virtuous.		✓	
Goodness is an objective form.	✓		
The concept of self-interest was not treated.			✓
Written dialogues were used to teach philosophy.	✓		

24. (B) 25. (C), (D) 26. (A)
 27. (C) 28. (A) 29. (B)
 30. (B) 31. (D) 32. (C)
 33. (B) 34. (C)

Speaking

Part 1

Chapter 1 Organizing Speech

Q1 Practice 1

► Step 1

Possible Related Ideas and Expressions:

city: village, urban center, downtown
visit: travel, tour, go to
fascinating: amazing, interesting, appealing
enjoy: like, value, favor

► Step 2

Useful Expressions:

family originated, always wanted to see, able to witness,
history, buildings and places, captivated, exploring

Q1 Practice 2

► Step 1

Possible Related Ideas and Expressions:

type: style, form, variety
job: work, employment, trade
choose: select, want, go for
enable: let, permit, be able to

► Step 2

Useful Expressions:

prefer this job because, have always been fascinated
by, would allow me to, enable me to, would get to,
observe, experiences, exciting

Q1 Practice 3

► Step 1

Possible Related Ideas and Expressions:

bad: terrible, unpleasant, nasty
situation: event, incident, experience
important: chief, significant, major
lesson: example, teaching, education

► Step 2

Useful Expressions:

more important than, wanted, even though, finally, some
goals are not worth the risk

Q2 Practice 1

► Step 1

Possible Related Ideas and Expressions:

prefer: want, wish, choose
live: exist, inhabit, reside
mountain: height, pile, hill
water sports: surfing, swimming, scuba diving

► Step 2

Opinion 1

Useful Expressions:

prefer, hikes and backpacking, enjoy going, very
rewarding, able to, favorite sports

Opinion 2

Useful Expressions:

prefer, learn how to, lifelong dream, have always wanted,
very peaceful, not ever have to endure, want to stay

Q2 Practice 2

► Step 1

Possible Related Ideas and Expressions:

friends: pals, buddies, companions
relationship: connection, bond, union
difficult: hard, tough, demanding
support: assist, cheer on, defend

► Step 2

Opinion 1

Useful Expressions:

prefer to have, build strong relationships, in my
experience, can be overwhelming, hard to divide my
time, have time for myself

Opinion 2

Useful Expressions:

prefer to have, get to know lots of people, someone
to talk to, more support, feel isolated, better able to,
experience many different things

Q2 Practice 3

► Step 1

Possible Related Ideas and Expressions:

money: riches, wealth, currency
summer vacation: break, rest, relaxation
busy: hard-working, active, industrious
boring: dull, dreary, unexciting

► Step 2

Opinion 1

Useful Expressions:

spending money, go on trips, remarkable experience, could not have afforded it, often get bored, rather keep busy

Opinion 2

Useful Expressions:

time to rest, worked so hard, did not get enough sleep, recuperate, time to do things, rather hang out with friends

Chapter 2 Synthesizing Information

Q3 Practice 1

► Step 1

Suggested Keywords/Key Phrases:

computer lab, printing paper, waste, money saved, computers

Sample Restatement:

The university computer lab will no longer provide printing paper for students. Students must use their own paper to print materials. This is because students have been wasting the university's printing paper. The money the university saves will be spent on purchasing more computers.

► Step 2

Suggested Keywords/Key Phrases:

distressing, school-related, more computers, lower student demand, lab fee

Sample Restatement:

The man and woman are distressed to hear about the university's decision. The woman remarks that she always prints out materials in the lab that are school-related. The man then comments that the money the university saves will be used to buy more computers. However, the woman thinks that there will be a lower student demand for the computer lab. Since students will no longer want to use the lab, they will not want to pay the lab fees. This means less money for the school.

► Step 3

Opinion: The woman disagrees with the university's decision.

Reason 1: She believes the university is wrong to say that students use the printing paper to print materials unrelated to school.

Detail: Everyone she knows, including herself, prints scholarly materials.

Reason 2: The school will lose money from lab fees, which means less money for new computers.

Detail: She believes student demand for the computer lab will go down if they have to bring their own paper, and students will not want to pay lab fees if they do not use the lab.

► Step 4

Useful Expressions:

students must use own paper, disagrees with decision, students print scholarly material, fewer students will pay lab fee, less money for new computers

Q3 Practice 2

► Step 1

Suggested Keywords/Key Phrases:

April 15, parking tickets, discourage student parking, emergency vehicles, closer parking lot

Sample Restatement:

On April 15, the price of parking tickets will be raised to discourage students from parking along the street. Parking along the street makes it harder for emergency vehicles to get to fire lanes. We also hope to use the money raised by the increase in parking tickets to build a parking lot closer to campus.

► Step 2

Suggested Keywords/Key Phrases:

\$35-\$50, customers, bad for business, half hour walk, current parking lot

Sample Restatement:

The man agrees with the rise in parking tickets from \$35 to \$50. He mentions that when students park on the street, they prevent customers from parking in front of the shops. He believes this is bad for businesses. He is also hoping that the money from parking tickets can be used to create a parking lot closer to campus. The current parking lot is too far away, and it takes the man a half hour to walk to class from there.

▶ Step 3

Opinion: The man believes that the rise in parking tickets is a good idea.

Reason 1: It will keep students from illegally parking along the street.

Detail: This will allow customers to park there, which will mean better business for the shops along the street.

Reason 2: The money can be used to build a parking lot closer to campus.

Detail: It takes the man a half hour to walk to class from the current parking lots.

▶ Step 4

Useful Expressions:

increase in cost of parking tickets, agrees with decision, students hurt businesses, customers cannot park, lot is too far away, less time walking to class

Q3 Practice 3

▶ Step 1

Suggested Keywords/Key Phrases:

paper course catalogues, online course catalogues, register, paper and ink, convenient

Sample Restatement:

The university will be switching from paper course catalogues to online course catalogues. From now on, students will register for classes through the online catalogue. This will save the university the costs of paper and ink. It will also make it more convenient for students to register for classes.

▶ Step 2

Suggested Keywords/Key Phrases:

other ways to raise money, inconvenient, sign up, challenge, registrar

Sample Restatement:

The man disagrees with the university's decision to switch from paper course catalogues to online course catalogues. He thinks there are other ways for the university to save money. The woman points out that it will be easier for students to sign up for classes now, but the man disagrees. He thinks using the online course catalogue will be inconvenient for students. It

will be a challenge to learn how to use it. He thinks the registrar will be visited by lots of students who are having problems with the new system.

▶ Step 3

Opinion: The man disagrees with the university's decision to switch from paper course catalogues to online course catalogues.

Reason 1: He thinks there are other ways for the university to save money.

Detail: The university can save money by sending emails rather than posting announcements.

Reason 2: He feels that the online catalogue will be more inconvenient for students who are registering.

Detail: Students will have to learn how to navigate through a new system.

▶ Step 4

Useful Expressions:

paper catalogue replaced online, disagrees with decision, can save money in other ways, inconvenient, students will visit registrar anyway

Q4 Practice 1

▶ Step 1

Suggested Keywords/Key Phrases:

universal, warm colors, warmth and comfort, cool colors, confidence

Sample Restatement:

Colors are connected with certain emotions and can be used to affect emotions in a universal way. Colors are separated into two categories based on emotion. Warm colors are colors like red. They make people feel warmth and comfort. Cool colors are colors like blue. They make people feel more confident.

▶ Step 2

Suggested Keywords/Key Phrases:

pink, opponent's locker rooms, loss of energy, blue, job interviews

Sample Restatement:

The professor describes how colors can influence people. Warm colors like pink make people feel comfortable. For this reason, some sports teams paint their opponent's

locker rooms pink to get them to lose energy. Since cool colors like blue are connected with confidence, those applying for jobs are often told to wear blue to display confidence during interviews.

► Step 3

Warm colors: colors like red and pink, associated with warmth and comfort

Example of how they are used: many sports teams paint their opponents' locker rooms pink, hoping it will cause opponents to lose energy

Cool colors: colors like blue and purple, associated with calmness and confidence

Example of how they are used: people often encouraged to wear blue to portray confidence at job interviews

► Step 4

Useful Expressions:

warm colors create warmth, cool colors inspire confidence, team paints opponents' locker room pink, comforting so opposing team loses energy, wear blue to interview, seem confident

Q4 Practice 2

► Step 1

Suggested Keywords/Key Phrases:

social structure, resources, order, conflicts, survival

Sample Restatement:

A dominance hierarchy is a social structure among certain species of animals. It consists of a dominant animal that controls how resources are used. The dominant animal keeps order within the dominance hierarchy. It also solves conflicts between other animals. Dominance hierarchies are necessary for the survival of some species.

► Step 2

Suggested Keywords/Key Phrases:

rank, baboon, highly structured, scarce resources, savanna

Sample Restatement:

The professor says that baboons use a highly-structured dominance hierarchy. She mentions that baboons use ranks to keep order in baboon groups. They are ruled by a dominant leader. The professor also says that

dominance hierarchies help baboons avoid disputes over scarce resources. This is more important for savanna baboons because they live in a place where food is rarer.

► Step 3

Species that uses dominance hierarchies: baboons

Point 1: used to maintain order

Example: formed through a ranking system with a dominant leader in charge

Point 2: used to manage disputes over scarce resources

Example: Savanna baboons have stricter dominance hierarchies than forest baboons do because food on the savanna is scarce.

► Step 4

Useful Expressions:

dominance hierarchies maintain order, resolve conflicts, baboons use ranking system, leader must manage resources and aggression

Q4 Practice 3

► Step 1

Suggested Keywords/Key Phrases:

continental drift, Alfred Wegener, Pangea, fossils, rock formations

Sample Restatement:

Alfred Wegener believed that at one time, the Earth only had one big continent called Pangea. However, the large continent eventually broke up. The pieces moved away from each other in what Wegener called continental drift. Yet evidence of Pangea can be found through similar fossils and rock formations found across today's continents.

► Step 2

Suggested Keywords/Key Phrases:

fit, Africa and South America, additional evidence, marine reptile fossil, sandstone hills

Sample Restatement:

Wegener first noticed that the coasts of Africa and South America seemed to fit together, suggesting continental drift. Additional evidence to support Wegener's hypothesis was found in fossil records and

rock formations. Fossil records of an ancient marine reptile are found in both Africa and South America. Also, there are similar sandstone hills on both the coasts of Africa and South America.

► Step 3

Continental drift: continents were once one landmass, broke up and drifted away from each other, forming today's continents

Evidence 1: similar fossils found on different continents

Example: fossils of ancient marine reptile found in both Africa and South America

Evidence 2: similar rock formations found on different continents

Example: same type of sandstone hills on west coast of South America is found on east coast of Africa

► Step 4

Useful expressions:

continental drift, continents were one landmass, fossils and rock formations, ancient marine reptile, similar coasts and minerals

Chapter 3 Stating Opinions and Summarizing

Q5 Practice 1

► Step 1

Problem: The woman is getting a C in her organic chemistry class and needs a B average to keep her scholarship.

Solution 1: Request to take the class as a pass or fail

Solution 2: Attend tutoring sessions for help

► Step 2

Opinion 1

Problem: The woman is getting a C in organic chemistry, but she needs to have a B average to keep her scholarship.

Best solution: I think the best solution is for the woman to request to take the class as a pass or fail.

Reason 1: She is too busy to take tutoring, and it may make her fall behind in other classes.

Reason 2: A pass or fail will not affect her grade negatively.

Opinion 2

Problem: The woman is getting a C in her organic chemistry class and needs a B average to keep her scholarship.

Best solution: I think the best solution is for the woman to attend the tutoring sessions and get help for organic chemistry.

Reason 1: It would be worthwhile to study with people who can help prepare her for the tests.

Reason 2: If she does well in the class, it will not matter with a pass or fail.

► Step 3

Opinion 1

Useful expressions:

C in organic chemistry, improve grade, request pass or fail, too busy, fall behind, will not affect GPA

Opinion 2

Useful expressions:

C in organic chemistry, improve grade, tutor, learn material better, raise GPA

Q5 Practice 2

► Step 1

Problem: The man will not be back in time to go on a field trip with his class, and it is a big part of his grade.

Solution 1: Meet up with the class the next day. (Saturday)

Solution 2: Ask the professor for an alternative assignment.

► Step 2

Opinion 1

Problem: The man will not be back in time to go on a field trip with his class, and it is a big part of his grade.

Best solution: I think the best solution is to catch up with his class on Saturday morning.

Reason 1: The mountain signs will make it easy for him to find his class.

Reason 2: He will not have to worry about the professor allowing him to do an alternative assignment.

Opinion 2

Problem: The man will not be back in time to go on a field trip with his class, and it is a big part of his grade.

Best solution: I think the best solution is to ask the professor for an alternative assignment.

Reason 1: The professor should understand that the man has an emergency and should be willing to give him another assignment.

Reason 2: The man will not have to worry about getting lost on the mountain trails.

► Step 3

Opinion 1

Useful Expressions:

grandfather in hospital, field trip, meet class Saturday morning, follow signs, no alternative assignment

Opinion 2

Useful Expressions:

grandfather in hospital, field trip, alternative assignment, professor will probably allow, no risk of getting lost

Q5 Practice 3

► Step 1

Problem: The woman does not have enough money to live in the dorms.

Solution 1: Get a work-study job

Solution 2: Take out a loan

► Step 2

Opinion 1

Problem: The woman does not have enough money to live in the dorms.

Best solution: I feel that the best solution is for the woman to get a work-study job.

Reason 1: This will allow for the woman to live on campus without going into debt.

Reason 2: A work-study job will be able to work around her busy schedule.

Opinion 2

Problem: The woman does not have enough money to live in the dorms.

Best solution: I feel that the best solution is for the woman to take out a loan.

Reason 1: This will allow for the woman to live on campus without having to work, letting her concentrate more on schoolwork.

Reason 2: She will be able to pay for all her housing expenses at the beginning of the semester.

► Step 3

Opinion 1

Useful Expressions:

live on campus, cannot afford, work-study job, pay costs, no debt, work around school schedule

Opinion 2

Useful Expressions:

live on campus, cannot afford, take out loan, do not have to work, concentrate on school, less stress, pay right away

Q6 Practice 1

► Step 1

Minimalism is a movement where artists reduced artwork to its basic shapes and colors.

Design techniques used by minimalist artists:

a) simple, uniform objects in their artwork

b) lots of objects in repeating patterns

Carl Andre's "Steel Zinc Plain":

Used the technique of uniform shapes

Physical description: square-shaped plates arranged in a checkerboard pattern people can walk on

Dan Flavin's "Monument for V. Tatlin":

Used the technique of repetition

Physical description: fluorescent tubes arranged in a simple miniature tower; inspired by grand monument

► Step 3

Useful Expressions:

minimalist artists, basic colors and shapes, simple and unique, repetition, checkerboard pattern, uniform shapes, fluorescent tubes

Q6 Practice 2

▶ **Step 1**

Charisma definition: ability to inspire enthusiasm and affection in other people

Traits of charismatic leadership:

- a) creates a vision that is appealing to followers
- b) demonstrates this vision through action

Dr. Martin Luther King, Jr.:

He demonstrated the ability to create an appealing vision.

His accomplishments: Believing all men were created equal, he helped American government pass laws giving every Americans certain rights.

General Patton:

He demonstrated his vision through action.

He showed this by actively demonstrating how to get rid of a traffic jam.

▶ **Step 3**

Useful Expressions:

charismatic leadership, leaders attract followers, create an appealing vision, Dr. Martin Luther King Jr., demonstrate vision through action, General Patton

Q6 Practice 3

▶ **Step 1**

The Asch experiment revealed that the pressure to conform greatly influences people's decisions.

Description of Asch experiment: Asch showed students note cards with three black lines written on them and asked questions about the lines; all but the last student were instructed to give the same wrong answer.

Response of the last student: One-third of the time, the last student replied with the same wrong answer, even though it was different from what he had observed.

What Asch believed would happen: He believed that the last student would almost always resist group pressure and give the right answer.

What actually happened: Students were willing to sacrifice what they knew was true in order to conform.

▶ **Step 3**

Useful Expressions:

Asch experiment, pressure to conform, influences decisions, students told to give wrong answer, last student gave same answer, different than what was observed

| Vocabulary Review 1 |

- | | | |
|-----------------|-----------------|--------------|
| 1. (B) | 2. (D) | 3. (A) |
| 4. (A) | 5. (C) | 6. (D) |
| 7. (C) | 8. (B) | |
| 9. (A) | 10. (D) | 11. (B) |
| 12. (C) | 13. (A) | 14. (D) |
| 15. (C) | | |
| 16. afford | 17. scholarship | 18. ignorant |
| 19. unscholarly | 20. penalty | |
| 21. (D) | 22. (E) | 23. (B) |
| 24. (A) | 25. (C) | |

| Vocabulary Review 2 |

- | | | |
|--------------|------------------|-------------|
| 1. (B) | 2. (C) | 3. (D) |
| 4. (B) | 5. (C) | 6. (D) |
| 7. (A) | 8. (C) | |
| 9. (B) | 10. (D) | 11. (C) |
| 12. (B) | 13. (A) | 14. (B) |
| 15. (C) | | |
| 16. monument | 17. traffic jam | |
| 18. grandeur | 19. remarkable | 20. endures |
| 21. rebuke | 22. dejection | 23. varied |
| 24. assume | 25. subsequently | |

Part 2

Chapter 4 Test Questions 1 and 2

Q1 Practice 1

► Step 1

Transitions:

For instance, because, Also

Sentence Order:

(C) (E) (A) (D) (F) (B)

► Step 2

Suggested Answers:

1. The speaker's favorite place is the park in the downtown area of her city.
2. The speaker likes to watch people interacting with each other, and she likes playing volleyball there.
3. The speaker likes to do these activities there because she enjoys watching people and because playing volleyball allows her to make friends and take a break from schoolwork.

► Step 3

Helpful Expressions:

park downtown, watch people, interaction, play volleyball, meet friends, exercise, break from school

► Step 4

Possible Responses:

1. My favorite place to go in my city is the movie theater.
2. I like to watch new movies and eat popcorn with my friends there.
3. I like to watch movies because they are interesting and exciting and I can relax with my friends.

Q1 Practice 2

► Step 1

Transitions:

because, before, Even though, also, as a child

Sentence Order:

(F) (D) (A) (C) (E) (B)

► Step 2

Suggested Answers:

1. The speaker's favorite book was about a boy who uses his imagination to turn his room into a magical forest, where he becomes the king of all the Wild Things. The Wild Things are monsters in the forest.
2. The speaker liked this book as a child because it had lots of pictures and it was easy to memorize.
3. What was surprising about the monsters is that even though they were supposed to be scary, the pictures made them look silly and likeable.

► Step 3

Helpful Expressions:

Where the Wild Things Are, imagination, great pictures, silly monsters, simple story, easy to memorize

► Step 4

Possible Responses:

1. My favorite book was about a boy who became a wizard.
2. I liked this book because it was exciting and it had magic in it.
3. What was surprising about the book was that the boy could fly and cast magic spells.

Q1 Practice 3

► Step 1

Transition Words/Phrases:

before, however, also

► Step 2

Helpful Expressions:

positive impact, ninth-grade teacher, passion for literature, fun, deal with conflicts, follow example

► Step 4

Possible Answers

Teacher: High school gym teacher Mr. Goodwin

Reason 1: Before high school, I did not like to exercise.

Reason 2: However, Mr. Goodwin taught me that exercising can be fun.

Q1 Practice 4

▶ **Step 1**

Transition Words/Phrases:

first, plus

▶ **Step 2**

Helpful Expressions:

mother's advice, take schoolwork seriously, good grades, college scholarship, good study habits, eligible for jobs

▶ **Step 4**

Possible Answers:

Grandfather's **advice:** Honesty is always the best policy.

Reason 1: Lying hurts others.

Detail: When I was little, I broke a glass and told my parents that my sister did it. My sister was very upset.

Reason 2: It hurts me more to lie than to tell the truth.

Detail: I got into much more trouble for lying than for breaking the glass.

Q2 Practice 1

▶ **Step 1**

Transitions:

secondly, this way, also

Sentence Order:

(E) (D) (A) (F) (C) (B)

▶ **Step 2**

Suggested Answers:

1. The speaker wishes to attend a local college.
2. One reason the speaker gives for preferring a local college is that she would be closer to her family, so they would be there to help her through any difficulties.
3. The second reason the speaker gives is that she believes local colleges provide just as good an education as national universities at half the cost.

▶ **Step 3**

Helpful Expressions:

prefer local college, family nearby, give advice, support, good education, less cost, attain success

▶ **Step 4**

Possible Responses:

1. I would like to attend a national university.
2. I would like to attend a national university because I want to be independent and have new experiences.
3. I feel that a national university would offer me more opportunities for employment after I graduate.

Q2 Practice 2

▶ **Step 1**

Transitions:

since, also, primarily, in contrast

Sentence Order:

(E) (C) (F) (B) (D) (A)

▶ **Step 2**

Suggested Answers:

1. The speaker prefers to visit educational places.
2. The first reason the speaker gives for his preference is that educational places help him to understand and appreciate the area that he is visiting.
3. The speaker says that educational places like museums are distinctive to an area, whereas places solely devoted to entertainment can be found anywhere.

▶ **Step 3**

Helpful Expressions:

prefer educational places, curious about area and people, understand and appreciate history and culture, distinctive, will not see again

▶ **Step 4**

Possible Responses:

1. I would prefer to visit entertaining places when I travel.
2. I prefer entertaining places because I want to have fun when I go somewhere.
3. In my opinion, educational places are often boring and do not show what people are really like, while places for entertainment shows what people like to do.

Q2 Practice 3

▶ Step 1

Transition Words/Phrases:

first, also, secondly, consequently

▶ Step 2

Helpful Expressions:

parents should influence material, best judges, aware of struggles, helpful for curriculum, children may feel uncomfortable, can intervene

▶ Step 4

Possible Answers

Should parents influence curriculum? No.

Reason 1: Teachers are educated to know what children should learn.

Reason 2: A curriculum is designed to help all children learn the same things at the same rate.

Reason 3: If all parents were allowed to influence a curriculum, then no one would ever agree.

Q2 Practice 4

▶ Step 1

Transition Words/Phrases:

also, however

▶ Step 2

Helpful Expressions:

not good to be constantly active, drains energy, bodies need rest, relax and recharge, counterproductive, do things more efficiently

▶ Step 4

Possible Answers

Is it good to be constantly active? Yes

Reason 1: Being active keeps life interesting and exciting.

Reason 2: Being active prevents laziness and procrastination.

Reason 3: Being active helps your mind and your body to stay healthy and stimulated.

Q3 Practice 1

▶ Step 1

Main idea: Honors students planning to go to graduate school must now take pre-graduate classes.

Key points: The classes will help the transition from college to graduate school.

The classes will enhance students' graduate school applications.

Opinion: The woman agrees with the English Department's decision for mandatory pre-graduate classes.

Reason 1: Pre-graduate classes are a good way to help English majors succeed in graduate school.

Reason 2: These classes will give students an advantage on their graduate school applications.

▶ Step 2

Possible Sample Response:

The announcement says that English students planning to attend graduate school must now take pre-graduate courses. The woman agrees with this idea. She says that the classes will help students succeed in graduate school by preparing them early on. She supports this point by saying that many graduate students drop out because they are not prepared for graduate level work. She thinks the classes will help them know what to expect. Also, she believes they will give students an advantage on their graduate school applications. She says that everyone she knows who has taken pre-graduate courses has been accepted into graduate school.

Q3 Practice 2

▶ Step 1

Main idea: School counselors now have open office hours three times per week to see students.

Key points: Students can have their questions answered more quickly.

There will be enough counselors available to meet demand.

Opinion: The man thinks that the business school's decision to have open walk-in hours for counseling is a good idea.

Reason 1: He often has trouble getting in to see counselors in a timely manner.

Example: He currently needs to schedule counseling appointments weeks in advance.

Reason 2: His questions only take a few minutes to resolve.

Example: Hence, counselors should be able to see all of the students with problems.

► **Step 2**

Possible Sample Response:

The announcement says that business counselors will hold open office hours to answer students' questions. The man thinks this is a great idea. He usually has to wait weeks for an appointment with a counselor. He also thinks this new policy will solve the problem of counselor availability. Most counselors do not work every day. Therefore, they are not always accessible. Now, according to the man, counselors will be available at once. Since most questions only take a few minutes to answer, he feels that open office hours will be enough to handle all the students.

Q4 Practice 1

► **Step 1**

Main idea: Adults with severe brain damage may be able to recover brain functions.

Key points: Parts of the adult brain can sometimes create new cells.

The brain can adapt to take on new functions.

Ways the Adult Brain Can Recover from Damage

Way 1: The adult brain can re-grow cells lost through damage

How this happens: Undamaged brain cells divide to form multiple cells

How this was discovered: In a 1998 study of dead human brain tissue

Way 2: The brain can reorganize itself

How this happens: Healthy parts of the brain take over the functions of the damaged parts

Example: Stroke victims

► **Step 2**

Possible Sample Response:

According to the reading, an adult brain can recover from damage in two ways. The professor explains that the first is brain cell re-growth. She says sometimes an adult brain can re-grow cells that were lost through

damage. She says this can happen when undamaged brain cells divide to form new cells. She then explains how reorganization can also help the adult brain recover from damage. The professor gives the example of stroke victims. Sometimes when patients lose certain functions due to a stroke, the healthy parts of their brains are able to change. They can take over functions that were performed by damaged parts of the brain.

Q4 Practice 2

► **Step 1**

Main idea: Interactive television has negative effects on children.

Key points: Interactive television can negatively affect children's intelligence.

Interactive television can target children for non-educational purposes.

Negative Effects of Interactive Television

Effect 1: It causes young children to watch even more television.

Study 1: Children who watch television at a young age score lower on intelligence tests than do other children.

Study 2: Children as young as a year old are watching up to two hours of television a day.

Effect 2: Interactive television allows advertisers to target children in new ways.

How this happens: Advertisers can sell specific products to children based on what they learn about them on the Internet.

Why this is a problem: Children take what they see and hear as fact.

► **Step 2**

Possible Sample Response:

According to the reading, interactive television can negatively affect children's intelligence and allow companies to target children. The professor expands on this first point by saying that television is harmful for children under the age of two to watch. Tests show that it can lower intelligence levels. Yet there are many interactive television programs made especially for children under two. He also says interactive television allows advertisers to target young children. They can sell products to children based on what they learn them through the Internet. Children are easily persuaded by these advertisements and believe what they see or hear is true.

Q5 Practice 1

▶ **Step 1**

Problem: The man has some questions about a lab report that is due soon, but he has class during his professor's office hours.

Solution 1: He could make an appointment to talk to his professor another time.

Advantages: He could explain what he needs help with in detail.

Disadvantages: The professor may be too busy to see him.

Solution 2: The man could email his professor the questions.

Advantages: It would be easier than meeting with the professor.

Disadvantages: It could be hard to explain what he needs help with through email.

▶ **Step 2**

Suggested Answers:

1. The man has some questions about a lab report that is due soon, but he has class during his professor's office hours.
2. He should schedule an appointment with his professor outside of office hours.
3. I think meeting with the professor would give him the ability to explain in detail what he needs help with. Also, the professor should be willing to accommodate students who have class during her office hours.

▶ **Step 3**

Sample Response:

The man wants to talk to his professor about his lab report. However, he has class during the professor's office hours. The woman suggests he either make an appointment to talk with the professor another time or email the professor his questions. I think he should schedule an appointment outside of office hours. His professor likely knows that some students have class during her office hours. I am sure she would accommodate those students. Also, by meeting with his professor in person, the man can fully explain what he is having trouble with. He will be able to work directly with his professor to come up with solutions.

Q5 Practice 2

▶ **Step 1**

Problem: A course the student wants to take is only offered at night, and she is afraid to walk back to her car alone in the dark.

Solution 1: Request a security escort to walk her back to her car.

Advantages: The service is free, and she will always have someone well-trained to escort her to her car.

Disadvantages: It might be inconvenient and awkward to request a security escort every week.

Solution 2: Wait until class starts and then see if there is a friend in the class that would be willing to walk her back to her car.

Advantages: It would be more convenient and less awkward than requesting a security escort every week.

Disadvantages: There might not be anyone she knows taking the class.

▶ **Step 2**

Suggested Answers:

1. The woman is afraid to walk to her car at night by herself.
2. I think she should request a security escort to walk her back to her car once a week.
3. I think requesting a security escort would be better because then the girl would not have to take the chance of walking back to her car alone. Also, she will have someone with her who is well-trained to protect her.

▶ **Step 3**

Sample Response:

The woman wants to take a writing class. However, it is at night, and she does not want to walk alone back to her car. The man suggests she either ask for a security escort to her car or find someone in class to walk with her to the parking lot. I think she should ask campus security for an escort to walk her to her car. That way, she will not have to walk alone if no one in her class is walking to the student parking lot. Also, she should walk with someone who knows how to handle dangerous situations.

Q6 Practice 1**► Step 1**

Main topic: the aristocratic hero in Western Classical literature

Shared characteristic of the aristocratic hero: noble birth

Example 1: Odysseus from Homer's *The Odyssey*

Details: Odysseus is a king of a Greek island who struggles to get home for many years; despite his trials, his noble birth is never questioned; he is favored by the gods; rarely do the gods favor anyone that is not noble.

Example 2: Heroes in the plays of William Shakespeare

Details: His characters are often kings; almost all the heroes in Shakespeare's plays are noble, even in his comedies.

► Step 2**Suggested Answers:**

1. All Classical heroes are of noble and aristocratic birth.
2. The Greek gods typically favored those heroes who were royal.
3. The heroes of Shakespeare's plays are rarely common.

► Step 3**Sample Response:**

The professor says that Western Classical literature has people of noble birth as its heroes. This is called the aristocratic hero. The professor says the idea of the aristocratic hero lasted for hundreds of years. She mentions the Greek hero Odysseus as one of the first aristocratic heroes. He is a legendary king favored by the gods. The professor mentions that the Greek gods rarely favor characters that are not noble. The professor then says that this characteristic of the aristocratic hero lasted for thousands of years. She mentions Shakespeare, who lived much later, but still focused largely on noble people as his heroes. Even the characters of Shakespeare's comedies were from England's high society.

Q6 Practice 2**► Step 1**

Main topic: How water contributed to the success of ancient cities

Claim the professor makes: Success of ancient cities depended on nearby water sources

Point 1: Water sources allowed cities to develop agriculture.

Example: The ancient Sumerians, one of the first civilizations, used water from nearby rivers for crops; allowed them to settle down and develop art and culture.

Point 2: Water sources gave ancient cities the ability to trade.

Example: Ancient Egyptians used the Nile River to transport their cargo; allowed them to develop an effective trade network and become prosperous.

► Step 2**Suggested Answers:**

1. Water sources allowed ancient cities to become great and prosperous.
2. The Sumerian civilization formed because the Sumerians used the water from rivers to develop agriculture, giving them the ability to settle down in one area.
3. The professor said that the nearby Nile River allowed Egypt to trade goods to different parts of the Empire, which allowed their cities to become prosperous.

► Step 3**Sample Response:**

The professor says that the success of ancient cities depended largely on their location near large water sources. First, water gave people a way to grow food. For example, Sumerians watered their crops with water from nearby rivers. Because they did not have to search for food, they could devote more time to developing their culture. Living close to water also allowed ancient peoples to trade with each other. This made many of them prosperous. The Egyptians, for example, used the Nile River to transport good between cities in their empire. Therefore, it was important for ancient people to build cities along waterways in order to trade with other civilizations.

| Vocabulary Review 3 |

- | | | |
|---------|---------|---------|
| 1. (B) | 2. (A) | 3. (C) |
| 4. (D) | 5. (A) | 6. (C) |
| 7. (B) | 8. (A) | 9. (D) |
| 10. (B) | 11. (A) | 12. (C) |
| 13. (B) | 14. (B) | 15. (A) |
| 16. (B) | 17. (D) | 18. (B) |
| 19. (A) | 20. (D) | 21. (B) |
| 22. (B) | 23. (A) | 24. (C) |
| 25. (D) | 26. (A) | 27. (D) |
| 28. (C) | 29. (D) | 30. (C) |
31. neuroscientists
32. cognitively
33. permanent
34. hard-wired
35. cells
36. regenerate
37. tissue
38. adapt
39. strokes
40. motor
41. conceal
42. mystify
43. fulfilling
44. swimming
45. sensible
46. (O)
47. (S)
48. (O)
49. (S)
50. (S)

| Vocabulary Review 4 |

- | | | |
|---------|---------|---------|
| 1. (D) | 2. (B) | 3. (A) |
| 4. (C) | 5. (B) | 6. (D) |
| 7. (C) | 8. (B) | 9. (A) |
| 10. (A) | 11. (C) | 12. (A) |
| 13. (B) | 14. (A) | 15. (C) |
| 16. (D) | 17. (B) | 18. (A) |
| 19. (B) | 20. (B) | 21. (A) |
| 22. (D) | 23. (B) | 24. (C) |
| 25. (A) | 26. (D) | 27. (D) |
| 28. (C) | 29. (A) | 30. (D) |
31. impact
32. assistance
33. facilitate
34. transition
35. applicants
36. pool
37. park
38. campus
39. encounter
40. escort
41. out
42. off
43. up
44. down
45. back
46. (E)
47. (D)
48. (B)
49. (A)
50. (C)

Part 3

Chapter 7 Pronunciation

Stress on content words

► Step 1

1. However, I would definitely like to go to the park on my new scooter.
2. After this annual seminar is over, please do not forget to sign up for the one next year.
3. The small child was uncertain as to whether or not he should raise his hand.
4. I think it is better to keep a calendar in order to remember important dates.
5. My grandparents significantly influenced my happiness as a child.
6. Although I would like to take Saturday off, I believe it is more important that I go to the tutoring session.
7. So far, my experiences with skydiving have been fun and exciting.
8. The professor must conduct lots of research in order to publish his findings.

► Step 2

Suggested clear words in bold:

Even though some may think that fictional books are pointless, I believe that fictional books are a **necessity** for **many people**. First of all, fictional books can be used as **teaching tools**. For example, a lot of the fictional books I have read involve characters who learn **important life lessons**. I can apply the **lessons** these **characters learn** to my own life. Also, fictional books provide us with a **necessary** means of **escape**. Sometimes we require a **period** away from **reality**. I feel that fictional books give us just the break we need to allow us to recover from **life's difficulties**.

Stress on function words

► Step 1

- | | | |
|-------------|--------|--------|
| 1. (S) | 2. (S) | 3. (R) |
| 4. (R) | 5. (S) | 6. (S) |
| 7. (S), (S) | 8. (R) | |

► Step 2

1. I know you think I cannot do it, but I really can handle an after-school job.

- Last year, it both rained **and** snowed during the month of June.
- Are you **absolutely** certain that you cannot make the meeting today?
- She prefers cleaning her bedroom over cleaning her **bathroom**.
- I have **so much** homework that I **do not** know where to start.
- It is **impossible** to trust **anything** that my best friend says.
- Marketing 413 is **only** for business majors.
- The instructor taught the girl to play the piano **beautifully**.

Chapter 8 Stress and Intonation

Changing pitch for emphasis

► Step 1

- It is a bad idea to wait until the night before a test to begin studying.
 - It is also not wise to wait until the last minute to do homework.
- Teenagers should have certain restrictions on their driver's licenses.
 - However, those over 18 do not need any driving restrictions.
- Are you sure you do not want to have lunch with me?
 - No, I am eating lunch with another friend.
- That is a really large piece of cake.
 - It is way too much for me to eat.

► Step 2

- The recreational center will offer a new self-defense course. It will teach young people how to protect themselves.
- Butterflies are usually active during the day. Moths are more active at night.
- I prefer not to have homework over the weekends. However, I do not mind having a little bit of homework then.
- Everyone wants to buy a beautiful house. For this reason, houses that are ugly do not sell very well.
- The fifth-grader was a very messy worker. Her partner was very organized.
- The woman bought a new bag at the mall downtown. It had just opened a couple of weeks before.

Commas and series with *and* or *or*

► Step 1

- The man's chores included walking the dog, / (✓) doing the laundry, / (✓) cleaning the bathroom, / (✓) and washing the car. (✓)
- Recycling campaigns have been very successful in our city, / (✓) partially due to the friendly publicity from local newspapers. (✓)
- I was not certain whether the text should be placed at the top of the page / (✓) or in the middle. (✓)
- Young people often experience pressure from outside influences to conform to certain trends, / (✓) particularly when they get into high school. (✓)
- He could have told his mother that he had spent the evening studying, / (✓) but it would not have been the truth. (✓)
- The man was not sure whether to pick the striped tie, / (✓) the green tie, / (✓) or the purple tie. (✓)

Chapter 9 Pausing

► Step 1

- Although the Greeks were credited with the first Western democracy / neither women nor slaves had the right to vote.
- During the debate / the woman proved that Jason's argument was flawed / thereby embarrassing him in front of everyone.
- Those pineapples were / in my opinion / the best fruit that I had ever tasted.
- Many critics believe that modern movies lack what early movies possessed / namely / a strong plot and good actors.
- Common pets in American households include birds / cats / and dogs.
- Nevertheless / I still do not agree that animal testing is worthwhile.

► Step 2

- His ability to track creatures across long distances / enabled the man to compete in an annual competition / where contestants tracked certain animals.
- Many scientists contend that the universe started with a big bang, / releasing enormous amounts of energy to create the solar systems and planets.

3. In the last three years, / Joe's friends not only supported him during his illness, / but they did everything in their power to make life easier for him / so that he could recover more quickly.
4. Neela, / a foreign exchange student from India, / came from a small village in the mountains that depended almost entirely on farming.

Practice Test 1

Question 1

Sample Response:

One of my goals is to receive my doctorate degree later in my life. I want to receive my doctorate for two key reasons. First, it would make my parents proud. They always stressed the importance of education as I was growing up. Neither of them had the opportunity to get a college education, however. I know that they would be pleased if I could manage such an achievement. In addition, I am deeply passionate about my field of study in philosophy. Getting a doctorate in philosophy would allow me to explore this subject even further.

Question 2

Sample Response 1:

I believe that young people should volunteer for civic work. First, civic work is a social responsibility. Everyone benefits from the community, so it is everybody's obligation to voluntarily help their communities. Secondly, I think young people are more likely to appreciate their communities if they do not receive a monetary reward for it. I have known people who are paid for jobs involving civic work, and they do not have nearly the same enthusiasm as a volunteer has. This is because volunteering teaches young people compassion for others instead of for what they hope to get out of the experience.

Sample Response 2:

I believe that young people should be paid for civic work. Although I think volunteering is good, it is not fair to expect young people to work for their communities without compensation. Many adults

who work in hospitals, animal shelters and other areas of civic work get paid for their efforts. Young people should be given the same consideration. Additionally, young people often do not have time to volunteer in their communities. Personally, I am far too busy with homework and other activities to volunteer freely. In order to justify our time spent working in civic affairs, I believe payment is necessary.

Question 3

Sample Response:

The announcement explains that the campus health-food restaurant, Green Acres, will be closing down at the end of the semester. The female student is upset by this decision. She claims that the reason why the restaurant was not popular with the students is because it was not advertised well. She explains that she had seen a total of two advertisements for Green Acres since it had opened three months ago. She also disagrees with the idea that the food was too expensive. She states that she is willing to pay extra for food that is healthy, and she feels most students feel the same way. She concludes by commenting that this restaurant is the only healthy one on campus.

Question 4

Sample Response:

The passage deals with the subject of vaccination. The professor supports the information in the passage by using the example of smallpox to show how vaccinations have been used successfully. She explains that smallpox was a deadly disease 200 years ago until smallpox vaccines were introduced. The vaccines allowed the body to develop a resistance against smallpox through two stages outlined in the reading. First, the body developed antibodies to destroy the disease. This occurred after a weakened form of a disease like smallpox was given to the patient. Then the patient's body stored some of these antibodies in case of future smallpox infections. Through these stages, the body became immune to smallpox. As a result, the professor explains, the smallpox disease has died out.

Question 5

Sample Response 1:

The woman's problem is that her current roommate is keeping her awake at night by talking on the phone. Initially, the man suggests that the woman report her roommate to the R.A. Then he suggests that she switch rooms. I think suggestion two is the better option. First, by doing this, the woman can avoid getting her roommate into trouble. This will keep her roommate from getting angry with her. Also, even if the roommate does stop talking on the phone, it probably will not be for very long. The woman said that her roommate had stopped for a while before, but then started up again. By moving to another room, the woman could keep her roommate happy and ensure that she gets more sleep at night.

Sample Response 2:

The woman's problem is that her current roommate is keeping her awake at night by talking on the phone. Initially, the man suggests that the woman report her roommate to the R.A. Then he suggests that she switch rooms. I think suggestion one is the better option. First, I think it is too much trouble for the woman to move to another room. She should not have to move because of a bad roommate. Secondly, I do not think the roommate will ever stop talking on the phone late at night until she gets in trouble. She needs to learn a hard lesson for her rudeness. By reporting her roommate, the woman would avoid having to move and would stop her roommate's bad behavior for good.

Question 6

Sample Response:

The professor explains how different languages can develop from the same language. Originally, he says that there was one common language spoken by all people. However, when people began to split into different tribes, the languages that each tribe spoke changed somewhat. They became different versions of the same language called dialects. To explain dialects, the professor cites the different versions of English used in the United Kingdom and America. The professor uses as an example Spanish and French. However, he also says that though these languages are different, they still have similarities. This shows that they had a common origin.

Practice Test 2

Question 1

Sample Response:

One person from history that I admire is Harriet Tubman. She was an American who was a slave during the 19th century. I think very highly of Harriet Tubman because she freed so many of her fellow slaves at great danger to herself. Even though Tubman had escaped from slavery, she risked her life to return and help hundreds of her fellow slaves to escape. In addition, she worked hard to give women in America the right to vote. I feel Harriet Tubman is a perfect role model because she risked a lot for what she believed in.

Question 2

Sample Response 1:

I believe that teachers should not be limited in the amount of homework that they can assign. First, such a policy would violate the right of the teachers. Given their close association with the class, only teachers can decide how much or how little homework is necessary to ensure that the class understands the material. Moreover, such a policy might encourage school officials to take further measures to limit the role of the teacher in the classroom. Teachers need to have clear and definite roles if they want to make a difference to their students.

Sample Response 2:

I believe that restricting the amount of homework a teacher can assign would be beneficial. First of all, teachers often assign students too much homework. Even if a student has only half an hour of homework per class, taking five or six classes can result in nearly three hours of homework per evening. This tends to discourage and exhaust students. Additionally, I believe that other activities, like extracurricular activities or jobs, can teach students important skills that homework cannot. Students need to be encouraged to pursue these activities instead of simply concentrating on piles of homework.

Question 3

Sample Response:

The department's announcement states that it will be canceling an upcoming publications class. It explains that the professor who normally teaches the class will be out on extended leave. It also said that there is not sufficient student interest in the class. The male student in the conversation is upset by this decision. He explains to the female student that he knows of a graduate student who could be a great student teacher for the class. He claims that she knows more about publishing than other professors do. He also disputes the claim that there is not enough student interest in the class. He explains that he knows at least ten other students that were planning on taking the publications class.

Question 4

Sample Response:

The reading states that there are two differences between male and female songbirds that affect their songs. The professor explains that one difference is in the RA, which is a part of a songbird's brain that controls song production. She says that the RA is much bigger in male songbirds. She mentions the male zebra finch, whose RA is at least five times larger than that of a female zebra finch. Also, she explains that the brains of male songbirds can make a specific hormone. This allows them to produce more elaborate songs. The professor then says that baby female songbirds that have been given more of this hormone also produce more elaborate songs, proving that this hormone plays a big part in song production.

Question 5

Sample Response 1:

The female student is concerned about an upcoming group presentation for one of her classes. Her friend suggests that she could let her group do most of the speaking, while she does the writing. He also suggests that she practice her portion of the presentation a lot beforehand. If I was the student, I would choose to practice and just do it. First off, public speaking is a necessary skill to have in most professions. I believe the student would benefit if she learned how to do it well now. Additionally, even if she does mess up her speech, I think her professor will likely grade her higher if she genuinely tries to speak instead of not trying at all.

Sample Response 2:

The female student is concerned about an upcoming group presentation for one of her classes. Her friend suggests that she could let her group do most of the speaking, while she does the writing. He also suggests that she practice her portion of the presentation a lot beforehand. If I was the student, I would choose to let the rest of my group do the speaking. As the student stated, there is no way that she can be sure that practice will keep her from messing up. It did not help her in the past. Also, she runs the risk of hurting her entire group's grade if she messes up her part of the presentation. It would benefit her group more if she did the writing instead.

Question 6

Sample Response:

The professor's lecture discusses how carnivorous plants can only grow best under certain conditions. The first condition is soil that is low in nutrients. The professor says that carnivorous plants often die when they are grown by humans. Scientists believe this is because they usually receive too many nutrients. Since carnivorous plants evolved to get all of their nutrients from the insects they eat, soil that is too rich in nutrients is harmful to them. This is why carnivorous plants can only grow in environments like swamps, where the soil is poor in nutrients. Additionally, carnivorous plants require very moist environments. They often die if they dry out. The professor gives an example of a pitcher plant, which requires moisture in order to capture prey.

Part 1

Chapter 1 Organizing Information

01 Medical Science

► Step 1

Main idea: There are many problems with laser vision correction surgery.

Key point 1: Laser vision correction surgery costs too much because of equipment costs.

Key point 2: Serious problems like eye problems and lengthy recovery times occur after laser vision correction surgery.

Key point 3: Laser vision correction surgery is not effective for long periods.

► Step 2

Main idea: There are not many problems with laser vision correction surgery.

Key point 1: Laser vision correction surgery is decreasing in cost because of competition and lower equipment costs.

Key point 2: After surgery, problems are rare and recovery times are no worse than other surgeries.

Key point 3: Laser vision correction surgery lasts for over twenty years.

► Step 3

Introduction:

Main topic: Whether laser vision correction surgery will become more popular

Main idea of the reading passage: There are many serious problems with laser vision correction surgery.

Main idea of the lecture: There are not many problems with laser vision correction surgery.

Body:

Key point 1: Cost of laser vision surgery

Supporting information from the reading passage: Laser vision surgery costs too much because of the high equipment costs.

Supporting information from the lecture: Surgery costs are dropping due to competition and less expensive equipment costs.

Key point 2: Problems after laser vision surgery

Supporting information from the reading passage: Patients often experience eye problems after surgery; slow recovery times.

Supporting information from the lecture: Eye problems after surgery rarely occur; recovery time not any worse than other surgeries.

Key point 3: Length of time the surgery is effective

Supporting information from the reading passage: The surgery is only effective for a short period.

Supporting information from the lecture: The surgery is effective for over twenty years.

Conclusion:

Summary: The professor claims that the arguments stated in the reading against laser eye surgery are untrue.

► Step 4

Both the lecture and the passage discuss laser vision correction surgery. While the passage predicts that the procedure will not be popular, the lecturer says that it will.

First, the passage says the surgery is too expensive for most people. The lecturer refutes this, explaining that the cost is starting to decrease. Moreover, he says it will cost even less in the future. Second, the passage mentions that many people may experience problems after having the surgery. Again, the professor disagrees. He says that the complications mentioned in the passage are rare. Finally, the passage says that the effects of the surgery do not last long. The lecturer denies this, explaining that in most cases, the procedure is effective for many years.

Corrective laser surgery is a developing procedure. The passage says that it will never be popular; however, the lecturer says many people will want to undergo the surgery in the future.

02 Education

► Step 1

Main idea: Universities should focus more on research.

Key point 1: Ranking systems will give higher ranks to universities that perform more research.

Key point 2: Public intellectuals are famous for their research and therefore attract students and funding for the university.

Key point 3: More research gives the professor a better grasp of the subject.

► Step 2

Main idea: Universities should focus more on teaching methods than on research.

Key point 1: Ranking systems are more concerned with the way universities teach students.

Key point 2: Public intellectuals are professors who make their knowledge more accessible to the public.

Key point 3: Teaching and research are unrelated.

► Step 3

Introduction:

Main topic: Research versus teaching in universities

Main idea of the reading passage: Universities should focus more on research.

Main idea of the lecture: Universities should focus more on teaching.

Body:

Key point 1: University ranking systems

Supporting information from the reading passage: University ranking systems will give universities that have performed more research a higher rank.

Supporting information from the lecture: University ranking systems are more concerned with how a university teaches its students.

Key point 2: Public Intellectuals

Supporting information from the reading passage: Public intellectuals that attract funding for the university are professors who have performed lots of research.

Supporting information from the lecture: Public intellectuals are professors who have worked to make their knowledge more accessible to the public.

Key point 3: The effect of research on teaching

Supporting information from the reading passage:

By conducting research, the professor becomes a better teacher.

Supporting information from the lecture: Research and teaching ability are unrelated.

Conclusion:

Summary: The passage suggests that research should be a more important concern for universities, but the speaker feels teaching should be the higher concern.

► Step 4

Both the lecture and the passage discuss how universities should concentrate the work of professors. While the passage says that they should focus on research, the lecturer says it is better to emphasize teaching.

First, the passage claims that research helps universities rank better than other schools. In contrast, the lecturer points out that ranking systems now consider teaching as part of their calculations. Next, the passage says that professors gain recognition if they do more research. The lecturer counters by saying those who emphasize teaching are more relatable to a wider audience, and therefore more popular. Lastly, the passage says that research makes professors better teachers. The lecturer denies this by saying that professors who focus on teaching become better instructors because they practice more.

Many professors struggle with balancing research and teaching. While the passage says it is better to focus on research, the lecturer says it is better to emphasize teaching.

03 Environmental Science

► Step 1

Main idea: Reusable grocery bags should be adopted over plastic grocery bags.

Key point 1: Reusable grocery bags will reduce the waste of thousands of plastic bags.

Key point 2: Reusable grocery bags would save money on food.

Key point 3: Reusable grocery bags will help save petroleum.

▶ Step 2

Main idea: Plastic grocery bags should be replaced with reusable ones.

Key point 1: Plastic grocery bags take 1,000 years to decompose; they can harm animals.

Key point 2: Getting rid of plastic grocery bags would save one cent per bag; thousands of bags are used every day.

Key point 3: We would save billions of dollars on petroleum if we got rid of plastic bags.

▶ Step 3

Introduction:

Main topic: Reusable grocery bags versus plastic grocery bags

Main idea of the reading passage: Reusable grocery bags should be adopted over plastic grocery bags.

Main idea of the lecture: Plastic grocery bags should be replaced by reusable ones.

Body:

Key point 1: Environmental benefits

Supporting information from the reading passage: Reusable grocery bags would reduce the waste of billions of plastic grocery bags.

Supporting information from the lecture: Plastic grocery bags are very harmful to the environment; they take 1,000 years to decompose and are harmful to animals.

Key point 2: Financial benefits

Supporting information from the reading passage: Reusable grocery bags would save money on food costs.

Supporting information from the lecture: Reusable grocery bags would save money on food costs.

Key point 3: Other benefits

Supporting information from the reading passage: Using reusable bags will help save petroleum.

Supporting information from the lecture: Getting rid of plastic grocery bags would save billions of dollars on petroleum.

Conclusion:

Summary: Both the reading and the professor support using reusable grocery bags over plastic ones.

▶ Step 4

Both the lecture and the passage discuss the disadvantages of using plastic grocery bags. The passage says that it is best if people start to use reusable bags. The lecturer agrees and supports the view with examples.

First, the passage says that plastic bags create too much extra waste. The lecturer supports the claim by adding that plastic bags just pile up as litter. Reusable bags, meanwhile, are better because they can be used repeatedly. Next, the passage claims that reusable bags are more affordable for both grocery stores and consumers. The lecturer agrees, emphasizing that the cost of plastic bags adds up, while reusable bags only have to be purchased once. Finally, the passage says that petroleum and natural gas can be conserved by not using plastic bags anymore. Again, the lecturer supports this by explaining that 1.6 billion gallons of petroleum are used to make plastic bags annually. The lecturer and the passage both agree that people should not use plastic bags anymore, and use reusable bags instead.

04 Psychology

▶ Step 1

Main idea: Spanking is a good disciplinary tool for children.

Key point 1: Spanking helps children to learn right from wrong.

Key point 2: Spanking is more effective than other punishments like time-outs.

Key point 3: Spanking can only be seen as punishment.

▶ Step 2

Main idea: Spanking is not a good disciplinary tool for children.

Key point 1: Spanking does not help children make the association between right and wrong.

Key point 2: Studies show spanking is no more effective than time-outs.

Key point 3: Children do not associate spanking with punishment; it teaches violence instead.

► Step 3

Introduction:

Main topic: Spanking children

Main idea of the reading passage: Spanking is good for children.

Main idea of the lecture: Spanking is bad for children.

Body:

Key point 1: Morality of spanking

Supporting information from the reading passage: Spanking helps children to learn between right and wrong forms of behavior.

Supporting information from the lecture: Children cannot make the association between spanking and morality.

Key point 2: Effectiveness of spanking

Supporting information from the reading passage: Spanking is more effective than time-outs.

Supporting information from the lecture: Studies show spanking is not a more effective punishment.

Key point 3: The child's understanding of spanking

Supporting information from the reading passage: Spanking cannot be misunderstood as anything other than a punishment.

Supporting information from the lecture: The child does not see the spanking as punishment; instead, the child learns that the use of force is OK.

Conclusion:

Summary: The professor disagrees with the reading, stating that spanking is not a good punishment.

► Step 4

Both the passage and the lecture discuss spanking. The passage says that spanking is a good disciplinary tool, while the lecturer says that it is not.

First, the passage says that spanking teaches children the difference between right and wrong. The lecturer says this is wrong because spanking does not teach children morals. Those have to be taught by talking to the child. Next, the passage says that spanking is more effective than other punishments. The lecturer denies this by saying that research has proven that spanking does not teach children any lessons. Finally, the passage says that spanking is good because it

sends a clear message to children that they are being punished. The professor disagrees and points out that spanking does not teach children not to misbehave. Instead, it sends them mixed messages because it teaches them that situations can be dealt with by using violence.

Many people are curious about whether spanking is a good disciplinary tool for children. While the passage says it is good, the lecturer says it is actually bad.

Chapter 2 Paraphrasing

01 Zoology

► Step 1

Main idea: Zoos are not healthy environments for animals.

Key point 1: Zoo animals do not thrive in captivity.

Key point 2: Animals behave differently in zoos because they do not live in their natural habitat.

Key point 3: Zoos are not the best way to study animals.

► Step 2

A. 2

B. 1

C. Zoos are not beneficial to the animals that are kept there.

► Step 3

Main idea: Zoos benefit animals in several ways.

Key point 1: Zoos help protect animals from extinction through captive breeding programs.

Key point 2: Many zoos now have a "natural habitat" philosophy, which provides animals with surroundings that closely resemble those they encounter in nature.

Key point 3: Zoos provide the best way to observe and study animals.

► Step 4

1. b

2. b

3. a

4. b

► Step 5

- A. 1. harmful benefit
 2. counters protect
 3. habitats surroundings
 4. without observe
- B. 1. In the lecture, zoos are said to benefit animals, while the reading says they are harmful.
 2. The passage says that zoos do not protect animals, to which the professor counters by saying they protected the California condor.
 3. The speaker says zoos give animals surroundings that look like their natural homes, though the reading says zoos remove animals from their natural habitats.
 4. The professor says that observing live animals in the zoo is the best way to study them; however, the passage says there are better ways to study animals outside of zoos.

► Step 6

1. Animals do not always thrive in captivity, though scientists had no problems getting the California condor to live and breed in captivity.
 2. Zoos try to design exhibits so that animals live in places that resemble their natural habitats, though some think that zoos do not do a good job of doing so.

02 Paleontology

► Step 1

Main idea: Woolly mammoths went extinct due to climate change and over hunting.

Key point 1: The climate change was not good for woolly mammoths because it raised temperatures.

Key point 2: Predators like the saber-toothed tiger helped reduce mammoth populations.

Key point 3: Humans hunted too many woolly mammoths.

► Step 2

- A. 1
 B. 2
 C. Woolly mammoths went extinct mainly because of climate changes and over hunting.

► Step 3

Main idea: Woolly mammoths probably did not go extinct because of climate change and over hunting.

Key point 1: Woolly mammoths probably just moved north to where it was colder.

Key point 2: Woolly mammoths were too large to have any natural predators; the bite of saber-toothed tigers was too weak.

Key point 3: Humans did not over hunt woolly mammoths because there were other animals available to hunt.

► Step 4

1. a 2. a 3. a 4. a

► Step 5

- A. 1. effects denies
 2. decline relocated
 3. prey deterred
 4. extent plenty
- B. 1. While the professor denies that over hunting and climate change had anything to do with the woolly mammoth's extinction, the author states that their combined effects were, in fact, responsible.
 2. The speaker thinks that mammoths simply relocated toward the northern pole, but the reading blames the decline of the woolly mammoth on the warmer climate change.
 3. The professor points out the fact that animal predators would have been deterred from hunting the woolly mammoth because of its large size. The passage assumes that saber-toothed tigers preyed on woolly mammoths.
 4. The professor suggests that there were plenty of other animals for humans to hunt. However, the reading claims that woolly mammoths were hunted by humans to a great extent.

► Step 6

1. Warmer climates are thought to have created problems for the mammoths, though it is possible that the change just caused them to move farther north.
2. Some think people probably hunted woolly mammoths more than any other animal; however, humans likely hunted other animals as well.

03 Geography

► Step 1

Main idea: Flooding is good for a river.

Key point 1: Flooding provides nutritious silt to a river.

Key point 2: Flooding restores natural sandbars.

Key point 3: Flooding establishes plants along the river's bank.

► Step 2

A. 2

B. 2

C. Flooding rivers are beneficial in a number of ways.

► Step 3

Main idea: Flooding is bad for a river.

Key point 1: Flooding removes silt from a river.

Key point 2: Flooding destroys natural sandbars.

Key point 3: Flooding uproots plants along the river's banks.

► Step 4

1. b

2. b

3. a

4. a

► Step 5

- | | | |
|----|-----------------|-------------|
| A. | 1. impact | destructive |
| | 2. supplies | nourishing |
| | 3. reconstructs | eliminates |
| | 4. cultivate | beside |

- B. 1. The professor states that it is more destructive than beneficial to flood a river. On the other hand, the author argues that flooding a river has a positive impact.

2. The speaker claims that nourishing silt is removed from the river by flooding, but the reading states that flooding actually supplies silt to the river.

3. The lecturer states that natural sandbars are eliminated by flooding, but the passage says that the river's sandbars are reconstructed by flooding.

4. The professor argues that vegetation is removed from beside the river during flooding, although the reading says that vegetation is cultivated by flooding.

► Step 6

1. Purposely causing floods is believed to help spread silt in the river; however, flooding actually just carries the silt in the river away.

2. Flood waters wear down sandbars and other natural features, though some think flooding helps restore sandbars.

04 Education

► Step 1

Main idea: People should not have to pay for a university education.

Key point 1: Tuition is too expensive for many high school graduates.

Key point 2: Many students drop out of college because of the expense.

Key point 3: Students that do graduate still have the debt to pay off.

► Step 2

A. 2

B. 1

C. University education should be provided free of charge for a number of reasons.

► Step 3

Main idea: It is a good idea to eliminate college tuition.

Key point 1: People are avoiding college because of the cost; it now costs \$23,000 to attend a four-year college; private schools cost more.

Key point 2: Most college dropouts say they left college because of the expense; one in four freshmen drops out in the first year.

Key point 3: The typical college graduate has \$19,000 in college debt.

► Step 4

1. b 2. a 3. a 4. a

► Step 5

- A.
- | | |
|-------------------|-----------|
| 1. removing | endorses |
| 2. discourages | verifies |
| 3. considerations | cite |
| 4. forced | discloses |
- B.
- The professor endorses a view that is similar to the author's. The author argues that tuition should be removed from colleges.
 - By providing statistics on college tuition, the lecturer was able to verify what the reading claimed. According to the reading, many high school graduates are discouraged from attending college because of high college tuition.
 - The speaker mentions that college expenses are cited by college dropouts as the main reason why they left. The passage supports this view by claiming that many college students drop out due to financial considerations.
 - The lecturer discloses the fact that the average college student has \$19,000 in college debt. The author agrees, stating that being forced to pay off a large debt is a reality for many college graduates.

► Step 6

- The financial burden of attending university eventually leads students to drop out; in fact, one out of every four first-year students drops out after their freshman year.
- The elimination of tuition costs would help reduce the amount of debt students assume, currently about \$19,000 for a recent graduate.

Chapter 3 Making Connections

01 Global Issues

► Step 1

Main idea: There are many advantages to consuming only organic foods.

Key point 1: Humans consume no chemicals when they eat organic foods, greatly improving their health.

Key point 2: Organic farming reduces the amount of chemicals introduced to the environment.

Key point 3: Buying organic foods helps small farmers compete with large corporations.

► Step 2

Main idea: Organic food is not beneficial for many reasons.

Key point 1: Organic farmers use natural pesticides, which affect humans adversely.

Key point 2: Organic farmers harm the environment by cutting down trees to make room for more farmland.

Key point 3: Large corporations are attracted to organic farming, making it harder for small farmers to compete.

► Step 3

1. Yes 2. No 3. No

02 Technology

► Step 1

Main idea: Adopting hydrogen as an alternative fuel source has many advantages.

Key point 1: Hydrogen is abundant across the Earth.

Key point 2: Hydrogen is safer to transport than gasoline is.

Key point 3: Hydrogen is more efficient in vehicles than gasoline is.

► Step 2

Main idea: Hydrogen is not a good alternative fuel source.

Key point 1: Hydrogen is not available in a pure form. Hydrogen must be in a pure form to work.

Key point 2: Hydrogen is more explosive and is much more dangerous to transport than gasoline is.

Key point 3: Hydrogen is less efficient than gasoline is because it takes lots of energy to get it into a pure form.

► Step 3

1. Yes 2. Yes 3. No

03 Criminology

► Step 1

Main idea: Identity theft is a major problem.

Key point 1: Large amounts of information are gathered in company databases where thieves can steal from.

Key point 2: Thieves steal vital information and can use it to open credit accounts in another person's name.

Key point 3: Thieves can use stolen information to empty savings and retirement accounts of other people.

► Step 2

Main idea: Identity theft is not that big a concern.

Key point 1: Identity theft is rare because the information stolen from databases is actually quite small.

Key point 2: Much of the information that is stolen from databases is not useful enough to open an account in another person's name.

Key point 3: Most companies that deal with money have changed their policies to make it more difficult to steal money.

► Step 3

1. No 2. No 3. Yes

04 Business

► Step 1

Main idea: The minimum wage should be abolished.

Key point 1: The minimum wage makes workers too expensive for small businesses; unemployment results.

Key point 2: The minimum wage will encourage large businesses to relocate to foreign countries without a minimum wage.

Key point 3: The minimum wage encourages companies to buy machines over hiring workers.

► Step 2

Main idea: The minimum wage should not be abolished.

Key point 1: The minimum wage does not increase or decrease unemployment rates; small business can adjust.

Key point 2: Relocation of companies to foreign countries has nothing to do with minimum wage; it is because of the cost of living in these foreign countries.

Key point 3: The minimum wage has no effect on a business's decision to buy machines over hiring workers; businesses will always use machines over workers if it is less expensive.

► Step 3

1. Yes 2. No 3. No

| Vocabulary Review 1 |

- | | | |
|----------------|------------------|----------------|
| 1. (B) | 2. (C) | 3. (D) |
| 4. (A) | 5. (C) | 6. (A) |
| 7. (B) | 8. (D) | |
| 9. (C) | 10. (A) | 11. (C) |
| 12. (D) | 13. (B) | 14. (D) |
| 15. (C) | | |
| 16. reasonable | 17. association | |
| 18. numerous | 19. disciplinary | 20. punishment |
| 21. (D) | 22. (C) | 23. (E) |
| 24. (A) | 25. (B) | |

| Vocabulary Review 2 |

- | | | |
|---------|---------|---------|
| 1. (B) | 2. (C) | 3. (D) |
| 4. (A) | 5. (B) | 6. (D) |
| 7. (A) | 8. (B) | |
| 9. (A) | 10. (C) | 11. (D) |
| 12. (B) | 13. (A) | 14. (C) |
| 15. (B) | | |

16. abundance 17. approximately
 18. media 19. Ultimately 20. safeguard
21. sophisticated 22. intervention 23. corrective
 24. stacked 25. ideally

Part 2

Chapter 4 Brainstorming

01 Experience

► Step 2

Although some people prefer to work alone, I believe it is much better to work in teams. The benefits of working with a team vastly exceed the convenience of working alone. In my opinion, there are three main advantages to working in teams over working alone.

First, I prefer working in teams because I feel that it encourages productivity. Teams require each person to be responsible for a portion of the work. A person's failure to do his or her work affects the entire team. Within this kind of situation, team members feel a personal responsibility to ensure that their work is done well and in a timely fashion. If a single member of the team does not fulfill his or her duty, the entire team is affected. This sense of social obligation to others is lost when working alone. Working in teams inspires people to do good work.

Additionally, working in a team allows each person to work off of one another's strengths. If, for instance, some people in a work team are bad at designing products but are good at building them, they can find someone else to do the design work while they focus on the building process. This allows each member of the team to do what he or she is skilled at doing, which results in productive work. For example, the last time I did a group project, we were required to film a short video. I am not comfortable in front of cameras, but I was interested in filming and editing. My partner enjoyed being filmed and did a great job of presenting it. Because we each focused on our strengths, we did well on our group project.

Finally, I think that working in a team allows people to form important relationships with others. After working with others for a period of time, it is likely that friendships

will be formed within the team. These relationships improve communication. For instance, I met a student who is now a good friend through a class project we did together. We worked well together and remained friends after the semester ended. Working alone does not create friendship and, as such, one's motivation is lost when one chooses to work alone.

In my experience, I feel that teams produce the best work possible. Teams make people both happier and more efficient.

► Step 3

1. Although some people prefer to work alone, I believe it is much better to work in teams.
2. First, I prefer working in teams because I feel that it encourages productivity.
3. Additionally, working in a team allows each person to work off of one another's strengths.
4. Finally, I think that working in a team allows people to form important relationships with others.

► Step 4

1. The essay claims that working in teams is better.
2. The writer lists three advantages to working in teams to support her thesis statement. The writer also lists some disadvantages of working alone.
3. The writer does not present an opposing argument in the conclusion.
4. The main idea of the conclusion is that working in teams is better than working alone.

02 Experience

► Step 2

Many people believe that the best way to gain knowledge is through school. However, I disagree with this belief. In my opinion, a person will learn much more useful knowledge by pursuing options outside of a school environment.

The first reason why I think this is that experiences outside of school are more likely to give a person practical knowledge. The knowledge one tends to receive in school is not very practical. School involves learning about things like theories and experiments. In my experience, none of these has taught me anything about how the world actually works. Getting a job,

traveling, and simply talking to ordinary people can produce knowledge that is more relevant than anything one will learn in school.

In addition, the knowledge one acquires outside of school can be more appealing to potential employers. A growing number of big business owners have explained that they would prefer to hire someone with "real world" experience instead of someone with a college degree. Someone who has started their own business, for instance, is likely to know more about business than someone with a degree in it.

Finally, gaining knowledge outside of school allows us to choose what we want to learn. Rather than having to obey the requirements of a standard college curriculum, learning outside of school allows us to study precisely what we want. This makes us more likely to remember what we have learned than if we had been forced to learn it in school. It also allows us to avoid wasting time studying subjects that we do not find appealing.

Not only is the knowledge outside of school more relevant, but it also may be more helpful to someone looking to get a job. For these reasons, life outside of school is likely to be far more rewarding to someone hoping to gain knowledge.

► Step 3

1. In my opinion, a person will learn much more useful knowledge by pursuing options outside of a school environment.
2. The first reason why I think this is that experiences outside of school are more likely to give a person practical knowledge.
3. In addition, the knowledge one acquires outside of school can be more appealing to potential employers.
4. Finally, gaining knowledge outside of school allows us to choose what we want to learn.

► Step 4

1. The essay states that students gain better knowledge outside of school than knowledge gained in school.
2. The writer gives specific reasons to support his argument.
3. The writer does not present a comment or idea from the opposing argument in the conclusion.

4. The main idea of the conclusion is that knowledge gained outside of school is likely to be more rewarding than knowledge gained inside of school.

03 Experience

► Step 2

With concerns about pollution and oil shortages, many cities have begun to construct public transportation systems. However, I believe that cities that do not have public transportation systems should avoid constructing them. Constructing public transportation systems in large cities usually creates more problems than it solves.

My main reason for wanting to avoid constructing public transportation systems is because of all the disruption they cause. The construction of subways or train systems requires lots of money and the closing of central roads. It creates constant noise in surrounding areas. Plus, building these systems can take several years. Overall, they upset the flow of traffic and cause major delays in daily business.

Additionally, public transportation systems rarely cover the outskirts of cities. Lots of people today are buying homes outside of major cities. Yet, since most public transportation systems only run within city limits, many of the people that could use these systems never get to use them. As suburbs are becoming more popular, it is unclear how useful public transportation will be to the number of people that do not live in the city center.

Finally, public transportation systems around the world often suffer from overcrowding during peak hours. While they are often held up as a solution to congestion and the stress of traffic, the crowded environment of a public transportation system can be just as stressful as dealing with street traffic. For most people, traffic is preferred over being packed into a subway car with hundreds of other people.

Public transportation systems are not worth the effort. For this reason, large cities without a public transportation system would be wise to avoid building one. I feel that the money would be better spent improving roads and the way traffic moves in a city.

► Step 3

1. Constructing public transportation systems in large cities usually results in more problems than it solves.
2. My main reason for wanting to avoid constructing public transportation systems is because of all the disruption they cause.
3. Additionally, public transportation systems rarely cover the outskirts of cities.
4. Finally, public transportation systems around the world often suffer from overcrowding during peak hours.

► Step 4

1. The essay is against the building of public transportation systems in large cities.
2. The writer supports the thesis statement by listing some problems that constructing public transportation in large cities would cause.
3. The writer does not present a comment or idea from the opposing argument in the conclusion.
4. The main idea of the conclusion is that cities without public transportation systems are better off not building one and that money would be better spent in other areas.

04 Experience

► Step 2

In this changing world, math and science are becoming increasingly important. As a result, I think it is a good idea for schools to shift their attention away from the humanities and begin to concentrate more on math and science. There are a number of reasons why schools should encourage this change.

First, math and science are disciplines that can be used for a number of purposes. Unlike subjects such as philosophy, which are focused on abstract arguments and rarely have any effect on reality, science and math clearly benefit the society immediately around us. Math and science are necessary to build bridges, create new sources of energy, and invent new devices. They play a key role in nearly all parts of our day-to-day lives. Students that are educated in math and science are also more likely to find jobs than students who have studied the humanities. There are countless jobs which involve math, research, and science principles. Thus,

there are many job opportunities for students who have studied math and science. The number of jobs in the humanities, on the other hand, is relatively small. By focusing on math and science, a school can help its students find employment after graduation.

Moreover, students educated in math and science tend to be better able to deal with the adult world. An understanding of math, for instance, prepares a person for the real world by giving them the tools needed to understand and handle their finances. The humanities, by and large, do not yield knowledge that is immediately useful in everyday activities.

A shift away from the humanities and toward math and science will not only help students, but the society around them as well. These reasons provide a compelling argument for schools to begin shifting their attention away from the humanities.

► Step 3

1. As a result, I think it is a good idea for schools to shift their focus away from the humanities and begin to concentrate more on math and science.
2. First, math and science are disciplines that can be used for a number of purposes.
3. Students that are educated in math and science are also more likely to find jobs than students who have studied the humanities.
4. Moreover, students educated in math and science tend to be better able to deal with the adult world.

► Step 4

1. The essay agrees that schools should focus more on mathematics and science over the humanities.
2. The writer supports the thesis statement by providing several reasons why schools should focus on mathematics and science over the humanities.
3. The writer does not present a comment or idea from the opposing argument.
4. The main idea of the conclusion is that schools should begin to shift their focus away from humanities and more toward mathematics and science.

01 Thesis Statements

► Step 1

Thesis statement 1:

Despite the popularity of certain celebrities, I feel that celebrities earn much more money than they deserve for several reasons.

Thesis statement 2:

If tourists were to ask my opinion on which city in my nation to visit, I would suggest that they visit Los Angeles because of three major attractions that can be found there.

Thesis statement 3:

In my opinion, good role models are people who are caring, likable, and above all, ethical.

Thesis statement 4:

I agree that employees should always try to seek advancement at their jobs because of all the benefits that job advancement can offer.

► Step 2

Prompt 1: experience

Thesis statement: As a child, my parents emphasized the values of honesty, hard work, and compassion; all of which have made me into the person that I am today.

Prompt 2: opinion

Thesis statement: I feel that schools have no right to make students participate in physical education because exercise is a personal responsibility that belongs to the individual.

Prompt 3: opinion

Thesis statement: I have always preferred taking notes with a computer because it is easier and quicker than taking notes by hand.

Prompt 4: experience

Thesis statement: Visiting Yosemite National Park was the greatest adventure I have ever experienced, and I would recommend it to others for a number of reasons.

02 Topic Sentences

► Step 1

Prompt 1:

(3) For instance, the whole office of the president would be useless if there were not any people around to follow the president's laws.

(1) In my opinion, the leader needs his followers just as much as the followers need the leader.

(2) First of all, followers are important because without them, leaders would not have any power.

Prompt 2:

(3) Imagine how many species we would lose if we dug for oil in important animal ecosystems.

(2) First, we have a responsibility as humans to take care of our fellow creatures on the planet.

(1) Though I realize that benefits are lost by reserving certain areas of land just for animal use, I feel that this is the best course of action for several reasons.

Prompt 3:

(1) I know that computer games can be abused, but I still feel that the advantages of computer games are greater than the disadvantages.

(2) Computer games provide a much needed escape from the hardships and stress of life's daily activities.

(3) For example, whenever I had a bad day as a child, I could simply turn on a computer game and immediately feel better.

Prompt 4:

(3) When the automobile was invented, people could travel long distances in a relatively short amount of time.

(2) Today, while computers allow us to communicate with other people, the automobile actually lets us see them in person.

(1) I believe that the automobile is definitely a better invention than the computer.

► Step 2

Prompt 1:

Thesis statement: It is my belief that losing at games teaches children several important lessons that winning at games does not.

Reason/Example 1: Losing teaches children how to accept loss.

Reason/Example 2: The possibility of losing makes games fun.

Reason/Example 3: Losing inspires children to work harder.

Topic sentence: Secondly, the possibility of losing at a game is what makes games so much fun.

Prompt 2:

Thesis statement: I prefer to take tests that are multiple choice for many different reasons.

Reason/Example 1: It is harder to organize thoughts into sentences.

Reason/Example 2: You have a better chance of getting the correct answer.

Reason/Example 3: They are quicker to take.

Topic sentence: Secondly, multiple-choice tests provide you with a selection of choices to choose from, giving you a better chance of choosing the right answer.

Prompt 3:

Thesis statement: I would prefer the money go toward creating a park because I feel that my city needs more open spaces.

Reason/Example 1: A park will help with the overcrowding of people.

Reason/Example 2: A park would offer opportunities for children.

Reason/Example 3: A park would be much cleaner than a mall.

Topic sentence: I also believe that constructing a park would offer more recreational opportunities for children.

Prompt 4:

Thesis statement: I feel that it is better to study for tests over a period of time because it has many advantages.

Reason/Example 1: It is less stressful than doing it all at once.

Reason/Example 2: It accounts for unexpected emergencies.

Reason/Example 3: I am more likely to remember the material.

Topic sentence: Most importantly, I am more likely to remember the material if I have studied it for a longer period of time.

Chapter 6 Making Ideas Flow

01 Opinion

► Step 2

Introduction: D, A, C, B

Transitions: for this reason, In fact, Despite

Body paragraph 1: D, B, C, E, A, F

Transitions: Consequently, Since, After

Body paragraph 2: E, C, A, B, D

Transitions: also, These

Conclusion: C, A, B

Transitions: Ultimately

02 Opinion

► Step 2

Introduction: D, B, A, C

Transitions: Yet, However

Body paragraph 1: C, E, A, B, D

Transitions: These, First, This, because

Body paragraph 2: E, D, A, B, C

Transitions: In my case, This, In addition

Conclusion: B, A, C

Transitions: These, In conclusion

03 Opinion

► Step 2

Introduction: A, D, B, C

Transitions: Additionally

Body paragraph 1: B, E, A, D, C

Transitions: In my opinion, First of all, Moreover

Body paragraph 2: C, D, B, A, E

Transitions: In addition, For example, Therefore

Conclusion: C, B, A

Transitions: In conclusion, As a result

04 Opinion

► Step 1 (possible student response)

3. A good friend is someone who can teach me important lessons.

05 Opinion

► Step 1

Thesis: I believe that artists are just as important to a society as scientists are because of three contributions that they make.

Conclusion: These contributions that artists provide give them an important role in society.

06 Opinion

► Step 1 (possible student response)

3. are used to describe a person to others

| Vocabulary Review 3 |

- | | | |
|----------------|-------------------|-----------------|
| 1. (C) | 2. (D) | 3. (A) |
| 4. (C) | 5. (D) | 6. (A) |
| 7. (C) | 8. (C) | 9. (D) |
| 10. (C) | 11. (D) | 12. (B) |
| 13. (A) | 14. (B) | 15. (C) |
| 16. (A) | 17. (C) | 18. (B) |
| 19. (A) | 20. (C) | 21. (D) |
| 22. (A) | 23. (B) | 24. (C) |
| 25. (A) | 26. (B) | 27. (D) |
| 28. (B) | 29. (D) | 30. (D) |
| 31. outskirts | 32. civic | 33. constructed |
| 34. designed | 35. productivity | 36. theories |
| 37. structured | 38. comprehensive | |
| 39. measures | 40. potential | |

- | | | |
|----------------|--------------|-----------|
| 41. obvious | 42. relevant | 43. fatal |
| 44. disruption | 45. insight | |
| 46. (S) | 47. (O) | 48. (O) |
| 49. (S) | 50. (S) | |

| Vocabulary Review 4 |

- | | | |
|---------------------|----------------|----------------|
| 1. (B) | 2. (D) | 3. (C) |
| 4. (A) | 5. (C) | 6. (A) |
| 7. (D) | 8. (A) | 9. (B) |
| 10. (D) | 11. (C) | 12. (A) |
| 13. (C) | 14. (C) | 15. (B) |
| 16. (D) | 17. (A) | 18. (B) |
| 19. (A) | 20. (C) | 21. (D) |
| 22. (C) | 23. (A) | 24. (D) |
| 25. (B) | 26. (A) | 27. (C) |
| 28. (D) | 29. (C) | 30. (A) |
| 31. Renaissance | 32. relatives | 33. valued |
| 34. scholars | 35. interacted | 36. passionate |
| 37. inclined | 38. Initially | 39. negatively |
| 40. individual | | |
| 41. trustworthiness | | |
| 42. unite | 43. interact | 44. identify |
| 45. regulation | | |
| 46. (E) | 47. (A) | 48. (D) |
| 49. (C) | 50. (B) | |

Part 3

Chapter 7: Verbs and Tenses

Verb Tense

► Exercise 1

1. The reading passage describes NAFTA, or the North American Free Trade Agreement. NAFTA is an agreement between North American countries regarding issues of trade. It changed many policies between the North American countries involved. For example, the author says that NAFTA removed tariffs, which she defines as a type of tax, on goods traded between the US, Mexico, and Canada. The author also mentions that NAFTA removed a lot of restrictions on different categories of items traded.

She explains that these changes have helped increase trade and industry between the countries. However, she also cites some problems with NAFTA. Critics argue that the incomes of some people, like farmers, are decreasing as a result of NAFTA. These people have recommended that NAFTA revise some of its policies to make it more fair for certain people.

2. If I could choose between watching a serious movie and watching an entertaining movie, I would choose to watch the entertaining movie. Although I know many people who like to watch serious movies that teach them something, I believe that the primary purpose of movies is to entertain us, not to teach us. I think we learn more from educational books or from teachers, not from movies. This does not mean that movies have never taught me anything. Some of the best lessons I have learned in life have come from movies. However, I simply feel that movie producers should spend more time creating entertaining movies than serious ones. After all, life is often serious enough as it is. Amusing movies give people the chance to recover from some of the seriousness of life.

► Exercise 2

1. The reading passage describes nonverbal communication between people. It **(1)** explains that nonverbal communication is communication that is not spoken. It then says that much of what we know about people come from their movements and gestures, not so much by what they **(2)** say. In the lecture, the professor **(3)** reinforces how important nonverbal communication is by **(4)** describing how it can be used in a business setting. In the US, when a businessman is trying to sell a product and he does not look his client in the eye, it is **(5)** considered to be a sign of insecurity or deception. Therefore, nonverbal communication **(6)** is an important skill to have.
2. If I **(1)** could learn any musical instrument in the entire world, I would learn how to play the guitar. Although my life is currently too busy for me to take guitar lessons, I **(2)** plan to learn how to play the guitar in the future. Music has always been an important part of my life. When I was younger, my mother **(3)** made me take piano lessons. I liked taking piano lessons, but I would have liked guitar lessons better. I believe that **(4)** learning how to

play the guitar is worthwhile because the guitar has been **(5)** used so often in music. People **(6)** have been playing early forms of guitars for thousands of years. In my opinion, the guitar is the best instrument for a person to learn.

Word Forms and Uses

► Exercise 1

- | | | |
|---------|---------|---------|
| 1. (A) | 2. (C) | 3. (B) |
| 4. (C) | 5. (B) | 6. (B) |
| 7. (A) | 8. (B) | 9. (C) |
| 10. (A) | 11. (A) | 12. (C) |
| 13. (B) | 14. (A) | 15. (C) |
| 16. (B) | | |

► Exercise 2

1. Both the reading and the lecture discuss the accuracy of the Critical Period Hypothesis. The Critical Period Hypothesis states that children can only learn language during a certain period of their childhood. According to the reading, if children do not learn language before the critical age of twelve, then they will never learn to speak. In the lecture, the professor describes a young girl found in the 1970s who was thirteen years old and had never learned to speak. The girl was able to learn basic speech even though she was past the critical age. However, the girl was never able to learn any advanced language skills. The professor concludes by saying that although the Critical Period Hypothesis is not true all the time, its basic logic still seems to apply.
2. The invention of email has allowed communication between people to become much easier. However, I believe that although email has many advantages, it has many disadvantages as well. For instance, email has greatly replaced face-to-face communication, which I feel isolates people from one another. Instead of talking to each other personally, people now sit in front of their computers sending emails. They do not receive the social interaction that humans so often require. Also, emails have made written communication less formal. Many people send off emails without even double-checking for any errors. This gives the impression that they are careless and that they do not value the other person's time. I believe that we as a society need to be more careful of how we use email.

Chapter 8 Sentence Formation

Adjective Clauses

► Exercise 1

1. The principal of Ridgecrest High School, who had worked there for over ten years, finally decided to retire.
2. He waited until it was 6:00, when I was almost ready to leave for the day, before he told me that the printer needed to be fixed.
3. Each line of clothing was so sophisticated that the girl did not know which to select.
4. The wedding that I went to with my sister was for my two best friends.
5. Much to everyone's surprise, the racecar that was bright red won the race by a large margin.
6. I am so excited to hear a speech given by my favorite author, which should be given at the end of the banquet.
7. It is a proven fact that children who are home-schooled often do better than children who attend public school.
8. Some scientists believe that there could be hundreds of beetle species that we do not know about living on the same tree.
9. The zoo downtown, which houses a range of different animals from all over the world, is temporarily closed for renovation.
10. The astronomy class, which requires all students to perform a research project, is difficult for many students to pass.
11. The meeting that is scheduled for tomorrow will require all staff members to be there.
12. The park where the young girl held her birthday party was demolished to make room for an extended parking lot.

► Exercise 2

1. The dog that was discovered next to a busy highway was taken to the animal shelter.
2. Colleges that are raising tuition costs are experiencing a decline in student enrollment.
3. The ancient Romans created great arenas called coliseums where gladiator fights were held.
4. The children who are playing a board game completely lost track of time.

5. The notebook that was written by me during my childhood years is hidden in a safe place.
6. A student who forgets to do his homework usually comes to class with an excuse ready.
7. Clara Winterbourne, who is a popular television actress, just won an award for best picture.
8. The office in which the woman works is located on the fifth floor.
9. The statue that resembles a past American president was built over five years ago.
10. The professor who recently received a job at a university still cannot decide which courses he would like to teach.
11. The parent tried to explain the problem by using an example from his childhood, which made the child feel even more confused.
12. The play that will be held in the theater by the recreation center involves a love story.

Combining Sentences with Different Connectors

► Exercise 1

- C 1.
- IC 2. Many Westerners think that Buddha came from China, but he actually came from India.
- C 3.
- C 4.
- IC 5. Those with anxiety disorders experience extreme anxiety during certain situations. Nevertheless, they can control their anxiety through several helpful relaxation techniques.
- IC 6. Since American students are becoming increasingly overweight, some schools have decided to prohibit sodas at lunchtime.
- C 7.
- IC 8. The raven was generally thought to be an ill omen. At the same time, some Northwestern Native American tribes saw the raven as a creator spirit.
- C 9.
- IC 10. Cloning is a controversial subject, mainly because many people see it as an ethical issue.

IC 11. Benjamin Franklin was a famous American politician, but he was also a major inventor during the 18th-century.

C 12.

► Exercise 2

1. a. While one researcher says that a little bit of chocolate is healthy for you, another researcher maintains that the healthiest diet is one free of chocolate.
b. One researcher says that a little bit of chocolate is healthy for you, but another researcher maintains that the healthiest diet is one free of chocolate.
2. a. Leonardo da Vinci painted the famous portrait *Mona Lisa*, and he is known for creating the steam cannon.
b. Leonardo da Vinci painted the famous portrait *Mona Lisa*. Also, he is known for creating the steam cannon.
3. a. Although fifty years ago, it was common for women to stay at home while their husbands worked, it is much more common now for women to have jobs of their own.
b. Fifty years ago, it was common for women to stay at home while their husbands worked. However, it is much more common now for women to have jobs of their own.
4. a. As the river was home to an endangered species of fish, the government passed a law that forbids extensive fishing.
b. The river was home to an endangered species of fish, so the government passed a law that forbids extensive fishing.
5. a. The professor loves novels that were written during the past century, but he highly dislikes the 20th-century works of Ernest Hemingway.
b. The professor loves novels that were written during the past century, except he highly dislikes the 20th-century works of Ernest Hemingway.
6. a. Doctors will usually face at least one lawsuit during their careers, so they should make certain to purchase insurance when they first start to practice.
b. Doctors will usually face at least one lawsuit during their careers. Therefore, they should make certain to purchase insurance when they first start to practice.

► Exercise 3

1. Before revising your research paper, it is a good idea to put an extra copy of your rough draft somewhere safe.
2. Having already been built, the house will be donated to a charity for homeless people.
3. While listening to the professor's lecture, would you mind taking some notes for me?
4. Being a morning person, I would rather do all my work early in the morning than later in the afternoon.
5. Feeling sick after the amusement park ride, the girl decided to go straight home.

Parallel Structure

► Exercise 1

- P 1. If asked about my job qualifications, I would say that my most important qualifications are my dedication to the job and my ability to get work done quickly.
- NP 2. One lesson that I learned from my friend is that it is more difficult for many people to listen than to speak.
- P 3. A new law passed by the government will provide health care, welfare, and free tuition for people who live below the poverty level.
- P 4. Most of the people in my hometown would prefer to attend the local college over the state college.
- NP 5. The main bookstore in my hometown is raising the prices of its books and is giving coupons out as well.
- P 6. The business will donate some money to fund an upcoming art exhibition and to construct an extra building for a nearby school.
- NP 7. Memorizing the vocabulary words in Spanish was easy for me to do, but pronouncing the words took me a bit longer.
- P 8. The family is the most important part of a child's life because it helps the child to develop social skills that are appropriate and respectful of other people.

► Exercise 2

1. I feel that entertainment is just as necessary for adults as children. (as for)
2. Instead of listing pay as the most important part of their jobs, many employees are now listing benefits and to have friendly coworkers as equally important. (friendly coworkers)
3. For people who want to eat healthier, fish, walnuts, and an egg are all good sources of nutritious fatty acids. (eggs)
4. The children in my summer camp learned how to be polite, cooperate with others, and how to perform certain activities. (how to cooperate)
5. Chores, maintaining a curfew, and watching younger siblings are responsibilities that most teenagers say they dislike the most. (Doing chores)
6. Writers who have become popular with the public are usually adept at creating interesting plots and good character development. (developing good characters)
7. High school students who want to receive academic scholarships will have to work hard and need a high grade point average. (will need)
8. Since college freshmen often do not know what field they want to go into, many take their time and are waiting until their junior years before they make any major decisions. (wait)

► Exercise 3

1. Both the reading and the lecture discuss the health status of people in this country. The reading says that people today are unhealthier than people twenty years ago. High blood pressure, loss of energy, and obesity are common among people in today's society. The reading recommends eating healthy, exercising regularly, and getting a full night's sleep as ways to increase our overall health. The professor agrees with the reading's views, but she adds that certain vitamins should be increased in our diets to provide us with more energy. She also believes that stress is one reason why people today are unhealthy, so she advises us to avoid situations that are overly stressful.
2. It is my belief that school tests do not provide an accurate assessment of a student's knowledge. Many factors can influence how students perform on tests that have nothing to do with what they know. For instance, some students are simply bad at taking tests. They feel so much pressure

over the test that they perform poorly on it, even if they happen to know the material. Tests are also inefficient because all they measure is a student's ability to memorize facts and figures. Once the test is over, there is no reason for the students to retain this knowledge. For these reasons, I think tests should be eliminated from schools.

Practice Test 1

Sample Responses

► Task 1

The passage and the lecture both discuss medication as a way to treat depression. The passage argues that the best treatment for depression is medication, but the lecture points out a number of problems with using medication to treat depression.

The passage's first point is that the cause of depression is a chemical imbalance, which can severely affect a person's mood. There are many medications that can treat imbalances. The professor directly challenges this claim. She argues that experiences are nearly always the cause of depression. As a result, medication does not help treat the real cause.

The passage then suggests that medication has proven to be the most effective treatment for depression in clinical trials. The professor, on the other hand, argues that medication only helps the patient ignore depressive feelings for a short while. It does not treat the cause of depression.

The final point the passage makes in support of medication is that it is less disruptive than other forms of treatment. Since medication generally involves taking only a few pills a day, patients can do their day-to-day activities uninterrupted. The professor argues with this. She points out that medication has many side effects that can be very disruptive.

The passage supports the view that medication is best in treating depression. Yet the professor feels that medication is not the solution to depression.

► Task 2

I strongly disagree that success is based more on luck than on hard work. A number of experiences in my own life have caused me to doubt the value of luck. Overall, I feel that people must rely on hard work if they are ever going to be successful.

My first lesson that caused me to favor hard work over luck was in a high school math class. It was

roughly halfway through the year, and I had managed to pass the tests by guessing my way through most of the problems. I took my midterm exam with absolutely no preparation beforehand, expecting to guess as well as I had before. Instead of passing, however, I failed it. I realized then that preparation was a necessary part of success and luck could not be relied upon.

When I became a little bit older, I began to realize that believing in luck was not logical. Whenever I happened to be "lucky" in life, I found that most of these incidents occurred by pure chance. There was no evidence that luck really worked. However, there has been lots of evidence in my life which proves that hard work does work. As such, hard work—actual effort—is something that we can realistically draw upon if we hope to succeed.

Finally, looking at the individuals that I know and consider successful, I find that all of them strongly believe in hard work. They all view hard work as the basis of a successful life, whether it be in business, academics or elsewhere. As a result, most of them have worked hard and have achieved great things.

Given these reasons, I am inclined to believe hard work will make me more successful than just luck. Relying on luck is relying on something that has failed me often in the past.

Practice Test 2

Sample Responses

► Task 1

Both the passage and the lecture discuss the subject of organic produce over traditionally grown produce. While the passage argues that organic produce is better for humans to eat, the lecture suggests that organic produce is no better than traditionally grown produce. The passage's first point is that organic produce does not have the chemicals found on traditionally grown produce, which makes it safer to eat. Conversely, the professor explains that traditionally grown produce is washed several times before being put on shelves and contains very small amounts of chemicals. Moreover, these chemicals are not harmful to humans. The passage then argues that organic produce is better because organic farms present less of an environmental risk to nearby sources of water. It states that chemicals used on traditional farms can pollute nearby water sources. The professor explains that this concern is not realistic, as there are strict laws which prevent water pollution from happening.

The passage finally explains that organic farms have less of an impact on the ecosystem surrounding them than do traditional farms. The professor disputes this point as well. She says that studies have shown that traditional farms impact surrounding areas no more than organic farms do.

The professor maintains that traditionally grown produce is not harmful to humans or the environment. Although the passage suggests that organic produce is worth purchasing over traditional produce, the professor does not think there is a difference.

► Task 2

Some college classes are too big to take attendance in. However, I believe that college teachers should take attendance whenever possible to ensure that students receive a good education. Taking attendance has a number of benefits for those in college.

First, the quality of a student's education can be improved dramatically by attending class. In many classes that I have taken, I have not had the time to do all the reading. However, attending the lecture regularly helped me to learn a surprising amount. By taking attendance, the teacher can ensure that students are being exposed to some of the material in the course. Teachers make certain that students will exit the class with at least some knowledge.

In addition, a student's attendance allows the teacher to have a better idea of how the student is doing. By encouraging students to attend class through required attendance, the teacher can interact with his or her students and attempt to work with each one individually. This kind of interaction between students and teachers can improve a student's education greatly, but it cannot be achieved if attendance is not encouraged.

Finally, requiring attendance gets students to take school more seriously. Having a structured schedule of classes that they must attend motivates students to view school as a necessary part of life. Without attendance requirements, students tend to miss class often, which affects their perception of school. Attendance requirements encourage students to make an effort in their classes, causing them to realize that school is not merely something that they can attend whenever they feel like it.

While students might face a number of problems within the classroom, the first step to getting a good education is attending class. In my opinion, having strong attendance requirements and making sure that teachers enforce them is good for the students and for their education.

