

The People Who Make the Test!

The Official Guide to the TCC Fourth Edition

- Practice with authentic past TOEFL iBT® test questions and essay topics
- Read ETS raters' comments on actual test taker responses

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Interactive Authentic

TOEFL® Tests

About the TOEFL iBT® Test

Read this chapter to learn

- The main features of the TOEFL iBT test
- What kind of questions are on the test
- How you can use this book to help you prepare for the test

his *Official Guide* has been created to help English language learners understand the TOEFL® test and prepare for it. By preparing for the test, you will also be building the skills you need to succeed in an academic setting and go anywhere in your career, and in life.

Getting Started

Start your preparation for the TOEFL test by reading the following important information about the test, testing requirements, and your TOEFL scores.

Undergraduate, graduate, and postgraduate programs around the world require students to demonstrate their ability to communicate in English as an entrance requirement.

The TOEFL test gives test takers the opportunity to prove they can communicate ideas effectively by simulating university classroom and student life communication. The language used in the test reflects real-life English language usage in university lectures, classes, and laboratories. It is the same language professors use when they discuss course work or concepts with students. It is the language students use in study groups and everyday university situations, such as buying books at the bookstore. The reading passages are from real textbooks and course materials.

TOEFL Scores Can Help You Go Anywhere

The TOEFL test measures how well test takers *use* English, not just their knowledge of the language. Because it is a valid and reliable test with unbiased, objective scoring, the TOEFL test confirms that a student has the English language skills necessary to succeed in an academic setting.

That's why it is the most highly regarded and widely accepted test in the world. More than 8,500 colleges, universities, and agencies in 130 countries

accept TOEFL scores, so test takers have the flexibility to use their TOEFL test scores worldwide. The TOEFL test is also the most accessible English-language test. It is administered at more than 4,500 test centers in 180 countries. More than 27 million people have taken the test since it began in 1964.

Who Creates the TOEFL Test?

ETS (Educational Testing Service) is the nonprofit educational organization that develops and administers the TOEFL test.

Who Is Required to Take the TOEFL Test?

If your first or native language is *not* English, it is likely that the college or university that you wish to attend will require you to take an English-language proficiency test. However, you should check with each institution to which you are applying for admission.

How Is the TOEFL Test Used in the Admissions Process?

Your test scores will be considered together with other information you supply to the institution to determine if you have the appropriate academic and language background to be admitted to a regular or modified program of study. Often, your field of study and whether you are applying as a graduate or undergraduate student will determine what TOEFL scores you need.

Is There a Minimum Acceptable Score?

Each institution that uses TOEFL scores sets its own minimum level of acceptable performance. These minimums vary from one institution to another, depending on factors such as the applicant's field of study, the level of study (undergraduate or graduate), whether the applicant will be a teaching assistant, and whether the institution offers English as a Second Language support for its students.

How to Use This Book

This book gives you instruction, practice, and advice on strategies for performing well on the TOEFL test.

- **Chapter 1** provides an overview of the test, information about test scores, and an introduction to the on-screen appearance of the different parts of the TOEFL iBT test, along with general test-taking suggestions.
- Chapters 2, 3, 4, and 5 provide in-depth discussions of the kinds of questions that appear in each section of the test. Each chapter also includes

practice questions and explanations of correct answers so that you will understand the actual communicative skills that are being tested in each section.

- **Chapters 6–8** provide three full-length actual TOEFL iBT tests that will give you an estimate of how you might perform on the actual test.
- Chapter 9 is the Writer's Handbook, a guide to help you write essays in English. It covers grammar, usage, mechanics, style, and organization and development. There is also a discussion of different types of essays, tips on how to improve your essay by revising, editing, and proofreading, and a glossary.

You can use this book to familiarize yourself with the appearance, length, and format of the test. For additional practice and to experience the real test, go to TOEFL Practice Online at www.ets.org/toeflpractice. TOEFL Practice Online offers:

- a real TOEFL iBT test experience
- a variety of practice tests that help prepare you for test day
- same-day scores and performance feedback on all four tested skills

TOEFL Practice Online can help you become familiar with the way the test is delivered and what it is like to answer the questions under timed conditions. This *Official Guide* will help you understand the language skills you will need to succeed on the test and in the classroom.

Use the practice tests in this book and from TOEFL Practice Online to determine which of your skills are the weakest. Then follow the advice in each skill chapter to improve those skills. You should use other materials to supplement the practice test questions in this book.

Because the TOEFL test is designed to assess the actual skills you will need to be successful in your studies, the very best way to develop the skills being measured is to study in an English program that focuses on:

- communication using all four skills, especially speaking
- integrated skills (for example, listening/reading/speaking, listening/reading/writing)

However, even students who are not enrolled in an English program should practice the underlying skills that are assessed on the TOEFL test. In other words, the best way to improve performance on the test is to improve your skills. Each chapter of this book gives you explicit advice on how to connect your learning activities to the kinds of questions you will be asked on the test. Perhaps you want to improve your score on the Reading section. The best way to improve reading skills is to read frequently and to read many different types of texts in various subject areas (sciences, social sciences, arts, business, and others). The Internet is one of the best resources for this, but any books, magazines, or journals are very helpful as well. It is best to progress to reading texts that are more academic in style, the kind that would be found in university courses.

In addition, you might try these activities:

- Scan the passages to find and highlight key facts (dates, numbers, terms) and information.
- Increase vocabulary knowledge, perhaps by using flashcards.
- Rather than carefully reading each word and each sentence, practice skimming a passage quickly to get a general impression of the main idea.
- Choose some unfamiliar words in the passage and guess the meanings from the context (surrounding sentences).
- Select all the pronouns (*he, him, they, them,* and others) and identify which nouns each one refers to in the passage.
- Practice making inferences and drawing conclusions based on what is implied in the passage as a whole.

All About the TOEFL iBT Test

The TOEFL iBT test consists of four sections: Reading, Listening, Speaking, and Writing. The entire test is about 4 hours long, and all sections are taken on the same day.

Key Features

- The TOEFL iBT test measures all four language skills that are important for effective communication: speaking, listening, reading, and writing, emphasizing the test taker's ability to use English effectively in academic settings.
- It reflects how language is really used with integrated tasks that combine more than one skill, just as in real academic settings. The integrated questions ask test takers to:
 - read, listen, and then speak in response to a question
 - O listen and then speak in response to a question
 - O read, listen, and then write in response to a question
- It represents the best practices in language learning and teaching. In the past, English instruction focused on learning *about* the language (especially grammar), and students could receive high scores on tests without being able to communicate. Now teachers and learners understand the importance of using English to communicate, and activities that integrate language skills are popular in many English language programs.

Format

- The TOEFL iBT test is administered via the Internet at a secure network of testing centers around the world.
- Instructions for answering questions are given with each section. There is no computer tutorial.
- The test is not computer-adaptive. Each test taker receives items that cover the full range of ability.
- Test takers can take notes throughout the entire test. At the end of testing, all notes are collected and destroyed at the test center to ensure test security.
- For the Speaking section, test takers wear noise-canceling headphones and speak into a microphone. Responses are recorded digitally and sent to ETS to be scored.
- Human raters, trained and certified by ETS, rate the Speaking responses.
- For the Writing section, test takers type their responses. The typed responses are sent to ETS for scoring.
- Human raters, trained and certified by ETS, rate the Writing responses.
 In addition to human scoring, automated scoring is used for the Writing tasks.
- Scores are reported both online and by mail.

The following chart shows the possible number of questions and the timing for each section. The time limit for each section varies according to the number of questions. Every test contains additional questions in the Reading or Listening section. These extra questions are being tested by ETS and do not count toward the test taker's score.

Test Format

Test Section	Number of Questions	Timing
Reading	3–4 passages, 12–14 questions each	60–80 minutes
Listening	4–6 lectures, 6 questions each	60–90 minutes
	2–3 conversations, 5 questions each	
BREAK		10 minutes
Speaking	6 tasks: 2 independent and 4 integrated	20 minutes
Writing	1 integrated task	20 minutes
	1 independent task	30 minutes

Toolbar

The on-screen toolbar in each section allows you to navigate through the test with ease. Following are examples of testing tools from the Listening and Reading sections of the test. The section is always listed in the upper left-hand corner of the toolbar.

This is what the toolbar looks like in the Listening section.



- You will always know what question you are on and how much time is remaining in the section. It is possible to hide the clock at any time by clicking on **Hide Time**.
- **Volume** allows you to adjust the volume as you listen.
- **Help** allows you to get relevant help. When you use the **Help** feature, the clock does not stop.
- **Next** allows you to proceed to the next question.
- Once you click on Next, you can confirm your answers by clicking on OK.
 In the Listening section, you cannot see a question again once you click on OK.

The toolbar for the Reading section has some important features.



You can view the entire passage when answering questions. For some questions, you need to click on **View Text** to see the entire passage.

You can view all your answers by clicking on **Review**. This allows you to return to any other question and change your answer. You can also see which questions you have skipped and still need to answer.

In the Reading section you can also click on **Back** at any time to return to the previous question.

Reading Section

Academic Reading Skills

The Reading section measures your ability to understand university-level academic texts and passages. In many academic settings around the world, students are expected to read and understand information from textbooks and other academic materials written in English. The following are three purposes for academic reading:

Reading to find information

- effectively scanning text for key facts and important information
- increasing reading fluency and rate

Basic comprehension

- understanding the general topic or main idea, major points, important facts and details, vocabulary in context, and pronoun references¹
- making inferences² about what is implied in a passage

Reading to learn

- recognizing the organization and purpose of a passage
- understanding relationships between ideas
- organizing information into a category chart or a summary in order to recall major points and important details
- inferring how ideas throughout the passage connect

Description

Reading Section Format

Length of Each Passage	Number of Passages and Questions	Timing
Approximately 700 words	3–4 passages	60–80 minutes
	12–14 questions per passage	

Reading Passages

The TOEFL iBT test uses reading passages from university-level textbooks that introduce a discipline or topic. The excerpts are changed as little as possible so the test can measure how well test takers can read academic material.

The passages cover a variety of subjects. You should not be concerned if you are unfamiliar with a topic. The passage contains all the information needed to answer the questions.

^{1.} Pronoun references: The nouns that pronouns refer to in a passage

^{2.} Make an inference: To comprehend an argument or an idea that is strongly suggested but not explicitly stated in a passage

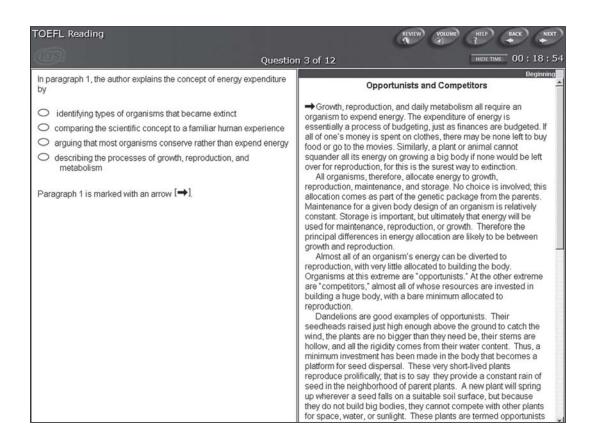
All passages are classified into three basic categories:

- exposition³
- argumentation⁴
- historical

Often, passages present information about the topic from more than one perspective or point of view. This is something you should note as you read. Usually, you are asked at least one question that allows you to demonstrate that you understood the general organization of the passage. Common organization types that you should be able to recognize are:

- classification
- compare/contrast
- cause/effect
- problem/solution

You must read through or scroll to the end of each passage before receiving questions on that passage. Once the questions appear, the passage appears on the right side of the computer screen. The questions are on the left. (See the illustration that follows.)



^{3.} Exposition: Material that provides an explanation of a topic

^{4.} Argumentation: Material that presents a point of view about a topic and provides evidence to support it

You do *not* need any special background knowledge to answer the questions in the Reading section correctly, but the definition of difficult words or phrases in the passage may be provided. If you click on a hyperlinked word, a definition appears in the lower left part of the screen.

The 60 to 80 minutes allotted for this section include time for reading the passages and answering the questions.

Reading Question Formats

There are three question formats in the Reading section:

- questions with four choices and a single correct answer in traditional multiple-choice format
- questions with four choices and a single answer that ask test takers to "insert a sentence" where it fits best in a passage
- "reading to learn" questions with more than four choices and more than one possible correct answer.

Features

Reading to Learn Questions

These questions test your ability to recognize how the passage is organized and understand the relationships among facts and ideas in different parts of the passage.

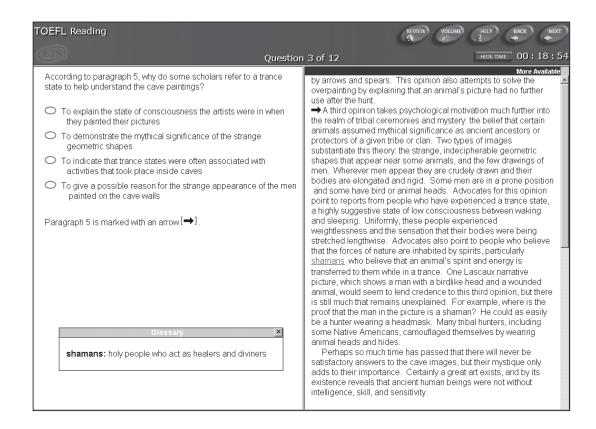
You are asked to sort information and place the text options provided into a **category chart** or **summary** (see the examples on page 11). The summary questions are worth up to 2 points each. The chart questions are worth up to 3 points. Partial credit is given in this question format.

Paraphrase Questions

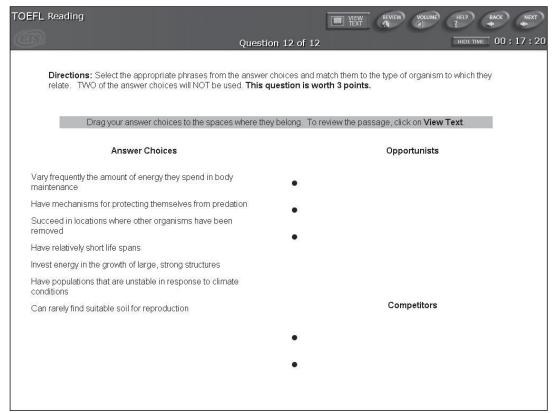
Questions in this category are in multiple-choice format. They test your ability to select the answer choice that most accurately paraphrases a sentence from the passage.

Glossary Feature

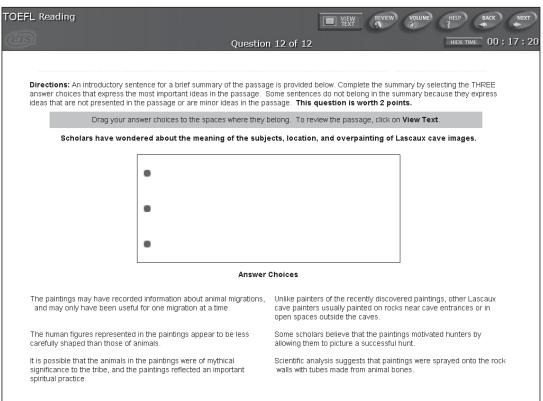
You can click on some special-purpose words and phrases in the reading passages to view a definition or explanation of the term. In the example below, test takers can click on the word "shamans" to view its definition.



Reading to Learn—Category Chart Question Example



Reading to Learn—Summary Question Example



Listening Section

Academic Listening Skills

The Listening section measures your ability to understand spoken English. In academic settings, students must be able to listen to lectures and conversations. Academic listening is typically done for one of the three following purposes:

Listening for basic comprehension

• comprehend the main idea, major points, and important details related to the main idea. (Comprehension of all details is not necessary.)

Listening for pragmatic understanding

- recognize a speaker's attitude and degree of certainty
- recognize the function or purpose of a speaker's statement

Connecting and synthesizing⁵ information

- recognize the organization of information presented
- understand the relationships between ideas presented (for example, compare/contrast, cause/effect, or steps in a process)
- make inferences⁶ and draw conclusions based on what is implied in the material
- make connections among pieces of information in a conversation or lecture
- recognize topic changes (for example, digressions⁷ and aside statements⁸) in lectures and conversations, and recognize introductions and conclusions in lectures

Description

Listening material in the test includes academic lectures and long conversations in which the speech sounds very natural. You can take notes on any listening material throughout the entire test.

Listening Section Format

Listening Material	Number of Questions	Timing
4–6 lectures, each 3–5 minutes long, about 500–800 words	6 questions per lecture	60–90 minutes
2–3 conversations, each about 3 minutes long, about 12–25 exchanges	5 questions per conversation	

^{5.} Synthesize: To combine information from two or more sources

^{6.} Make an inference: To comprehend an argument or an idea that is strongly suggested but not explicitly stated in a passage

^{7.} Digressions: Side comments in which the speaker briefly moves away from the main topic and then returns

^{8.} Aside statements: Comments that are relevant to the main theme but interrupt the flow of information or ideas (Example: "Pay attention now; this will be on the test.")

Academic Lectures

The lectures in the TOEFL test reflect the kind of listening and speaking that occurs in the classroom. In some of the lectures, the professor does all or almost all of the talking, with an occasional comment by a student. In other lectures, the professor may engage the students in discussion by asking questions that are answered by the students. The pictures that accompany the lecture help you know whether one or several people will be speaking.

A Lecture Where the Professor Is the Only Speaker



A Lecture Where the Professor and the Students Both Speak



Conversations in an Academic Setting

The conversations on the TOEFL test may take place during an office meeting with a professor or teaching assistant, or during a service encounter with university staff. The contents of the office conversations are generally academic in nature or related to course requirements. Service encounters could involve conversations about a housing payment, registering for a class, or requesting information at the library.

Pictures on the computer screen help you imagine the setting and the roles of the speakers.





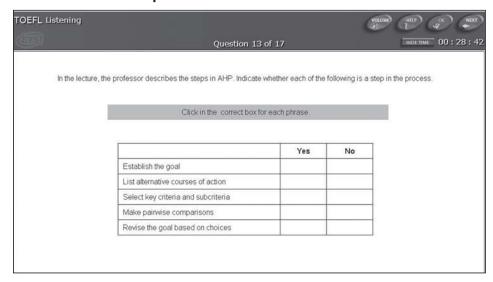
Listening Question Formats

After the listening material is played, you both see and hear each question before you see the answer choices. This encourages you to listen for main ideas.

There are four question formats in the Listening section:

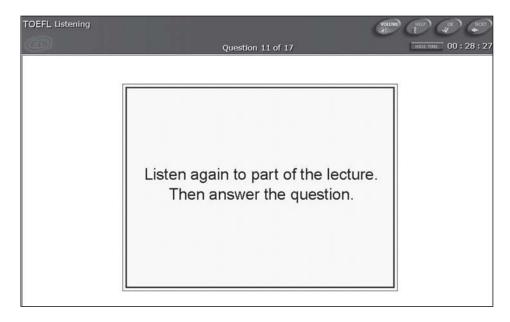
- traditional multiple-choice questions with four answer choices and a single correct answer
- multiple-choice questions with more than one answer (for example, two correct answers out of four choices or three answers out of five choices)
- questions that require you to order events or steps in a process
- questions that require you to match objects or text to categories in a chart

Chart Question Example

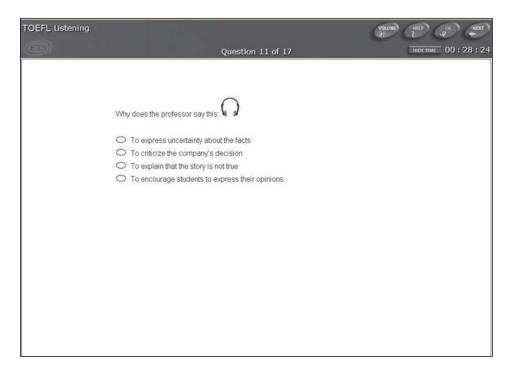


Features

- Note taking is allowed. After testing, notes are collected and destroyed before you leave the test center for test security purposes.
- A multiple-choice question measures understanding of a speaker's attitude, degree of certainty, or purpose. These questions require you to listen for voice tones and other cues and determine how speakers feel about the topic they are discussing.
- In some questions, a portion of the lecture or conversation is replayed. In the replay format, you listen to part of the conversation or lecture again and then answer a question.



This is an example of a type of question that measures the comprehension of the purpose of a speaker's statement.



Speaking Section

Academic Speaking Skills

Students should be able to speak English successfully in and outside the class-room. The Speaking section measures your ability to speak effectively in academic settings.

In classrooms, students must:

- respond to questions
- participate in academic discussions with other students
- synthesize⁹ and summarize what they have read in their textbooks and heard in class
- express their views on topics under discussion

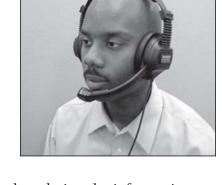
Outside of the classroom, students must:

- participate in casual conversations
- express their opinions
- communicate with people in such places as the bookstore, the library, and the housing office

Description

The Speaking section is approximately 20 minutes long and includes six tasks.

- The first two tasks are independent speaking tasks on topics familiar to you. They ask you to draw upon your own ideas, opinions, and experiences when responding. However, you can respond with any idea, opinion, or experience relevant to completing the task.
- The remaining four tasks are integrated tasks where you must use more than one skill when responding. Two of the tasks require



you to read, listen, and then speak in response by relating the information from the reading and listening material. The other two tasks require you to listen and then speak in response. You can take notes and use those notes when responding to the speaking tasks.

Like the other sections of the test, the Speaking section is delivered via the Internet. For all speaking tasks, you use a headset with a microphone. Speak into the microphone to record your responses. Responses are digitally recorded and sent to ETS, where they are scored by certified raters.

^{9.} Synthesize: To combine information from two or more sources

Speaking Task Types

Task Type	Task Description	Timing
Independent Tasks		
Personal Preference	This question asks the test taker to express and defend a personal choice from a given category—for example, important people, places, events, or activities that the test taker enjoys.	Preparation time: 15 seconds Response time: 45 seconds
2. Choice	This question asks the test taker to make and defend a personal choice between two contrasting behaviors or courses of action.	Preparation time: 15 seconds Response time: 45 seconds
Integrated Tasks		
	Read/Listen/Speak	
3. Campus Situation Topic: Fit and Explain	 A reading passage (75–100 words) presents a campus-related issue. A listening passage (60–80 seconds; 150–180 	Preparation time: 30 seconds Response time: 60 seconds
	words) comments on the issue in the reading passage.	
	 The question asks the test taker to summarize the speaker's opinion within the context of the reading passage. 	
4. Academic Course Topic: General/ Specific	 A reading passage (75–100 words) broadly defines a term, process, or idea from an academic subject. 	Preparation time: 30 seconds Response time: 60 seconds
•	 An excerpt from a lecture (60–90 seconds; 150–220 words) provides examples and specific information to illustrate the term, process, or idea from the reading passage. The question asks the test taker to combine and convey important information from the reading passage and the lecture excerpt. 	
	Listen/Speak	
5. Campus Situation Topic: Problem/ Solution	 The listening passage (60–90 seconds; 180–220 words) is a conversation about a student-related problem and two possible solutions. The question asks the test taker to demonstrate an understanding of the problem and to express an opinion about solving the problem. 	Preparation time: 20 seconds Response time: 60 seconds
6. Academic Course Topic: Summary	 The listening passage is an excerpt from a lecture (90–120 seconds; 230–280 words) that explains a term or concept and gives concrete examples to illustrate that term or concept. The question asks the test taker to summarize the lecture and demonstrate an understanding of the relationship between the examples and the overall topic. 	Preparation time: 20 seconds Response time: 60 seconds
TOTAL		20 minutes

Writing Section

Academic Writing Skills

In all academic situations where writing in English is required, students must be able to present their ideas in a clear, well-organized manner. The Writing section measures your ability to write English in an academic setting.

- Often, students need to write a paper or an essay response about what they are learning in their classes. This requires combining information they have heard in class lectures with what they have read in textbooks or other materials. This type of writing is referred to as **integrated writing**. In this type of writing, students must:
 - take notes on what they hear and read, and use them to organize information before writing
 - summarize, paraphrase, and cite information from the source material accurately
 - write about the ways the information they heard relates to the information they read

For example, in an academic course, a student might be asked to compare and contrast the points of view expressed by the professor in class with those expressed by an author in the assigned reading material. The student must successfully draw information from each source to explain the contrast.

Students must also write essays that express and support their opinions.
 In this type of writing, known as **independent writing**, students express an opinion and support it based on their own knowledge and experience.

For example, students may be asked to write an essay about a controversial issue. The students use past, personal experience to support their position.

In all types of writing, it is helpful for students to:

- identify one main idea and some major points that support it
- plan how to organize the essay (for example, with an outline)
- develop the essay by using reasons, examples, and details
- express information in an organized manner
- use effective linking words (transitional phrases) to connect ideas and help the reader understand the flow of ideas
- use a range of grammar and vocabulary for effective expression
- use grammar and vocabulary accurately; use idiomatic expressions appropriately
- follow the conventions of spelling, punctuation, and layout

Description

The total time for the Writing section is 50 minutes. Test takers write their responses to two writing tasks (see the table below). Responses are typed into the computer and sent to ETS, where they are scored by both certified raters and the automated scoring system.

Writing Task Types

Task Type	Task Description
Task 1 Integrated Writing: Read/Listen/Write	 Test takers read a short text of about 230–300 words (reading time, 3 minutes) on an academic topic. Test takers may take notes on the reading passage. The reading passage disappears from the screen during the lecture that follows. It reappears when test takers begin writing so they can refer to it as they work. Test takers listen to a speaker discuss the same topic from a different perspective. The listening passage is about 230–300 words long (listening time, about 2 minutes). The listening passage provides additional information that relates to points made in the reading passage. Test takers may take notes on the listening passage. Test takers write a summary in connected English prose of important points made in the listening passage, and explain how these relate to the key points of the reading passage. Suggested response length is 150–225 words; however, there is no penalty for writing more as long as it is in response to the task presented. Response time: 20 minutes
Task 2 Independent Writing: Writing from Knowledge and Experience	 Test takers write an essay that states, explains, and supports their opinion on an issue. An effective essay will usually contain a minimum of 300 words; however, test takers may write more if they wish. Test takers must support their opinions or choices rather than simply list personal preferences or choices. Typical essay questions begin with statements such as: —Do you agree or disagree with the following statement? Use reasons and specific details to support your answer. —Some people believe X. Other people believe Y. Which of these two positions do you prefer/agree with? Give reasons and specific details. Response time: 30 minutes

About Test Scores

Score Scales

The TOEFL iBT test provides scores in four skill areas:

Total Score	0–120
Writing	0-30
Speaking	0-30
Listening	0-30
Reading	0-30

The total score is the sum of the four skill scores.

Rating of Speaking and Writing Responses

Speaking

Responses to all six Speaking tasks are digitally recorded and sent to ETS. The responses from each test taker are scored by three to six different certified raters. The response for each task is rated on a scale from 0 to 4 according to the rubrics on pages 188–191. The average of all six ratings is converted to a scaled score of 0 to 30.

Raters listen for the following features in test taker responses:

- **Delivery:** How clear was the speech? Good responses are fluid and clear, with good pronunciation, natural pacing, and natural-sounding intonation patterns.
- Language use: How effectively does the test taker use grammar and vocabulary to convey ideas? Raters determine the test taker's ability to control both basic and more complex language structures, and use appropriate vocabulary.
- **Topic development:** How fully do test takers answer the question and how coherently do they present their ideas? How well did the test taker synthesize and summarize the information in the integrated tasks? Good responses generally use all or most of the time allotted, and the relationship between ideas and the progression from one idea to the next are clear and easy to follow.

It is important to note that raters do not expect test takers' responses to be perfect. Even high-scoring responses may contain occasional errors and minor problems in any of the three areas described above.

Writing

Responses to all writing tasks also are sent to ETS. The responses are rated by two certified raters and the automated scoring system on a scale of 0 to 5 according to the rubrics on pages 200–201 and 209–210. The average of the scores on the two writing tasks is converted to a scaled score of 0 to 30.

- The response to the integrated writing task is scored on the quality of writing (organization, appropriate and precise use of grammar and vocabulary) and the completeness and accuracy of the content.
- The independent writing essay is scored on the overall quality of the writing: development, organization, and appropriate and precise use of grammar and vocabulary.

It is important to note that the raters recognize that the responses are first drafts. They do not expect test takers to produce a well-researched, comprehensive essay. For that reason, test takers can earn a high score with a response that contains some errors.

Score Reports

TOEFL score reports provide valuable information about a test taker's readiness to participate and succeed in academic studies in an English-speaking environment. Score reports include:

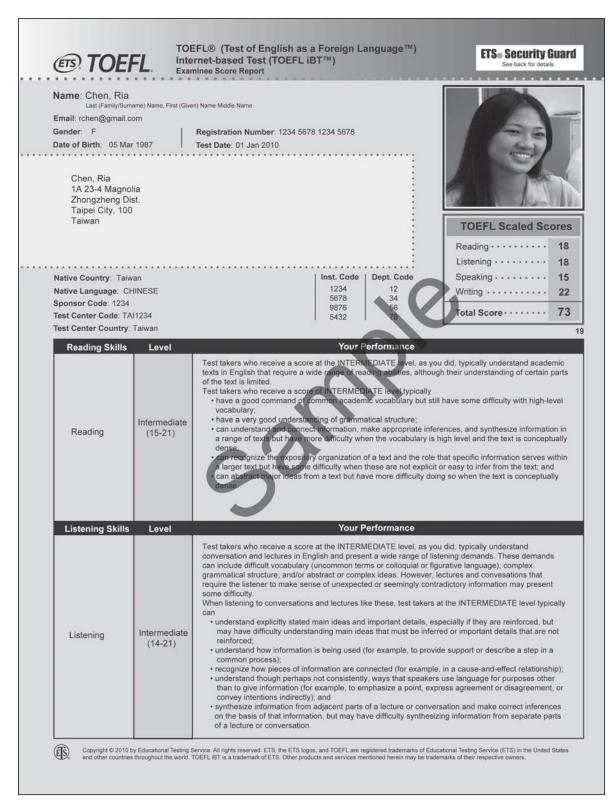
- four skill scores
- total score

Scores are reported online approximately 10 days after the test. Test takers can view their scores online at no charge. Colleges, universities, and agencies receive paper score reports if the test taker has selected them as score recipients. (A paper copy of the score report is mailed to the test taker only upon request.)

Test taker score reports also include performance feedback that indicates whether their performance was high, medium, or low, and describes what test takers in each score range typically know and can do with the English language.

Score Requirements

Each institution sets its own requirements for TOEFL scores. Test takers should consult their target institutions to determine their specific TOEFL score requirements. A list of colleges, universities, and agencies that accept TOEFL scores and a list of institutional score requirements reported to ETS can be obtained at www.toeflgoanywhere.org.



Sample TOEFL iBT Score Report

Speaking Skills	Level	Your Performance	
Speaking about Familiar Topics	Limited (1.5-2.0)	Your responses indicate some difficulty speaking in English about everyday experience and opinions. Listeners sometimes have trouble understanding you because of noticeable problems with pronunciation, grammar, and vocabulary. While you are able to respond partially to the questions, you are not able to fully develop your ideas, possibly due to limited vocabulary and grammar.	
Speaking about Campus Situations	Limited (1.5-2.0)	Your responses indicate that you have some difficulty speaking in English about information from conversations, newspaper articles, university publications, and so on. While you are able to talk about some of the key information from these sources, limited grammar and vocabulary may prevent you from fully expressing your ideas. Problems with pronunciation make it difficult for listeners to understand you at times.	
Speaking about Academic Course Content	Limited (1.5-2.0)	In your response, you are able to use English to talk about the basic ideas from academic reading or lecture materials, but, in general, you include few relevant or accurate details. It is sometimes difficult for listeners to understand your responses because of problems with grammar, vocabulary, and pronunciation. Overall, you are able to respond in a general way to the questions, but the amount of information in your responses is limited and the expression of ideas is often vague and unclear.	
Writing Skills	Level	Your Performance	
Writing based on Reading and Listening	Good (4.0-5.0)	You responded well to the task, relating the lecture to the reading. Weaknesses, if you have any, might have to do with: • slight imprecision in your summary of some of the main points and/or • use of English that is occasionally ungrammatical or unclear	
Writing based on Knowledge and Experience	Fair (2.5-3.5)	You expressed ideas with reasons, examples, and details, but your responses indicate weaknesses such as: • you may not provide enough specific support and development for your main points; • your ideas may be difficult to follow because of how you organize your essay or because of the language you use to connect your ideas;	

THIS IS THE ONLY PERSONAL RECORD YOU WILL RECEIVE. PLEASE RETAIN FOR YOUR RECORDS.

This score report provides four section scores and a total score. An analysis of your strengths and weaknesses in English is included. The level pertaining to each skill should not be generalized beyond the performance on this test. Skill levels and their associated descriptions are not intended for use by institutions as part of their admissions criteria and will not be shared unless you grant permission.

Information About Scores: The following scaled scores are reported TOEFL iBT. A total score is not reported when one or more sections been administered. These scores have the following ranges:

Sections Reading Listening Speaking Writing 0-30 0-30 0-30 0-30 0-30

0-120

Total Score

Score Legends:

Reading	Skills
Level Scaled S Range	
High	22-30
Intermediate	15-21
Low	0-14

Listenin	ng Skills	
Level	Scaled Score Range	
High	22-30	
Intermediate	14-21	
Low	0-13	

Speaking Skills		
Level	Task Rating	Scaled Score Range
Good	3.5-4.0	26-30
Fair	2.5-3.0	18-25
Limited	1.5 - 2.0	10-17
Weak	0 - 1.0	0-9

Writing Skills		
Level	Task Rating	Scaled Score Range
Good	4.0-5.0	24-30
Fair	2.5-3.5	17-23
Limited	1.0-2.0	1-16
Score of Zero	0	0

Institution Code Numbers: The code numbers on this score report are the ones you selected at the time you registered. If any of the numbers you indicated are not shown, they were incorrect and the TOEFL office was unable to send those score reports. To have additional official score reports sent, follow the directions on the attached Score Report Request Form.

DEPT.	WHERE THE REPORT WAS SENT
00	Admissions office for undergraduate study or an institution or agency that is not a college or university
01, 04-99	Admissions office for graduate study in a field other than management (business) or law according to the codes selected when you registered
02	Admissions office of a graduate school of management (business)
03	Admissions office of a graduate school of law

Additional information about TOEFL iBT scores can be found on the Test Takers section of the TOEFL website at www.ets.org/toefl.

ETS® Security Guard text is printed with a special heat sensitive ink for security. To activate this security feature, apply heat to the text, either by rubbing it or blowing on it, and the ETS® Security Guard text will disappear.

IMPORTANT NOTE TO INSTITUTIONS: Scores are valid ONLY if received directly from ETS. Photocopies should never be accepted. If you received this score report directly from an examinee, please provide your official TOEFL institution code to the examinee so he/she can request that an official score report be sent to you. If you need to contact ETS, use the toll-free number on the back of the official score report. Scores more than two years old cannot be reported or validated.

Sample TOEFL iBT Score Report

General Skill-building Tips

The best way for English language learners to develop the skills measured by the TOEFL test is to enroll in an English language learning program that features:

- reading, speaking, listening, and writing skills, with an emphasis on speaking
- an integrated skills approach (for example, instruction that builds skills in listening/reading/speaking or listening/reading/writing)

In addition to the advice for improvement listed in the Appendix of this book, ETS has created the following tips for test takers, but they also contain information useful to teachers.

Reading Tips

English language learners can improve their reading skills by reading regularly, especially university textbooks or other materials that cover a variety of subject areas (for example, sciences, social sciences, arts, business, and others) and are written in an academic style. A wide variety of academic texts can be found on the Internet as well as in magazines and journals.

Reading to Find Information

- Scan passages to find and highlight key facts (dates, numbers, terms) and information.
- Practice frequently to increase reading rate and fluency.

Reading for Basic Comprehension

- Increase vocabulary. Flash cards can help.
- Practice skimming a passage quickly to get a general impression of the main idea instead of carefully reading each word and each sentence.
- Develop the ability to skim quickly and identify major points.
- After skimming a passage, read it again more carefully and write down the main idea, major points, and important facts.
- Choose some unfamiliar words in the passage and guess the meaning from the context (surrounding sentences). Then, look them up to determine their meaning.
- Underline all pronouns (for example, *he, him, they, them*) and identify the nouns to which they refer in the passage.
- Practice making inferences and drawing conclusions based on what is implied in the passage as a whole.

Practice your reading skills

with TOEFL® Practice Online at www.ets.org/toeflpractice and receive same-day scores to confirm you are ready for test day.

Note

The Reading section does not measure summarizing skills, but practicing them builds the skills required for the integrated tasks in the Speaking and Writing sections.

Reading to Learn

- Identify the passage type (for example, cause/effect, compare/contrast, classification, problem/solution, description, narration) and its organization.
- Organize the information in the passage:
 - Create an outline of the passage to distinguish between major and minor points.
 - If the passage categorizes information, create a chart and place the information in appropriate categories.

On the TOEFL test, test takers do not have to create such charts. Instead, a chart with possible answer choices is provided for them, and they are required to fill in the chart with the correct choices. Practicing this skill will help test takers think about categorizing information and be able to do so with ease.

- Create an oral or written summary of the passage using the charts and outlines.
- Paraphrase individual sentences in a passage. Then paraphrase entire paragraphs.

Listening Tips

Listening to the English language frequently and reading a wide variety of academic materials is the best way to improve listening skills.

Watching movies and television and listening to the radio provide excellent opportunities to build listening skills. Audiotapes and CDs of lectures and presentations are equally valuable and are available at libraries and bookstores. Those with transcripts are particularly helpful. The Internet is also a great resource for listening material (for example, www.npr.org or www.bbc.co.uk/radio or www.bbc.co.uk/worldservice/learningenglish).

Listening for Basic Comprehension

- Increase vocabulary.
- Focus on the content and flow of spoken material. Do not be distracted by the speaker's style and delivery.
- Anticipate what a person is going to say as a way to stay focused.
- Stay active by asking yourself questions (for example, What main idea is the professor communicating?).
- Copy the words "main idea," "major points," and "important details" on different lines of paper. Listen carefully, and write these down while listening. Continue listening until all important points and details are written down and then review them.
- Listen to a portion of a lecture or talk and create an outline of important points. Use the outline to write a brief summary. Gradually increase the amount of the presentation you use to write the summary.

Notes

The Reading section measures the ability to recognize paraphrases. The ability to paraphrase is also important for the integrated tasks in the Writing and Speaking sections of the test.

The Listening section does not measure summarizing skills, but practicing summarizing skills is useful for the integrated tasks in the Speaking and Writing sections.

Listening for Pragmatic Understanding¹⁰

- Think about what each speaker hopes to accomplish: What is the purpose of the speech or conversation? Is the speaker apologizing, complaining, or making suggestions?
- Notice each speaker's style. Is the language formal or casual? How certain does each speaker sound? Is the speaker's voice calm or emotional? What does the speaker's tone of voice tell you?
- Notice the speaker's degree of certainty. How sure is the speaker about the information? Does the speaker's tone of voice indicate something about his/her degree of certainty?
- Listen for changes in topic or digressions¹¹.
- Watch a recorded TV or movie comedy. Pay careful attention to the way stress and intonation patterns are used to convey meaning.

^{10.} Pragmatic understanding: To understand a speaker's purpose, attitude, degree of certainty, etc. 11. Digressions: Side comments in which the speaker briefly moves away from the main topic and then returns

Listening to Connect and Synthesize¹² Ideas

- Think about how the lecture you're hearing is organized. Listen for the signal words that indicate the introduction, major steps or ideas, examples, and the conclusion or summary.
- Identify the relationships between ideas. Possible relationships include: cause/effect, compare/contrast, and steps in a process.
- Listen for words that show connections and relationships between ideas.
- Listen to recorded material and stop the recording at various points. Predict what information or idea will be expressed next.
- Create an outline of the information discussed while listening or after listening.

Practice your listening skills

with TOEFL® Practice Online at www.ets.org/toeflpractice and receive same-day scores to confirm you are ready for test day.

Speaking Tips

The best way to practice speaking is with native speakers of English. If you do not live in an English-speaking country, finding native speakers of English might be quite challenging. In some countries, there are English-speaking tutors or assistants who help students with conversation skills and overall communication skills. It is critical to find them and speak with them as often as possible. Another way to practice speaking is by joining an English club whose members converse in English about movies, music, and travel. If a club does not exist in your area, start one and invite native speakers to help you get started.

Independent Speaking Tasks

- Make a list of topics that are familiar, and practice speaking about them.
- Describe a familiar place or recount a personal experience.
- Later, state an opinion or a preference and present clear, detailed reasons for it.
- Make a recommendation and explain why it is the best way to proceed.
- Practice giving one-minute responses to topics.

^{12.} Synthesize: To combine information from two or more sources

Integrated Speaking Tasks

- Find a textbook that includes questions about the material at the end of chapters, and practice answering the questions orally.
- Read a short article (100–200 words). Make an outline that includes only the major points of the article. Use the outline to orally summarize the information.
- Find listening and reading material on the same topic covered by the article. The material can contain similar or different views. (The Internet and the library are good places to find information.) Take notes or create outlines on the listening and reading material:¹³
 - Orally summarize the information in both the written and spoken materials. Be sure to paraphrase using different words and grammatical structures.
 - Orally synthesize the material by combining the information from the reading and listening materials and explain how they relate.
 - State an opinion about the ideas and information presented in the reading and listening material and explain how they relate.
 - If the reading and/or listening material describes a problem, suggest and explain a solution to the problem.
- Recognize the attitude of the speaker or the writer of the original material through intonation, stress, and word choice. This helps you to understand their point of view and plan an appropriate response.

All Speaking Tasks

- Increase vocabulary and learn to use idiomatic speech appropriately.
- Learn grammatical structures and use them naturally when speaking.
- Work on pronunciation, including word stress, intonation patterns, and pauses. (There are a number of products and websites that can help you develop pronunciation skills.)
- When practicing for the TOEFL test using the tips above, take 15 seconds
 to think about what you are going to say before you speak. Write down a
 few key words and ideas, but do not attempt to write down exactly what
 you are going to say. (Raters will be able to detect responses that are read
 and give them a lower score.)
- Use signal words and expressions to introduce new information or ideas, to connect ideas, and to mark important words or ideas. This will help the listener easily follow what you are saying. (For example, "on the one hand…," "but on the other hand…," "what that means is…," "The first reason is…," "another difference is…")

^{13.} Taking notes on the reading and listening material in the integrated Speaking tasks is allowed. Since the reading and listening material is very brief, taking notes on the material may not be necessary. However, the activity described above will help test takers prepare for entering the academic setting. If test takers can do this well, they will most likely succeed on the integrated Speaking tasks on the TOEFL test.

- Make recordings of the preceding activities and evaluate your effort by asking yourself these questions:
 - O Did I complete the task?
 - O Did I speak clearly?
 - O Did I make grammatical errors?
 - O Did I use words correctly?
 - O Did I organize my ideas clearly and appropriately?
 - O Did I use the time effectively?
 - O Did I speak too fast or too slowly?
 - O Did I pause too often?
- Monitor your progress and ask an English teacher or tutor to evaluate your speech using the appropriate Speaking rubrics. (See pages 188–191 for the rubrics.)

Practice your speaking skills

with TOEFL® Practice Online at www.ets.org/toeflpractice and receive same-day scores to confirm that you are ready for test day.

Writing Tips

Integrated Writing Tasks

- Find a textbook that includes questions about the material at the end of chapters, and practice writing answers to the questions.
- Read an article that is about 300–400 words long. Make an outline that includes the major points and important details of the article. Use the outline to write a summary of the information and ideas. Summaries should be brief and clearly communicate only the major points and important details. Be sure to paraphrase using different words and grammatical structures.
- Find listening and reading material on a single topic on the Internet or in the library. The material can provide similar or different views. Take notes on the written and spoken portions, and do the following:
 - Summarize the information and ideas in both the written and spoken portions.
 - O Synthesize the information and discuss how the reading and listening materials relate. Explain how the ideas expressed are similar, how one idea expands upon another, or how the ideas are different or contradict each other.

Paraphrasing

Paraphrasing involves restating something from the source material in one's own words. On the TOEFL test, test takers receive a score of zero if all they do is copy words from the reading passage. Practice paraphrasing words, phrases, sentences, and entire paragraphs frequently using the following tips:

- Learn to find synonyms with ease. Pick 10 to 15 words or phrases in a reading passage and quickly think of synonyms without looking them up in a dictionary or thesaurus.
- Write a paraphrase of a reading passage using only your notes. If you
 have not taken notes, write the paraphrase without looking at the original
 text. Then check the paraphrase with the original passage to make sure
 that it is factually accurate and that you have used different words and
 grammatical structures.

Independent Writing Tasks

- Make a list of familiar topics and practice writing about them.
- For each topic, state an opinion or a preference and then support it with evidence.
- Practice planning and writing at least one essay for each topic. Be sure to take 30 minutes to plan, write, and revise each essay.
- Think about and list all ideas related to a topic or task before writing. This is also called "prewriting."
- Identify one main idea and some major points to support that idea, and plan how to communicate them (by creating, for example, an outline to organize ideas).
- Create a focused thesis statement and use it to develop the ideas presented in the essay.
- Develop the essay by using appropriate explanation and detail.

All Writing Tasks

- Increase vocabulary and knowledge of idiomatic speech so you can use it appropriately.
- Learn grammatical structures so well that you can use them naturally when writing.
- Learn the conventions of spelling, punctuation, and layout (for example, paragraph creation).
- Express information in an organized manner, displaying unity of thought and coherence.
- Use signal words and phrases, such as "on the one hand" or "in conclusion," to create a clear structure for your response.

- As you practice, ask yourself these questions:
 - O Did I complete the task?
 - O Did I write clearly?
 - O Did I make grammatical errors?
 - O Did I use words correctly?
 - O Did I organize my ideas clearly and coherently?
 - O Did I use the time effectively?
- Monitor your own progress and ask an English teacher or tutor to evaluate the writing by using the appropriate Writing rubrics. (See pages 200–201 and 209–210 for the rubrics.)

Practice your writing skills

with TOEFL® Practice Online at www.ets.org/toeflpractice and receive same-day scores to confirm that you are ready for test day.

Note

Teachers: It is a good idea for English programs to use the TOEFL Speaking and Writing rubrics (pages 188–191, 200–201, and 209–210) to measure students' abilities and evaluate their progress. This helps test takers build their skills for the TOEFL test.

Test Preparation Tips from ETS

Once you have built your skills and practiced, you will be ready for the TOEFL test. Here are some good test-taking strategies recommended by ETS:

- Carefully follow the directions in each section to avoid wasting time.
- Click on Help to review the directions only when absolutely necessary because the test clock will not stop when the Help function is being used.
- **Do not panic.** Concentrate on the current question only, and do not think about how you answered other questions. This is a habit that can be learned through practice.
- Avoid spending too much time on any one question. If you have given the question some thought and you still do not know the answer, eliminate as many answer choices as possible and then select the best remaining choice. You can review your responses in the Reading section by clicking on Review. However, it is best to do this only after all the questions have been answered so you stay focused and save time.
- Pace yourself so you have enough time to answer every question. Be aware of the time limit for every section/task, and budget enough time for each question/task so you do not have to rush at the end. You can hide the time clock if you wish, but it is a good idea to check the clock periodically to monitor progress. The clock will automatically alert you when 5 minutes remain in the Listening and Reading sections, as well as in the independent and integrated tasks in the Writing section.

Questions Frequently Asked by Test Takers

Test Benefits

Why should I take the TOEFL test?

No matter where in the world you want to study, the TOEFL test can help you get there. You will be eligible for admission to virtually any institution in the world, including the top colleges and universities in the United States, Canada, the United Kingdom, Australia, and New Zealand. See the Destinations Directory at www.ets.org/toefl.

The TOEFL test gives you more flexibility on when, where, and how often you take the test, and more practice tools and feedback, than any other English language test in the world.

Test takers who are well prepared for the TOEFL test can feel confident that they are also well prepared for academic success.

What makes the TOEFL test better than other English language tests?

The TOEFL test assesses a test taker's ability to integrate English skills and to communicate about what he or she reads and hears. These are the skills you will actually use in an academic classroom.

The test also measures speaking more fairly than other tests. Each Speaking response is evaluated by three to six raters, which is more objective and reliable than other tests that use only one interviewer from a local test site.

Who else benefits from the test?

Admissions officials and faculty at colleges and universities, as well as administrators of certification and licensing agencies, receive better information on an applicant's English communication skills.

Registration

How and when do I register for the test?

Online registration is the easiest method. You can also register by mail or by phone. See **www.ets.org/toefl** for details. Registration is available 3–4 months before the test date. Register early, as seats can fill up quickly.

Where and when can I take the TOEFL test?

The test is given on fixed dates, 30–40 times a year, via the Internet at secure test centers. The ETS testing network, with more than 4,500 test centers in 180 countries, is the largest in the world. Go to **www.ets.org/toefl** for a list of locations and dates.

How much does the TOEFL test cost?

The price of the test varies by country. Please check the TOEFL website at **www.ets.org/toefl** for the test fees in your country.

Test Preparation

Are sample questions available?

Yes, test takers who register for the TOEFL iBT test receive a link to the TOEFL iBT Sampler, a one-time-use set of actual TOEFL questions. The Sampler includes questions from all four sections of the test. The Reading and Listening sections are interactive, and sample responses are provided for the Speaking and Writing questions.

Can I take a practice test and get a score?

Yes. Practice tests can be purchased at TOEFL Practice Online, at www.ets.org/toeflpractice. This site features practice tests that include *exclusive* TOEFL iBT practice questions covering all four skills: Reading, Listening, Speaking, and Writing, with scoring provided by certified ETS raters.

Scores and Score Reports

How do I get my scores?

Scores are posted online approximately 10 days after the test date, then mailed to the institutions you selected.

Included with your registration fees are:

- 1 online score report for you and 1 printed score report if requested
- up to 4 official score reports that ETS will send directly to the institutions or agencies that you select before you take the test

Can I order additional score reports?

Yes. For a small fee, you can send score reports to as many institutions as you choose. See www.ets.org/toefl for details.

How long are scores valid?

ETS will report scores for 2 years after the test date.

Will institutions accept scores from previous tests?

Check with each institution or agency directly.

Test Delivery

What skills are tested on the TOEFL iBT Test?

The test is given in English, has four sections on reading, listening, speaking, and writing, and takes about 4 hours.

Section	Time Limit	Number of Questions
Reading	60-80 minutes	36–56
Listening	60–90 minutes	34–51
Break	10 minutes	
Speaking	20 minutes	6 tasks
Writing	50 minutes	2 tasks

Can I take only one section of the test?

No. The entire test must be taken to receive a score.

Which computer keyboard is used?

QWERTY, the most common English-language keyboard, is used. It takes its name from the first six letters at the top of the keyboard. Test takers should practice on a QWERTY keyboard before taking the TOEFL iBT test.

Reading Section

Read this chapter to learn

- The 10 types of TOEFL Reading questions
- How to recognize each Reading question type
- Tips for answering each Reading question type
- Strategies for preparing for the Reading section

he TOEFL iBT Reading section includes three or four reading passages, each approximately 700 words long. There are 12 to 14 questions per passage. You have from 60 to 80 minutes to answer all questions in the section.

Reading Passages

TOEFL iBT reading passages are excerpts from college-level textbooks that would be used in introductions to a discipline or topic. The excerpts are changed as little as possible because the goal of the test is to assess how well test takers can read the kind of writing that is used in an academic environment.

The passages will cover a variety of subjects. Do not worry if you are unfamiliar with the topic of a passage. All the information needed to answer the questions will be in the passage. All TOEFL reading passages are classified into three basic categories based on author purpose: (1) Exposition, (2) Argumentation, and (3) Historical.

Often, passages will present information about the topic from more than one perspective or point of view. This is something you should note as you read because usually you will be asked at least one question that allows you to show that you have understood the general organization of the passage. Common types of organization you should be able to recognize are:

- classification
- comparison/contrast
- cause/effect
- problem/solution

TOEFL reading passages are approximately 700 words long, but the passages used may vary somewhat in length. Some passages may be slightly longer than 700 words, and some may be slightly shorter.

Reading Questions

Reading questions cover Basic Information skills, Inferencing skills, and Reading to Learn skills. There are 10 question types. The following chart summarizes the categories and types of TOEFL iBT Reading questions.

TOEFL Reading Question Types

Basic Information and Inferencing questions (12 to 14 questions per set)

- 1. Factual Information questions (3 to 6 questions per set)
- 2. Negative Factual Information questions (0 to 2 questions per set)
- 3. Inference questions (1 to 3 questions per set)
- 4. Rhetorical Purpose questions (1 to 2 questions per set)
- 5. Vocabulary questions (3 to 5 questions per set)
- 6. Reference questions (0 to 2 questions per set)
- 7. Sentence Simplification questions (0 or 1 question per set)
- 8. Insert Text question (1 question per set)

Reading to Learn questions (1 per set)

- 9. Prose Summary
- 10. Fill in a Table

The following sections will explain each of these question types. You will find out how to recognize each type and see examples of each type with explanations. You will also find tips that can help you answer each Reading question type.

Basic Information and Inferencing Questions

Type 1: Factual Information Questions

These questions ask you to identify factual information that is explicitly stated in the passage. Factual Information questions can focus on facts, details, definitions, or other information presented by the author. They ask you to identify specific information that is typically mentioned only in part of the passage. They generally do not ask about general themes that the passage as a whole discusses. Often, the relevant information is in one or two sentences.

How to Recognize Factual Information Questions

Factual Information questions are often phrased in one of these ways:

- According to the paragraph, which of the following is true of X?
- The author's description of X mentions which of the following?
- According to the paragraph, X occurred because . . .
- According to the paragraph, X did Y because . . .
- According to the paragraph, why did X do Y?
- The author's description of X mentions which of the following?

Tips for Factual Information Questions

- You may need to refer back to the passage in order to know what exactly is said about the subject of the question. Since the question may be about a detail, you may not recall the detail from your first reading of the passage.
- Eliminate choices that present information that is contradicted in the passage.
- Do not select an answer just because it is mentioned in the passage. Your choice should answer the specific question that was asked.

Example

PASSAGE EXCERPT: "... Sculptures must, for example, be stable, which requires an understanding of the properties of mass, weight distribution, and stress. Paintings must have rigid stretchers so that the canvas will be taut, and the paint must not deteriorate, crack, or discolor. These are problems that must be overcome by the artist because they tend to intrude upon his or her conception of the work. For example, in the early Italian Renaissance, bronze statues of horses with a raised foreleg usually had a cannonball under that hoof. This was done because the cannonball was needed to support the weight of the leg. In other words, the demands of the laws of physics, not the sculptor's aesthetic intentions, placed the ball there. That this device was a necessary structural compromise is clear from the fact that the cannonball quickly disappeared when sculptors learned how to strengthen the internal structure of a statue with iron braces (iron being much stronger than bronze)..."

According to paragraph 2, sculptors in the Italian Renaissance stopped using cannonballs in bronze statues of horses because

- they began using a material that made the statues weigh less
- they found a way to strengthen the statues internally
- the aesthetic tastes of the public had changed over time
- the cannonballs added too much weight to the statues

Explanation

The question tells you to look for the answer in the excerpted paragraph, which in this case is paragraph 2. You do not need to skim the entire passage to find the relevant information.

Choice 1 says that sculptors stopped putting cannonballs under the raised legs of horses in statues because they learned how to make the statue weigh less and not require support for the leg. The passage does not mention making the statues weigh less; it says that sculptors learned a better way to support the weight. Choice 3 says that the change occurred only because people's taste changed, meaning that the cannonballs were never structurally necessary. That directly contradicts the passage. Choice 4 says that the cannonballs weakened the structure of the statues. This choice also contradicts the passage. Choice 2 correctly identifies the reason the passage gives for the change: sculptors developed a way to strengthen the statue from the inside, making the cannonballs physically unnecessary.

Type 2: Negative Factual Information Questions

These questions ask you to verify what information is true and what information is NOT true or not included in the passage based on information that is explicitly stated in the passage. To answer this kind of question, first locate the relevant information in the passage. Then verify that three of the four answer choices are true and that the remaining choice is false. Remember, for this type of question, the correct answer is the one that is NOT true.

How to Recognize Negative Factual Information Questions

You can recognize negative fact questions because the word "NOT" or "EXCEPT" appears in the question in capital letters.

- According to the passage, which of the following is NOT true of X?
- The author's description of X mentions all of the following EXCEPT . . .

Tips for Negative Factual Information Questions

- Usually a Negative Factual Information question requires you to check more of the passage than a Factual Information question. The three choices that are mentioned in the passage may be spread across a paragraph or several paragraphs.
- In Negative Factual Information questions, the correct answer either directly contradicts one or more statements in the passage or is not mentioned in the passage at all.
- After you finish a Negative Factual Information question, check your answer to make sure you have accurately understood the task.

Example

PASSAGE EXCERPT: "The United States in the 1800s was full of practical, hardworking people who did not consider the arts—from theater to painting—useful occupations. In addition, the public's attitude that European art was better than American art both discouraged and infuriated American artists. In the early 1900s there was a strong feeling among artists that the United States was long overdue in developing art that did not reproduce European traditions. Everybody agreed that the heart and soul of the new country should be reflected in its art. But opinions differed about what this art would be like and how it would develop."

According to paragraph 1, all of the following were true of American art in the late 1800s and early 1900s EXCEPT:

- Most Americans thought art was unimportant.
- American art generally copied European styles and traditions.
- Most Americans considered American art inferior to European art.
- American art was very popular with European audiences.

Explanation

Sometimes in Negative Factual Information questions, it is necessary to check the entire passage in order to make sure that your choice is not mentioned. However, in this example, the question is limited to one paragraph, so your answer should be based just on the information in that paragraph. Choice 1 is a restatement of the first sentence in the paragraph: since most Americans did not think that the arts were useful occupations, they considered them unimportant. Choice

2 makes the same point as the third sentence: "... the United States was long overdue in developing art that did not reproduce European traditions" means that up to this point in history, American art did reproduce European traditions. Choice 3 is a restatement of the second sentence in the paragraph: American artists were frustrated because of "the public's attitude that European art was better than American art...." Choice 4 is not mentioned anywhere in the paragraph. Because you are asked to identify the choice that is NOT mentioned in the passage or that contradicts the passage, the correct answer is choice 4.

Type 3: Inference Questions

These questions measure your ability to comprehend an argument or an idea that is strongly implied but not explicitly stated in the text. For example, if an effect is cited in the passage, an Inference question might ask about its cause. If a comparison is made, an Inference question might ask for the basis of the comparison. You should think about not only the explicit meaning of the author's words but also the logical implications of those words.

How to Recognize Inference Questions

Inference questions will usually include the word *infer, suggest,* or *imply*.

- Which of the following can be inferred about X?
- The author of the passage implies that X . . .
- Which of the following can be inferred from paragraph 1 about X?

Tips for Inference Questions

- Make sure your answer does not contradict the main idea of the passage.
- Do not choose an answer just because it seems important or true. The correct answer must be inferable from the passage.
- You should be able to defend your choice by pointing to explicitly stated information in the passage that leads to the inference you have selected.

Example

PASSAGE EXCERPT: "... The nineteenth century brought with it a burst of new discoveries and inventions that revolutionized the candle industry and made lighting available to all. In the early-to-mid-nineteenth century, a process was developed to refine tallow (fat from animals) with alkali and sulfuric acid. The result was a product called stearin. Stearin is harder and burns longer than unrefined tallow. This breakthrough meant that it was possible to make tallow candles that would not produce the usual smoke and rancid odor. Stearins were also derived from palm oils, so vegetable waxes as well as animal fats could be used to make candles..."

Which of the following can be inferred from paragraph 1 about candles before the nineteenth century?

\bigcirc	They did not smoke when they were burned.
\bigcirc	They produced a pleasant odor as they burned.
\bigcirc	They were not available to all.
\bigcirc	They contained sulfuric acid.

Explanation

In the first sentence from the excerpt the author says that "new discoveries and inventions" made "lighting available to all." The only kind of lighting discussed in the passage is candles. If the new discoveries were important because they made candles available to all, we can infer that before the discoveries, candles were not available to everyone. Therefore choice 3 is an inference about candles we can make from the passage. Choices 1 and 2 can be eliminated because they explicitly contradict the passage ("the usual smoke" and "rancid odor"). Choice 4 can be eliminated because sulfuric acid was first used to make stearin in the nineteenth century, not before the nineteenth century.

Type 4: Rhetorical Purpose Questions

Rhetoric is the art of speaking or writing effectively. In Factual Information questions you are asked *what* information an author has presented. In Rhetorical Purpose questions you are asked *why* the author has presented a particular piece of information in a particular place or manner. Rhetorical Purpose questions ask you to show that you understand the rhetorical function of a statement or paragraph as it relates to the rest of the passage.

Sometimes you will be asked to identify how one paragraph relates to another. For instance, the second paragraph may give examples to support a statement in the first paragraph. The answer choices may be expressed in general terms (for example, "a theory is explained and then illustrated") or in terms that are specific to the passage. ("The author explains the categories of adaptation to deserts by mammals and then gives an example.")

A Rhetorical Purpose question may also ask why the author quotes a certain person or why the author mentions a particular piece of information (*Example:* Why does the author mention "the ability to grasp a pencil"? *Correct answer:* It is an example of a motor skill developed by children at 10 to 11 months of age.)

How to Recognize Rhetorical Purpose Questions

These are examples of the way Rhetorical Purpose questions are typically worded:

- The author discusses X in paragraph 2 in order to . . .
- Why does the author mention X?
- The author uses X as an example of . . .

Tips for Rhetorical Purpose Questions

- Know the definitions of these words or phrases, which are often used to describe different kinds of rhetorical purposes: "definition," "example," "to illustrate," "to explain," "to contrast," "to refute," "to note," "to criticize," "function of."
- Rhetorical Purpose questions usually do not ask about the overall organization of the reading passage. Instead, they typically focus on the logical links between sentences and paragraphs.

Example

PASSAGE EXCERPT: "... Sensitivity to physical laws is thus an important consideration for the maker of applied-art objects. It is often taken for granted that this is also true for the maker of fine-art objects. This assumption misses a significant difference between the two disciplines. Fine-art objects are not constrained by the laws of physics in the same way that applied-art objects are. Because their primary purpose is not functional, they are only limited in terms of the materials used to make them. Sculptures must, for example, be stable, which requires an understanding of the properties of mass, weight distribution, and stress. Paintings must have rigid stretchers so that the canvas will be taut, and the paint must not deteriorate, crack, or discolor. These are problems that must be overcome by the artist because they tend to intrude upon his or her conception of the work. For example, in the early Italian Renaissance, bronze statues of horses with a raised foreleg usually had a cannonball under that hoof. This was done because the cannonball was needed to support the weight of the leg..."

Why does the author discuss the "bronze statues of horses" created by artists in the early Italian Renaissance?

- To provide an example of a problem related to the laws of physics that a fine artist must overcome
- To argue that fine artists are unconcerned with the laws of physics
- To contrast the relative sophistication of modern artists in solving problems related to the laws of physics
- To note an exceptional piece of art constructed without the aid of technology

Explanation

You should note that the sentence that first mentions "bronze statues of horses" begins "For example . . ." The author is giving an example of something he has introduced earlier in the paragraph. The paragraph overall contrasts how the constraints of physical laws affect the fine arts differently from applied arts or crafts. The fine artist is not concerned with making an object that is useful, so he or she is less constrained than the applied artist. However, because even a fine-arts object is made of some material, the artist must take into account the physical properties of the material. In the passage, the author uses the example of the bronze statues of horses to discuss how artists had to include some support for the raised foreleg of the horse because of the physical properties of the bronze. So the correct answer is choice 1.

Type 5: Vocabulary Questions

These questions ask you to identify the meanings of individual words and phrases as they are used in the reading passage (a word might have more than one meaning, but *in the reading passage*, only one of those meanings is relevant.) Vocabulary that is tested actually occurs in the passage; there is no "list of words" that must be tested. Usually a word or phrase is chosen to be tested as a vocabulary question because understanding that word or phrase is important to understanding a large or important part of the passage. On the TOEFL test, some words in the passage that are unusual, are technical, or have special meanings in the context of the topic are defined for you. If you click on the hyperlinked word in

the passage, a definition will appear in a box. In this book, words of this type are defined at the end of the passage. Naturally, words that are tested as vocabulary questions are not defined for you.

How to Recognize Vocabulary Questions

Vocabulary questions are usually easy to identify. You will see one word or phrase highlighted in the passage. You are then asked a question like any of the following:

- The word "X" in the passage is closest in meaning to . . .
- The phrase "X" in the passage is closest in meaning to . . .
- In stating X, the author means that . . .

Tips for Vocabulary Questions

- Remember that the question is not just asking the meaning of a word; it is asking for the meaning *as it is used in the passage*. Do not choose an answer just because it can be a correct meaning of the word; understand which meaning the author is using in the passage.
- Reread the sentence in the passage, substituting the word or phrase you
 have chosen. Confirm that the sentence still makes sense in the context
 of the whole passage.

Examples

PASSAGE EXCERPT: "In the animal world the task of moving about is fulfilled in many ways. For some animals locomotion is accomplished by changes in body shape..."

The word "locomotion" in the passage is closest in meaning to

evolution

movement

survival
escape

Explanation

Locomotion means "the ability to move from place to place." In this example, it is a way of restating the phrase "the task of moving" in the preceding sentence. So the correct answer is choice 2.

PASSAGE EXCERPT: "Some poisonous snake bites need to be treated immediately or the victim will suffer paralysis . . ."

In stating that the victim will "suffer paralysis" the author means that the victim will

\bigcirc	lose the ability to move
\bigcirc	become unconscious
\bigcirc	undergo shock
\bigcirc	feel great pain

Explanation

In this example, both the words tested from the passage and the possible answers are phrases. *Paralysis* means "the inability to move," so if the poison from a snake bite causes someone to "suffer paralysis," that person will "lose the ability to move." The correct answer is choice 1.

Type 6: Reference Questions

These questions ask you to identify referential relationships between the words in the passage. Often, the relationship is between a pronoun and its antecedent (the word to which the pronoun refers). Sometimes other kinds of grammatical reference are tested (like *which* or *this*).

How to Recognize Reference Questions

Reference questions look similar to vocabulary questions. In the passage, one word or phrase is highlighted. Usually the word is a pronoun. Then you are asked:

• The word "X" in the passage refers to . . .

The four answer choices will be words or phrases from the passage. The high-lighted word or phrase refers to only one of the choices.

Tips for Reference Questions

- If the Reference question is about a pronoun, make sure your answer is the same number (singular or plural) and case (first person, second person, third person) as the highlighted pronoun.
- Substitute your choice for the highlighted word or words in the sentence. Does it violate any grammar rules? Does it make sense?

Examples

PASSAGE EXCERPT: "... These laws are universal in their application, regardless of cultural beliefs, geography, or climate. If pots have no bottoms or have large openings in their sides, they could hardly be considered containers in any traditional sense. Since the laws of physics, not some arbitrary decision, have determined the general form of applied-art objects, they follow basic patterns, so much so that functional forms can vary only within certain limits..."

The	e word "they" in the passage refers to
\bigcirc	applied-art objects
\bigcirc	the laws of physics
\bigcirc	containers
\bigcirc	the sides of pots

Explanation

This is an example of a simple pronoun-referent question. The highlighted word *they* refers to the phrase "applied-art objects," which immediately precedes it, so choice 1 is the correct answer.

Often, the grammatical referent for a pronoun will be separated from the pronoun. It may be located in a preceding clause or even in the preceding sentence.

PASSAGE EXCERPT: "... The first weekly newspaper in the colonies was the Boston Gazette, established in 1719, the same year that marked the appearance of Philadelphia's first newspaper, the *American Mercury*, where the young Benjamin Franklin worked. By 1760 Boston had 4 newspapers and 5 other printing establishments; Philadelphia, 2 newspapers and 3 other presses; and New York, 3 newspapers. The

distribution, if not the sale, of newspapers was assisted by the establishment of a postal service in 1710, which had a network of some 65 offices by 1770, serving all 13 colonies..."

The word "which" in the passage refers to

distribution
sale
newspaper
postal service

Explanation

In this example, the highlighted word is a relative pronoun, the grammatical subject of the relative clause "which had a network of some 65 offices . . ." The relative clause is describing the postal service, so choice 4 is the correct answer.

PASSAGE EXCERPT: "... Roots anchor the plant in one of two ways or sometimes by a combination of the two. The first is by occupying a large volume of shallow soil around the plant's base with a *fibrous root system*, one consisting of many thin, profusely branched roots. Since these kinds of roots grow relatively close to the soil surface, they effectively control soil erosion. Grass roots are especially well suited to this purpose. Fibrous roots capture water as it begins to percolate into the ground and so must draw their mineral supplies from the surface soil before the nutrients are leached to lower levels ..."

The phrase "this purpose" in the passage refers to

combining two root systems

feeding the plant

preventing soil erosion

leaching nutrients

Explanation

In the example, the highlighted words are a phrase containing a demonstrative adjective (*this*) and a noun (*purpose*). Because a fibrous root system can keep soil in place, it can be used to stop erosion, and grass roots are a fibrous root system. The sentence could be reworded as "Grass roots are especially well suited to preventing soil erosion," so choice 3 is the correct answer.

Type 7: Sentence Simplification Questions

In this type of question you are asked to choose a sentence that has the same essential meaning as a sentence that occurs in the passage. Not every reading set includes a Sentence Simplification question. There is never more than one in a set.

How to Recognize Sentence Simplification Questions

Sentence Simplification questions always look the same. A single sentence in the passage is highlighted. You are then asked:

• 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.

Tips for Sentence Simplification Questions

- Make sure you understand both ways a choice can be incorrect:
- It contradicts something in the highlighted sentence.
- It leaves out something important from the highlighted sentence.
- Make sure your answer does not contradict the main argument of the paragraph in which the sentence occurs, or the passage as a whole.

Example

PASSAGE EXCERPT: "... Although we now tend to refer to the various crafts according to the materials used to construct them-clay, glass, wood, fiber, and metal-it was once common to think of crafts in terms of function, which led to their being known as the "applied arts." Approaching crafts from the point of view of function, we can divide them into simple categories: containers, shelters, and supports. There is no way around the fact that containers, shelters, and supports must be functional. The applied arts are thus bound by the laws of physics, which pertain to both the materials used in their making and the substances and things to be contained, supported, and sheltered. These laws are universal in their application, regardless of cultural beliefs, geography, or climate. If a pot has no bottom or has large openings in its sides, it could hardly be considered a container in any traditional sense. Since the laws of physics, not some arbitrary decision, have determined the general form of applied-art objects, they follow basic patterns, so much so that functional forms can vary only within certain limits. Buildings without roofs, for example, are unusual because they depart from the norm. However, not all functional objects are exactly alike; that is why we recognize a Shang Dynasty vase as being different from an Inca vase. What varies is not the basic form but the incidental details that do not obstruct the object's primary function . . . "

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.

\supset	Functional applied-art objects cannot vary much from the basic patterns determined by the laws of physics.
\supset	The function of applied-art objects is determined by basic patterns in the laws of
	physics.
\supset	Since functional applied-art objects vary only within certain limits, arbitrary deci-
	sions cannot have determined their general form.
\supset	The general form of applied-art objects is limited by some arbitrary decision that
	is not determined by the laws of physics

Explanation

It is important to note that the question says that *incorrect* answers change the original meaning of the sentence or leave out essential information. In this example, choice 4 changes the meaning of the sentence to its opposite; it says that the form of functional objects is arbitrary, when the highlighted sentence says that the forms of functional objects are *never* arbitrary. Choice 2 also changes the meaning. It says that the functions of applied-art objects are determined by physical laws. The highlighted sentence says that the *form of the object* is determined by physical laws but the function is determined by people. Choice 3 leaves out an important idea from the highlighted sentence. Like the highlighted sentence, it says that the form of functional objects is not arbitrary, but it does not say that it is physical laws that determine basic form. Only choice 1 makes the same point as the highlighted sentence and includes all the essential meaning.

Type 8: Insert Text Questions

In this type of question, you are given a new sentence and are asked where in the passage it would best fit. You need to understand the logic of the passage as well as the grammatical connections (like pronoun references) between sentences. Every set includes an Insert Text question. There is never more than one in a set.

How to Recognize Insert Text Questions

In the passage you will see four black squares. The squares are located at the beginnings or ends of sentences. Sometimes all four squares appear in one paragraph. Sometimes they are spread across the end of one paragraph and the beginning of another. You are then asked this 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?

Your job is to click on one of the squares and insert the sentence in the text.

Tips for Insert Text Questions

- Try the sentence in each of the places indicated by the squares. You can place and replace the sentence as many times as you want.
- Look at the structure of the sentence you are inserting. Pay special attention to connecting words; they can provide important information about where the sentence should be placed.
- Frequently used connecting words:

On the other hand Further, or Furthermore Similarly
For example Therefore In contrast
On the contrary In other words Finally

As a result

Make sure that the inserted sentence connects logically to both the sentence before it and the sentence after it, and that any pronouns agree with the nouns they refer to.

Example

PASSAGE EXCERPT WITH EXAMPLE SQUARES: "Scholars offer three related but different opinions about this puzzle. ■ One opinion is that the paintings were a record of the seasonal migrations made by herds. ■ Because some paintings were made directly over others, obliterating them, it is probable that a painting's value ended with the migration it pictured. ■ Unfortunately, this explanation fails to explain the hidden locations, unless the migrations were celebrated with secret ceremonies. ■"

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

All three of them have strengths and weaknesses, but none adequately answers all of the questions the paintings present.

Where would the sentence best fit?

- Scholars offer three related but different opinions about this puzzle. All three of them have strengths and weaknesses, but none adequately answers all of the questions the paintings present. One opinion is that the paintings were a record of the seasonal migrations made by herds. Because some paintings were made directly over others, obliterating them, it is probable that a painting's value ended with the migration it pictured. Unfortunately, this explanation fails to explain the hidden locations, unless the migrations were celebrated with secret ceremonies. ■
- Scholars offer three related but different opinions about this puzzle. One opinion is that the paintings were a record of the seasonal migrations made by herds. All three of them have strengths and weaknesses, but none adequately answers all of the questions the paintings present. Because some paintings were made directly over others, obliterating them, it is probable that a painting's value ended with the migration it pictured. Unfortunately, this explanation fails to explain the hidden locations, unless the migrations were celebrated with secret ceremonies. ■
- Scholars offer three related but different opinions about this puzzle. One opinion is that the paintings were a record of the seasonal migrations made by herds.
 Because some paintings were made directly over others, obliterating them, it is probable that a painting's value ended with the migration it pictured. All three of them have strengths and weaknesses, but none adequately answers all of the questions the paintings present. Unfortunately, this explanation fails to explain the hidden locations, unless the migrations were celebrated with secret ceremonies. ■
- Scholars offer three related but different opinions about this puzzle. One opinion is that the paintings were a record of the seasonal migrations made by herds.
 Because some paintings were made directly over others, obliterating them, it is probable that a painting's value ended with the migration it pictured. Unfortunately, this explanation fails to explain the hidden locations, unless the migrations were celebrated with secret ceremonies. All three of them have strengths and weaknesses, but none adequately answers all of the questions the paintings present.

Explanation

In this example, choice 1 is the correct answer. The new sentence makes sense only if it occurs in the first position, after the first sentence. In that place, "All three of them" refers back to "three related but different opinions." The information in the sentence is a commentary on all three of the "opinions"; the opinions are related, but none is a complete explanation. Logically, this evaluation of all three opinions must come either as an introduction to the three opinions, or as a conclusion about all three. Only the introductory position is available, because the paragraph does not include all three opinions.

Reading to Learn Questions

There are two types of Reading to Learn questions: "Prose Summary" and "Fill in a Table." Reading to Learn questions require you to do more than the Basic Information questions. As you have seen, the Basic Information questions focus on your ability to understand or locate specific points in a passage at the sentence level. The Reading to Learn questions also involve:

- recognizing the organization and purpose of the passage
- organizing the information in the passage into a mental framework
- distinguishing major from minor ideas and essential from nonessential information
- understanding rhetorical functions such as cause-effect relationships, compare-contrast relationships, arguments, and the like

In other words, these questions require you to demonstrate an understanding of the passage as a whole, not just specific information within it.

Reading to Learn questions require you to show that you are able not only to comprehend individual points, but also to place the major ideas and supporting information from the passage into an organizational framework or structure such as a prose summary or a table. By answering correctly, you will demonstrate that you can recognize the major points of a text, how and why the text has been organized, and the nature of the relationships within the text. Having an organized mental representation of a text is critical to learning because it allows you to remember important information from the text and apply it in new situations. If you have such a mental framework, you should be able to reconstruct the major ideas and supporting information from the text. By doing so, you will demonstrate a global understanding of the text as a whole. On the TOEFL test, each reading passage will have one Reading to Learn question. It will be either a Prose Summary or a Fill in a Table question, never both.

Type 9: Prose Summary Questions

These questions measure your ability to understand and recognize the major ideas and the relative importance of information in a passage. You will be asked to select the major ideas in the passage by distinguishing them from minor ideas or ideas that are not in the passage. The correct answer choice will synthesize major ideas in the passage. Because the correct answer represents a synthesis

of ideas, it will not match any particular sentence from the passage. To select the correct answer, you will need to create a mental framework to organize and remember major ideas and other important information. Understanding the relative importance of information in a passage is critical to this ability.

In a Prose Summary question, you will be given six answer choices and asked to pick the three that express the most important ideas in the passage. Unlike the Basic Information questions, each of which is worth just 1 point, a Prose Summary question is worth 2 points. You can earn 0 to 2 points depending on how many correct answers you choose. If you choose no correct answers or just one correct answer, you will earn no points. If you choose two correct answers, you will earn 1 point. If you choose all three correct answers, you will earn 2 points. The order in which you choose your answers does not matter for scoring purposes.

Example

Because the Prose Summary question asks you to show an understanding of the different parts of the passage, it is necessary to read the entire passage. Parts of the following passage have already been used to illustrate other question types.

APPLIED ARTS AND FINE ARTS

Although we now tend to refer to the various crafts according to the materials used to construct them-clay, glass, wood, fiber, and metal-it was once common to think of crafts in terms of function, which led to their being known as the "applied arts." Approaching crafts from the point of view of function, we can divide them into simple categories: containers, shelters, and supports. There is no way around the fact that containers, shelters, and supports must be functional. The applied arts are thus bound by the laws of physics, which pertain to both the materials used in their making and the substances and things to be contained, supported, and sheltered. These laws are universal in their application, regardless of cultural beliefs, geography, or climate. If a pot has no bottom or has large openings in its sides, it could hardly be considered a container in any traditional sense. Since the laws of physics, not some arbitrary decision, have determined the general form of applied-art objects, they follow basic patterns, so much so that functional forms can vary only within certain limits. Buildings without roofs, for example, are unusual because they depart from the norm. However, not all functional objects are exactly alike; that is why we recognize a Shang Dynasty vase as being different from an Inca vase. What varies is not the basic form but the incidental details that do not obstruct the object's primary function.

Sensitivity to physical laws is thus an important consideration for the maker of applied-art objects. It is often taken for granted that this is also true for the maker of fine-art objects. This assumption misses a significant difference between the two disciplines. Fine-art objects are not constrained by the laws of physics in the same way that applied-art objects are. Because their primary purpose is not functional, they are only limited in terms of the materials used to make them. Sculptures must, for example, be stable, which requires an understanding of the properties of mass, weight distribution, and stress. Paintings must have rigid stretchers so that the canvas will be taut, and the paint must not deteriorate, crack, or discolor. These are problems that must be overcome by the artist because they tend to intrude upon his or her conception of the work. For example, in the early Italian Renaissance, bronze statues of

horses with a raised foreleg usually had a cannonball under that hoof. This was done because the cannonball was needed to support the weight of the leg. In other words, the demands of the laws of physics, not the sculptor's aesthetic intentions, placed the ball there. That this device was a necessary structural compromise is clear from the fact that the cannonball quickly disappeared when sculptors learned how to strengthen the internal structure of a statue with iron braces (iron being much stronger than bronze).

Even though the fine arts in the twentieth century often treat materials in new ways, the basic difference in attitude of artists in relation to their materials in the fine arts and the applied arts remains relatively constant. It would therefore not be too great an exaggeration to say that practitioners of the fine arts work to overcome the limitations of their materials, whereas those engaged in the applied arts work in concert with their materials.

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.**

This passage discusses fundamental differences between applied-art objects and fine-art objects.

Answer Choices

- Applied-art objects fulfill functions, such as containing or sheltering, and objects with the same function have similar characteristics because they are constrained by their purpose.
- It is easy to recognize that Shang Dynasty vases are different from Inca vases.
- Fine-art objects are not functional, so they are limited only by the properties of the materials used.

- Renaissance sculptors learned to use iron braces to strengthen the internal structures of bronze statues.
- In the twentieth century, fine artists and applied artists became more similar to one another in their attitudes toward their materials.
- In all periods, fine artists tend to challenge the physical limitations of their materials while applied artists tend to cooperate with the physical properties of their materials.

Explanation

Correct Choices

- *Choice 1:* Applied-art objects fulfill functions, such as containing or sheltering, and objects with the same function have similar characteristics because they are constrained by their purpose.
- Explanation: As the introductory sentence states, the passage is mainly a contrast of applied-art objects and fine-art objects. The main point of contrast is functionality: applied-art objects are functional, whereas fine-art objects are not. The first part of the passage explains the consequences of functionality for the materials and "basic forms" of applied-art objects. The second part of the passage explains the consequences of not being functional to the materials and forms of fine-art objects. A good summary of the passage must include the definition of "applied-art objects" and the major consequence (objects with the same function will follow similar patterns), so Choice 1 should be included.
- *Choice 3:* Fine-art objects are not functional, so they are limited only by the properties of the materials used.
- *Explanation:* Because the passage contrasts applied-art objects and fine-art objects, a good summary should include the basic difference. Including Choice 3 in the summary provides the basic contrast discussed in the passage: applied art objects are functional; fine-art objects are not. Fine-art objects are not as constrained as applied-art objects because they do not have to perform a function.
- *Choice 6:* In all periods, fine artists tend to challenge the physical limitations of their materials, while applied artists tend to cooperate with the physical properties of their materials.
- *Explanation:* The last paragraph of the passage presents a further consequence of the basic contrast between applied-art objects and fine-art objects. This is the difference between the attitude of fine artists toward their materials and the attitude of applied artists toward their materials. A good summary will include this last contrast.

Incorrect Choices

- *Choice 2:* It is easy to recognize that Shang Dynasty vases are different from Inca vases.
- Explanation: Although this statement is true, it is not the main point of the first paragraph or of the passage. In fact, it contrasts with the main point of the paragraph: objects that have the same function are all similar. The last sentence of the first paragraph says that the Shang Dynasty vase and the Inca vase are different in "incidental details," but the "basic form" is the same. Including Choice 2 in the summary misrepresents the passage.
- *Choice 4:* Renaissance sculptors learned to use iron braces to strengthen the internal structures of bronze statues.
- *Explanation:* Choice 4 summarizes the information in sentences 9, 10, and 11 of paragraph 2. Within the context of the passage, this information helps you understand the meaning of the limitations that materials can impose on fine

artists. However, remember that the directions say to choose the statements that express *the most important ideas in the passage*. The example is less important than the general statements of difference. If Choice 4 is included, then Choice 1 or 3 or 6 would be left out and the summary would be missing an essential point of contrast between fine arts and applied arts.

Choice 5: In the twentieth century, fine artists and applied artists became more similar to one another in their attitudes toward their materials.

Explanation: This choice should be excluded because it is not supported by the passage. It is a misreading of paragraph 3, which says that the difference in attitude between fine artists and applied artists has not changed. Obviously, a choice that contradicts the information or argument in the passage should not be part of your summary.

Type 10: Fill in a Table Questions

In this kind of question, you will be given a partially completed table based on information in the passage. Your job is to complete the table by clicking on correct answer choices and dragging them to their correct locations in the table.

Fill in a Table questions measure your ability to conceptualize and organize major ideas and other important information from across the passage and then to place them in appropriate categories. This means that you must first recognize and identify the major points from the passage, and then place those points in their proper context.

Just as for Prose Summary questions, the able reader will create a mental framework to organize and remember major ideas and other important information.

Doing so requires the ability to understand rhetorical functions such as cause-effect relationships, compare-contrast relationships, arguments, and the like.

When building your mental framework, keep in mind that the major ideas in the passage are the ones you would include if you were making a fairly high-level outline of the passage. The correct answer choices are usually ideas that would be included in a slightly more detailed outline. Minor details and examples are generally not included in such an outline because they are used only to support the more important, higher-level themes. The distinction between major ideas/important information and less important information can also be thought of as a distinction between essential and nonessential information.

Passages used with Fill in a Table questions have more than one focus of development in that they include more than one point of view or perspective. Typical passages have the following types of organization: compare/contrast, problem/solution, cause/effect, alternative arguments (such as theories, hypotheses), and the like.

Correct answers represent major ideas and important supporting information in the passage. Generally these answers will not match specific phrases in the passage. They are more likely to be abstract concepts based on passage information or paraphrases of passage information. Correct answers will be easy to confirm by able readers who can remember or easily locate relevant text information.

Incorrect answers may include information about the topic that is not mentioned in the passage or that is not directly relevant to the classification categories in the table. They may also be obviously incorrect generalizations or conclusions based on what is stated in the passage. Be aware that incorrect answers may include words and phrases that match or resemble words or phrases in the passage.

Table Rules

Tables can have two or three columns/rows containing bullets representing five correct answer choices.

There will always be more answer choices than there are correct answers. Some answer choices will not be used.

An answer choice can be used only once in the table. If an answer choice applies to more than one answer category, or to no category in a table, a row or column labeled "both" or "neither" will be available in the table for placement of that answer choice.

Scoring

To earn points, you must not only select correct answer choices, but also organize them correctly in the table. You may receive partial credit, depending on how many correct answers you choose.

You can earn up to a total of 3 points, depending on how many correct answers you select and correctly place. For zero, one, or two correct answers you will receive no points. For three correct answers you will receive 1 point; for four correct answers you will receive 2 points; and for all five correct answers you will receive the entire 3 points.

Example

Note: The passage used for this example is the same one that was used above for the Prose Summary example question. In an actual test, you will not receive both a Prose Summary question and a Fill in a Table question about the same passage.

Directions: Complete the table below to summarize information about the two types of art discussed in the passage. Match the appropriate statements to the types of art with which they are associated. **This question is worth 3 points.**

TYPES OF ART	STATEMENTS	
The Applied Arts	Select 3	
	•	
	•	
	•	
The Fine Arts	Select 2	
	•	
	•	

Statements

An object's purpose is primarily aesthetic.

Objects serve a functional purpose.

The incidental details of objects do not vary.

Artists work to overcome the limitations of their materials.

The basic form of objects varies little across cultures.

Artists work in concert with their materials.

An object's place of origin is difficult to determine.

Drag your answer choices to the spaces where they belong. (This question type fills the computer screen. To see the passage, click on **View Text**.)

Correctly Completed Table

Directions: Complete the table below to summarize information about the two types of art discussed in the passage. Match the appropriate statements to the types of art with which they are associated. **This question is worth 3 points.**

TYPES OF ART	STATEMENTS
The Applied Arts	Select 3
	 Objects serve a functional purpose.
	 The basic form of objects varies little across cultures.
	 Artists work in concert with their materials.
The Fine Arts	Select 2
	 An object's purpose is primarily aesthetic.
	 Artists work to overcome the limitations of their materials.

Explanation

Correct Choices

Choice 1: An object's purpose is primarily aesthetic. (Fine Arts)

Explanation: This is an example of a correct answer that requires you to identify an abstract concept based on text information and paraphrases of text information. In paragraph 2, sentence 5, the passage states that the primary purpose of Fine Arts is not function. Then, in paragraph 2, sentence 11, the passage mentions a situation in which a sculptor had to sacrifice an aesthetic purpose due to the laws of physics. Putting these statements together, the reader can infer that fine artists, such as sculptors, are primarily concerned with aesthetics.

Choice 2: Objects serve a functional purpose. (Applied Arts)

Explanation: This is stated more directly than the previous correct answer. In paragraph 1, sentences 1, 2, and 3 make it clear how important function is in the applied arts. At the same time, paragraph 2 states that Fine Arts are not concerned with function, so the only correct place for this statement is in the Applied Arts category.

Choice 4: Artists work to overcome the limitations of their materials. (Fine Arts) *Explanation:* This is stated explicitly in the last paragraph of the passage. In that paragraph, it is made clear that this applies only to practitioners of the fine arts.

Choice 5: The basic form of objects varies little across cultures. (Applied Arts) Explanation: In paragraph 1, sentence 5, the passage states that certain laws of physics are universal. Then in sentence 7, that idea is further developed with the statement that functional forms can vary only within limits. From these two sentences, you can conclude that because of the laws of physics and the need for functionality, the basic forms of applied-art objects will vary little across cultures.

Choice 6: Artists work in concert with their materials. (Applied Arts)

Explanation: This is stated explicitly in the last paragraph of the passage. In that paragraph, it is made clear that this applies only to practitioners of the applied arts.

Incorrect Choices

Choice 3: The incidental details of objects do not vary.

Explanation: This idea is explicitly refuted by the last sentence of paragraph 1 in reference to the applied arts. That sentence (referring only to applied arts) states that the incidental details of such objects do vary, so this answer cannot be placed in the Applied Arts category. This subject is not discussed at all in reference to fine-art objects, so it cannot be correctly placed in that category either.

Choice 7: An object's place of origin is difficult to determine.

Explanation: This answer choice is implicitly refuted in reference to applied arts in the next-to-last sentence of paragraph 1. That sentence notes that both Shang Dynasty and Inca vases are identifiable as such based upon differences in detail. By inference, then, it seems that it is not difficult to determine an applied-art object's place of origin. Like the previous incorrect answer, this idea is not discussed at all in reference to fine-art objects, so it cannot be correctly placed in that category either.

Strategies for Preparing for the Reading Section

Now that you are familiar with the 10 question types that are used in the TOEFL Reading section, you are ready to sharpen your skills by working on whole reading sets. In the following pages, you can practice on six reading sets created by ETS for the TOEFL iBT test. The question types are not labeled, but you should be able to identify them and understand what you need to do to answer each correctly. After each passage and question set you will find answers and explanations for each question.

In addition to practicing on these sets, here are some other suggestions for improving the skills that will help you perform well on the Reading section:

The best way to improve reading skills is to read frequently and to read many different types of texts in various subject areas (sciences, social sciences, arts, business, and others). The Internet is one of the best resources for this, and of course books, magazines, and journals are very helpful as well. Make sure to regularly read texts that are academic in style, the kind that are used in university courses.

Here are some suggestions for ways to build skills for the three reading purposes covered by the TOEFL iBT test.

1. Reading to find information

- Scan passages to find and highlight key facts (dates, numbers, terms) and information.
- Practice this frequently to increase reading rate and fluency.

2. Reading for basic comprehension

- Increase your vocabulary knowledge, perhaps by using flashcards.
- Rather than carefully reading each word and each sentence, practice skimming a passage quickly to get a general impression of the main idea.
- Build up your ability to skim quickly and to identify the major points.
- After skimming a passage, read it again more carefully and write down the main idea, major points, and important facts.
- Choose some unfamiliar words in a passage and guess the meaning from the context (surrounding sentences).
- Select all the pronouns (*he, him, they, them,* and others) and identify which nouns they refer to in a passage.
- Practice making inferences and drawing conclusions based on what is implied in the passage as a whole.

3. Reading to learn

- Identify the passage type (classification, cause/effect, compare/contrast, problem/solution, description, narration, and so on).
- Do the following to organize the information in the passage:
 - Create an outline of the passage to distinguish between major and minor points.
 - O If the passage categorizes information, create a chart and place the information in appropriate categories. (Remember: on the test, you do not have to create such a chart. Instead, a chart with possible answer choices is provided for you, and you must fill in the chart with the correct choices.) Practicing this skill will help you think about categorizing information and be able to do so with ease.
 - If the passage describes the steps in a process, create an outline of the steps in their correct order.
- Create a summary of the passage using the charts and outlines.
- Paraphrase individual sentences in a passage, and then progress to paraphrasing an entire paragraph. Note: the TOEFL iBT Reading section measures the ability to recognize paraphrases. The ability to paraphrase is also important for the integrated tasks in the Writing and Speaking sections of the test.

Reading Practice Sets

PRACTICE SET 1

THE ORIGINS OF CETACEANS

It should be obvious that cetaceans—whales, porpoises, and dolphins—are mammals. They breathe through lungs, not through gills, and give birth to live young. Their streamlined bodies, the absence of hind legs, and the presence of a fluke¹ and blowhole² cannot disguise their affinities with land-dwelling mammals. However, unlike the cases of sea otters and pinnipeds (seals, sea lions, and walruses, whose limbs are functional both on land and at sea), it is not easy to envision what the first whales looked like. Extinct but already fully marine cetaceans are known from the fossil record. How was the gap between a walking mammal and a swimming whale bridged? Missing until recently were fossils clearly intermediate, or transitional, between land mammals and cetaceans.

Very exciting discoveries have finally allowed scientists to reconstruct the most likely origins of cetaceans. In 1979, a team looking for fossils in northern Pakistan found what proved to be the oldest fossil whale. The fossil was officially named *Pakicetus* in honor of the country where the discovery was made. *Pakicetus* was found embedded in rocks formed from river deposits that were 52 million years old. The river that formed these deposits was actually not far from an ancient ocean known as the Tethys Sea.

The fossil consists of a complete skull of an archaeocyte, an extinct group of ancestors of modern cetaceans. Although limited to a skull, the *Pakicetus* fossil provides precious details on the origins of cetaceans. The skull is cetacean-like but its jawbones lack the enlarged space that is filled with fat or oil and used for receiving underwater sound in modern whales. *Pakicetus* probably detected sound through the ear opening as in land mammals. The skull also lacks a blowhole, another cetacean adaptation for diving. Other features, however, show experts that *Pakicetus* is a transitional form between a group of extinct flesh-eating mammals, the mesonychids, and cetaceans. It has been suggested that *Pakicetus* fed on fish in shallow water and was not yet adapted for life in the open ocean. It probably bred and gave birth on land.

Another major discovery was made in Egypt in 1989. Several skeletons of another early whale, *Basilosaurus*, were found in sediments left by the Tethys Sea and now exposed in the Sahara desert. This whale lived around 40 million years ago, 12 million years after *Pakicetus*. Many incomplete skeletons were found but they included, for the first time in an archaeocyte, a complete hind leg that features a foot with three tiny toes. Such legs would have been far too small to have supported the 50-foot-long *Basilosaurus* on land. *Basilosaurus* was undoubtedly a fully marine whale with possibly nonfunctional, or vestigial, hind legs.

An even more exciting find was reported in 1994, also from Pakistan. The now extinct whale *Ambulocetus natans* ("the walking whale that swam") lived in the Tethys Sea 49 million years ago. It lived around 3 million years after *Pakicetus* but 9 million

years before Basilosaurus. The fossil luckily includes a good portion of the hind legs. The legs were strong and ended in long feet very much like those of a modern pinniped. The legs were certainly functional both on land and at sea. The whale retained a tail and lacked a fluke, the major means of locomotion in modern cetaceans. The structure of the backbone shows, however, that Ambulocetus swam like modern whales by moving the rear portion of its body up and down, even though a fluke was missing. The large hind legs were used for propulsion in water. On land, where it probably bred and gave birth, Ambulocetus may have moved around very much like a modern sea lion. It was undoubtedly a whale that linked life on land with life at sea.

- 1. Fluke: The two parts that constitute the large triangular tail of a whale
- 2. Blowhole: A hole in the top of the head used for breathing

It should be obvious that cetaceans—whales, porpoises, and dolphins—are mammals. They breathe through lungs, not through gills, and give birth to live young. Their streamlined bodies, the absence of hind legs, and the presence of a fluke¹ and blowhole² cannot disguise their affinities with land-dwelling mammals. However, unlike the cases of sea otters and pinnipeds (seals, sea lions, and walruses, whose limbs are functional both on land and at sea), it is not easy to envision what the first whales looked like. Extinct but already fully marine cetaceans are known from the fossil record. How was the gap between a walking mammal and a swimming whale bridged? Missing until recently were fossils clearly intermediate, or transitional, between land mammals and cetaceans.

- 1. Fluke: The two parts that constitute the large triangular tail of a whale
- 2. Blowhole: A hole in the top of the head used for breathing

Directions: Mark your answer by filling in the oval next to your choice.

1.	In paragraph 1, what does the author say about the presence of a blowhole in cetaceans?	2.	Which of the following can be inferred from paragraph 1 aborearly sea otters?
0	It clearly indicates that cetaceans are mammals.	0	It is not difficult to imagine who looked like.
\bigcirc	It cannot conceal the fact that ceta-	\bigcirc	There were great numbers of
	ceans are mammals.	\bigcirc	They lived in the sea only.
\bigcirc	It is the main difference between	\bigcirc	They did not leave many fossi
	cetaceans and land-dwelling mam-		remains.
	mals.		

It cannot yield clues about the ori-

gins of cetaceans.

	inferred from paragraph 1 about early sea otters?
\bigcirc	It is not difficult to imagine what they
	looked like.
\bigcirc	There were great numbers of them.
\bigcirc	They lived in the sea only.
\bigcirc	They did not leave many fossil
	remains.

The fossil consists of a complete skull of an archaeocyte, an extinct group of ancestors of modern cetaceans. Although limited to a skull, the *Pakicetus* fossil provides precious details on the origins of cetaceans. The skull is cetacean-like but its jawbones lack the enlarged space that is filled with fat or oil and used for receiving underwater sound in modern whales. *Pakicetus* probably detected sound through the ear opening as in land mammals. The skull also lacks a blowhole, another cetacean adaptation for diving. Other features, however, show experts that *Pakicetus* is a transitional form between a group of extinct flesh-eating mammals, the mesonychids, and cetaceans. It has been suggested that *Pakicetus* fed on fish in shallow water and was not yet adapted for life in the open ocean. It probably bred and gave birth on land.

3. The word "precious" in the passage 5. The word "It" in the passage refers is closest in meaning to to exact Pakicetus scarce O fish valuable O life initial ocean 4. Pakicetus and modern cetaceans have similar hearing structures adaptations for diving skull shapes breeding locations

PARAGRAPH 4

Another major discovery was made in Egypt in 1989. Several skeletons of another early whale, *Basilosaurus*, were found in sediments left by the Tethys Sea and now exposed in the Sahara desert. This whale lived around 40 million years ago, 12 million years after *Pakicetus*. Many incomplete skeletons were found but they included, for the first time in an archaeocyte, a complete hind leg that features a foot with three tiny toes. Such legs would have been far too small to have supported the 50-foot-long *Basilosaurus* on land. *Basilosaurus* was undoubtedly a fully marine whale with possibly nonfunctional, or vestigial, hind legs.

- 6. The word "exposed" in the passage is closest in meaning to
- explained
- O visible
- identified
- O located
- 7. The hind leg of *Basilosaurus* was a significant find because it showed that *Basilosaurus*
- O lived later than Ambulocetus natans
- O lived at the same time as *Pakicetus*
- was able to swim well
- o could not have walked on land

- 8. It can be inferred that *Basilosaurus* bred and gave birth in which of the following locations?
- On land
- Both on land and at sea
- In shallow water
- In a marine environment

An even more exciting find was reported in 1994, also from Pakistan. The now extinct whale *Ambulocetus natans* ("the walking whale that swam") lived in the Tethys Sea 49 million years ago. It lived around 3 million years after *Pakicetus* but 9 million years before *Basilosaurus*. The fossil luckily includes a good portion of the hind legs. The legs were strong and ended in long feet very much like those of a modern pinniped. The legs were certainly functional both on land and at sea. The whale retained a tail and lacked a fluke, the major means of locomotion in modern cetaceans. The structure of the backbone shows, however, that *Ambulocetus* swam like modern whales by moving the rear portion of its body up and down, even though a fluke was missing. The large hind legs were used for propulsion in water. On land, where it probably bred and gave birth, *Ambulocetus* may have moved around very much like a modern sea lion. It was undoubtedly a whale that linked life on land with life at sea.

- 9. Why does the author use the word "luckily" in mentioning that the Ambulocetus natans fossil included hind legs?
- Fossil legs of early whales are a rare find.
- The legs provided important information about the evolution of cetaceans.
- The discovery allowed scientists to reconstruct a complete skeleton of the whale.
- Until that time, only the front legs of early whales had been discovered.

- 10. 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.
- Even though Ambulocetus swam by moving its body up and down, it did not have a backbone.
- The backbone of Ambulocetus, which allowed it to swim, provides evidence of its missing fluke.
- Although Ambulocetus had no fluke, its backbone structure shows that it swam like modern whales.
- By moving the rear parts of their bodies up and down, modern whales swim in a different way from the way Ambulocetus swam.
- 11. The word "propulsion" in the passage is closest in meaning to
- staying afloat
- changing direction
- decreasing weight
- moving forward

Extinct but already fully marine cetaceans are known from the fossil record. ■ How was the gap between a walking mammal and a swimming whale bridged? ■ Missing until recently were fossils clearly intermediate, or transitional, between land mammals and cetaceans.

- Very exciting discoveries have finally allowed scientists to reconstruct the most likely origins of cetaceans. In 1979, a team looking for fossils in northern Pakistan found what proved to be the oldest fossil whale.
- Look at the four squares [■] that indicate where the following sentence can be added to the passage.

This is a question that has puzzled scientists for ages.

Where would the sentence best fit?

- Extinct but already fully marine cetaceans are known from the fossil record. This is a question that has puzzled scientists for ages. How was the gap between a walking mammal and a swimming whale bridged? Missing until recently were fossils clearly intermediate, or transitional, between land mammals and cetaceans.
 - Very exciting discoveries have finally allowed scientists to reconstruct the most likely origins of cetaceans. In 1979, a team looking for fossils in northern Pakistan found what proved to be the oldest fossil whale.
- Extinct but already fully marine cetaceans are known from the fossil record. How was the gap between a walking mammal and a swimming whale bridged? This is a question that has puzzled scientists for ages. Missing until recently were fossils clearly intermediate, or transitional, between land mammals and cetaceans.
 - Very exciting discoveries have finally allowed scientists to reconstruct the most likely origins of cetaceans. In 1979, a team looking for fossils in northern Pakistan found what proved to be the oldest fossil whale.
- Extinct but already fully marine cetaceans are known from the fossil record. ■
 How was the gap between a walking mammal and a swimming whale bridged?
 Missing until recently were fossils clearly intermediate, or transitional, between land mammals and cetaceans.

This is a question that has puzzled scientists for ages. Very exciting discoveries have finally allowed scientists to reconstruct the most likely origins of cetaceans. ■ In 1979, a team looking for fossils in northern Pakistan found what proved to be the oldest fossil whale.

- Extinct but already fully marine cetaceans are known from the fossil record. ■
 How was the gap between a walking mammal and a swimming whale bridged?
 Missing until recently were fossils clearly intermediate, or transitional, between land mammals and cetaceans.
 - Very exciting discoveries have finally allowed scientists to reconstruct the most likely origins of cetaceans. This is a question that has puzzled scientists for ages. In 1979, a team looking for fossils in northern Pakistan found what proved to be the oldest fossil whale.

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 fossils that help to explain the likely origins of cetaceans—whales, porpoises, and dolphins.

Answer Choices

- Recent discoveries of fossils have helped to show the link between land mammals and cetaceans.
- 2. The discovery of *Ambulocetus natans* provided evidence for a whale that lived both on land and at sea.
- The skeleton of Basilosaurus was found in what had been the Tethys Sea, an area rich in fossil evidence.
- Pakicetus is the oldest fossil whale yet to be found.
- Fossils thought to be transitional forms between walking mammals and swimming whales were found.
- 6. *Ambulocetus*'s hind legs were used for propulsion in the water.

PRACTICE SET 1 ANSWERS AND EXPLANATIONS

- 1. 2 This is a Factual Information question asking for specific information that can be found in paragraph 1. Choice 2 is the correct answer. It is essentially a rephrasing of the statement in paragraph 1 that blowholes cannot disguise cetaceans' affinities with other mammals. The other three choices are refuted, either directly or indirectly, by that paragraph.
- 2. This is an Inference question asking for information that can be inferred from paragraph 1. Choice 1 is the correct answer because paragraph 1 says that sea otters are unlike early mammals whose appearances are *not* easy to imagine. By inference, then, the early appearance of sea otters must be easy (or not difficult) to imagine.
- 3. **3** This is a Vocabulary question. The word being tested is *precious*. It is highlighted in the passage. The correct answer is choice 3, "valuable." Anything that is precious is very important and therefore valuable.
- 4. **3** This is a Factual Information question asking for specific information that can be found in the passage. Choice 3 is the correct answer. Paragraph 3 describes the differences and similarities between *Pakicetus* and modern ceta-

- ceans. Sentence 3 of that paragraph states that their skulls are similar. The other three choices describe differences, not similarities.
- 5. **1** This is a Reference question. The word being tested is *It*. That word is highlighted in the passage. This is a simple pronoun-referent item. Choice 1, "*Pakicetus*," is the correct answer. The word *It* here refers to a creature that probably bred and gave birth on land. *Pakicetus* is the only one of the choices to which this could apply.
- 6. **2** This is a Vocabulary question. The word being tested is *exposed*. It is highlighted in the passage. The correct answer is choice 2, "visible." *Exposed* means "uncovered." A skeleton that is uncovered can be seen. *Visible* means "can be seen."
- 7. This is a Factual Information question asking for specific information that can be found in the passage. Choice 4 is the correct answer because it is the only detail about the skeleton of *Basilosaurus* mentioned in paragraph 4, meaning that it is significant. Choice 1 is true, but it is not discussed in the detail that choice 4 is, and does not represent the significance of the discovery. Choice 3 is not mentioned, and choice 2 is not true.
- 8. **4** This is an Inference question asking for a conclusion that can be drawn from the entire passage. Choice 4 is the correct answer based on the last sentence of paragraph 4, which describes *Basilosaurus* as a fully marine whale. That implies that everything it did, including breeding and giving birth, could have been done only in a marine environment.
- 9. 2 This is an Inference question asking for a conclusion that can be drawn from the passage. Paragraph 5 explains that this discovery provided important information to scientists that they might not have been able to obtain without it. Therefore you can infer that the discovery was a "lucky" one. The passage offers no support for the other choices. Therefore choice 2 is the correct answer.
- 10. **3** This is a Sentence Simplification question. As with all of these questions, a single sentence in the passage is highlighted:

The structure of the backbone shows, however, that *Ambulocetus* swam like modern whales by moving the rear portion of its body up and down, even though a fluke was missing.

Choice 3 is the correct answer because it contains all of the essential information in the highlighted sentence. Choice 1 is not true because *Ambulocetus* did have a backbone. Choice 2 is not true because the sentence says that the backbone showed how the *Ambulocetus* swam, not that it was missing a fluke. Choice 4 is untrue because the sentence states that *Ambulocetus* and modern whales swam in the same way.

11. **4** This is a Vocabulary question. The word being tested is *propulsion*. It is highlighted in the passage. Choice 4, "moving forward," is the correct answer because it means "the action of propelling." The whale in the sentence used its hind legs to push itself forward in the water.

12. 2 This is an Insert Text question. You can see the four black squares in paragraphs 1 and 2 that represent the possible answer choices here.

Extinct but already fully marine cetaceans are known from the fossil record. ■ How was the gap between a walking mammal and a swimming whale bridged? ■ Missing until recently were fossils clearly intermediate, or transitional, between land mammals and cetaceans. ■ Very exciting discoveries have finally allowed scientists to reconstruct the most likely origins of cetaceans. ■ In 1979, a team looking for fossils in northern Pakistan found what proved to be the oldest fossil whale.

The sentence provided is "This is a question that has puzzled scientists for ages." The correct place to insert it is at square 2.

The sentence that precedes square 2 is in the form of a rhetorical question, and the inserted sentence explicitly provides a response to it. None of the other sentences preceding squares is a question, so the inserted sentence cannot logically follow any one of them.

13. **1 2 6** This is a Prose Summary question. It is completed correctly below. The correct choices are 1, 2, and 5. Choices 3, 4, and 6 are therefore incorrect.

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 fossils that help to explain the likely origins of cetaceans—whales, porpoises, and dolphins.

- Recent discoveries of fossils have helped to show the link between land mammals and cetaceans.
- The discovery of *Ambulocetus natans* provided evidence for a whale that lived both on land and at sea.
- Fossils thought to be transitional forms between walking mammals and swimming whales were found.

Answer Choices

- Recent discoveries of fossils have helped to show the link between land mammals and cetaceans.
- The discovery of Ambulocetus natans provided evidence for a whale that lived both on land and at sea.
- The skeleton of Basilosaurus was found in what had been the Tethys Sea, an area rich in fossil evidence.

- 4. *Pakicetus* is the oldest fossil whale yet to be found.
- Fossils thought to be transitional forms between walking mammals and swimming whales were found.
- 6. *Ambulocetus*'s hind legs were used for propulsion in the water.

Correct Choices

- Choice 1, "Recent discoveries of fossils have helped to show the link between land mammals and cetaceans," is correct because it represents the major idea of the entire passage. The bulk of the passage consists of a discussion of the major discoveries (*Pakicetus, Basilosaurus*, and *Ambulocetus*) that show this link.
- Choice 2, "The discovery of Ambulocetus natans provided evidence for a whale that lived both on land and at sea," is correct because it is one of the major discoveries cited in the passage in support of the passage's main point, that land mammals and cetaceans are related.
- Choice 5, "Fossils thought to be transitional forms between walking mammals and swimming whales were found," is correct because like choice 1, this is a statement of the passage's major theme as stated in paragraph 1: these fossils were "clearly intermediate, or transitional, between land mammals and cetaceans." The remainder of the passage discusses these discoveries.

Incorrect Choices

- *Choice 3*, "The skeleton of *Basilosaurus* was found in what had been the Tethys Sea, an area rich in fossil evidence," is true, but it is a minor detail and therefore incorrect.
- *Choice 4, "Pakicetus* is the oldest fossil whale yet to be found," is true, but it is a minor detail and therefore incorrect.
- *Choice* 6, "*Ambulocetus*'s hind legs were used for propulsion in the water," is true, but it is a minor detail and therefore incorrect.

PRACTICE SET 2

DESERT FORMATION

The deserts, which already occupy approximately a fourth of the Earth's land surface, have in recent decades been increasing at an alarming pace. The expansion of desertlike conditions into areas where they did not previously exist is called **desertification**. It has been estimated that an additional one-fourth of the Earth's land surface is threatened by this process.

Desertification is accomplished primarily through the loss of stabilizing natural vegetation and the subsequent accelerated erosion of the soil by wind and water. In some cases the loose soil is blown completely away, leaving a stony surface. In other cases, the finer particles may be removed, while the sand-sized particles are accumulated to form mobile hills or ridges of sand.

Even in the areas that retain a soil cover, the reduction of vegetation typically results in the loss of the soil's ability to absorb substantial quantities of water. The impact of raindrops on the loose soil tends to transfer fine clay particles into the tiniest soil spaces, sealing them and producing a surface that allows very little water penetration. Water absorption is greatly reduced, consequently runoff is increased, resulting in accelerated erosion rates. The gradual drying of the soil caused by its diminished ability to absorb water results in the further loss of vegetation, so that a cycle of progressive surface deterioration is established.

In some regions, the increase in desert areas is occurring largely as the result of a trend toward drier climatic conditions. Continued gradual global warming has produced an increase in aridity for some areas over the past few thousand years. The process may be accelerated in subsequent decades if global warming resulting from air pollution seriously increases.

There is little doubt, however, that desertification in most areas results primarily from human activities rather than natural processes. The semiarid lands bordering the deserts exist in a delicate ecological balance and are limited in their potential to adjust to increased environmental pressures. Expanding populations are subjecting the land to increasing pressures to provide them with food and fuel. In wet periods, the land may be able to respond to these stresses. During the dry periods that are common phenomena along the desert margins, though, the pressure on the land is often far in excess of its diminished capacity, and desertification results.

Four specific activities have been identified as major contributors to the desertification process: overcultivation, overgrazing, firewood gathering, and overirrigation. The cultivation of crops has expanded into progressively drier regions as population densities have grown. These regions are especially likely to have periods of severe dryness, so that crop failures are common. Since the raising of most crops necessitates the prior removal of the natural vegetation, crop failures leave extensive tracts of land devoid of a plant cover and susceptible to wind and water erosion.

The raising of livestock is a major economic activity in semiarid lands, where grasses are generally the dominant type of natural vegetation. The consequences of an excessive number of livestock grazing in an area are the reduction of the vegetation cover and the trampling and pulverization of the soil. This is usually followed by the drying of the soil and accelerated erosion.

Firewood is the chief fuel used for cooking and heating in many countries. The increased pressures of expanding populations have led to the removal of woody plants so that many cities and towns are surrounded by large areas completely lacking in trees and shrubs. The increasing use of dried animal waste as a substitute fuel has also hurt the soil because this valuable soil conditioner and source of plant nutrients is no longer being returned to the land.

The final major human cause of desertification is soil salinization resulting from overirrigation. Excess water from irrigation sinks down into the water table. If no drainage system exists, the water table rises, bringing dissolved salts to the surface. The water evaporates and the salts are left behind, creating a white crustal layer that prevents air and water from reaching the underlying soil.

The extreme seriousness of desertification results from the vast areas of land and the tremendous numbers of people affected, as well as from the great difficulty of reversing or even slowing the process. Once the soil has been removed by erosion, only the passage of centuries or millennia will enable new soil to form. In areas where considerable soil still remains, though, a rigorously enforced program of land protection and cover-crop planting may make it possible to reverse the present deterioration of the surface.

PARAGRAPH 1

The deserts, which already occupy approximately a fourth of the Earth's land surface, have in recent decades been increasing at an alarming pace. The expansion of desertlike conditions into areas where they did not previously exist is called **desertification**. It has been estimated that an additional one-fourth of the Earth's land surface is threatened by this process.

Directions: Mark your answer by filling in the oval next to your choice.

- 1. The word "threatened" in the passage is closest in meaning to
- restricted
- endangered
- oprevented
- rejected

PARAGRAPH 3

Even in the areas that retain a soil cover, the reduction of vegetation typically results in the loss of the soil's ability to absorb substantial quantities of water. The impact of raindrops on the loose soil tends to transfer fine clay particles into the tiniest soil spaces, sealing them and producing a surface that allows very little water penetration. Water absorption is greatly reduced, consequently runoff is increased, resulting in accelerated erosion rates. The gradual drying of the soil caused by its diminished ability to absorb water results in the further loss of vegetation, so that a cycle of progressive surface deterioration is established.

- 2. According to paragraph 3, the loss of natural vegetation has which of the following consequences for soil?
- Increased stony content
- Reduced water absorption
- Increased numbers of spaces in the soil
- Reduced water runoff

PARAGRAPH

There is little doubt, however, that desertification in most areas results primarily from human activities rather than natural processes. The semiarid lands bordering the deserts exist in a delicate ecological balance and are limited in their potential to adjust to increased environmental pressures. Expanding populations are subjecting the land to increasing pressures to provide them with food and fuel. In wet periods, the land may be able to respond to these stresses. During the dry periods that are common phenomena along the desert margins, though, the pressure on the land is often far in excess of its diminished capacity, and desertification results.

	,,			
3.	The word "delicate" in the passage is closest in meaning to	4.	According to paragraph 5, in dry periods, border areas have difficulty	
\bigcirc	fragile predictable complex		adjusting to stresses created by set- tlement retaining their fertility after desertifi-	
\bigcirc	valuable		cation providing water for irrigating crops	
			attracting populations in search of food and fuel	
tion cul- siti nes the	Four specific activities have been identified as major contributors to the desertification process: overcultivation, overgrazing, firewood gathering, and overirrigation. The cultivation of crops has expanded into progressively drier regions as population densities have grown. These regions are especially likely to have periods of severe dryness, so that crop failures are common. Since the raising of most crops necessitates the prior removal of the natural vegetation, crop failures leave extensive tracts of land devoid of a plant cover and susceptible to wind and water erosion.			
5.	The word "progressively" in the passage is closest in meaning to	7.	The phrase "devoid of" in the passage is closest in meaning to	
	openly		consisting of	
	impressively objectively		hidden by except for	
	increasingly		lacking in	
6.	According to paragraph 6, which of the following is often associated with raising crops?			
	Lack of proper irrigation techniques			
\bigcirc	Failure to plant crops suited to the particular area			
\bigcirc	Removal of the original vegetation			

Excessive use of dried animal waste

The final major human cause of desertification is soil salinization resulting from overirrigation. Excess water from irrigation sinks down into the water table. If no drainage system exists, the water table rises, bringing dissolved salts to the surface. The water evaporates and the salts are left behind, creating a white crustal layer that prevents air and water from reaching the underlying soil.

- According to paragraph 9, the ground's absorption of excess water is a factor in desertification because it can
- interfere with the irrigation of land
- \bigcirc limit the evaporation of water
- require more absorption of air by the soil
- bring salts to the surface

- All of the following are mentioned in the passage as contributing to desertification EXCEPT
- soil erosion
- global warming
- insufficient irrigation
- the raising of livestock

PARAGRAPH 10

The extreme seriousness of desertification results from the vast areas of land and the tremendous numbers of people affected, as well as from the great difficulty of reversing or even slowing the process. Once the soil has been removed by erosion, only the passage of centuries or millennia will enable new soil to form. In areas where considerable soil still remains, though, a rigorously enforced program of land protection and cover-crop planting may make it possible to reverse the present deterioration of the surface.

- 10. 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.
- Desertification is a significant problem because it is so hard to reverse and affects large areas of land and great numbers of people.
- Slowing down the process of desertification is difficult because of population growth that has spread over large areas of land.
- The spread of deserts is considered a very serious problem that can be solved only if large numbers of people in various countries are involved in the effort.
- Desertification is extremely hard to reverse unless the population is reduced in the vast areas affected.

- 11. It can be inferred from the passage that the author most likely believes which of the following about the future of desertification?
- Governments will act quickly to control further desertification.
- The factors influencing desertification occur in cycles and will change in the future.
- Desertification will continue to increase.
- Desertification will soon occur in all areas of the world.

- The raising of livestock is a major economic activity in semiarid lands, where grasses are generally the dominant type of natural vegetation. The consequences of an excessive number of livestock grazing in an area are the reduction of the vegetation cover and the trampling and pulverization of the soil. This is usually followed by the drying of the soil and accelerated erosion. ■
- 12. Look at the four squares [■] that indicate where the following sentence can be added to the passage.

This economic reliance on livestock in certain regions makes large tracts of land susceptible to overgrazing.

Where would the sentence best fit?

- This economic reliance on livestock in certain regions makes large tracts of land susceptible to overgrazing. The raising of livestock is a major economic activity in semiarid lands, where grasses are generally the dominant type of natural vegetation. The consequences of an excessive number of livestock grazing in an area are the reduction of the vegetation cover and the trampling and pulverization of the soil. This is usually followed by the drying of the soil and accelerated erosion. ■
- The raising of livestock is a major economic activity in semiarid lands, where grasses are generally the dominant type of natural vegetation. This economic reliance on livestock in certain regions makes large tracts of land susceptible to overgrazing. The consequences of an excessive number of livestock grazing in an area are the reduction of the vegetation cover and the trampling and pulverization of the soil. This is usually followed by the drying of the soil and accelerated erosion. ■
- The raising of livestock is a major economic activity in semiarid lands, where grasses are generally the dominant type of natural vegetation. The consequences of an excessive number of livestock grazing in an area are the reduction of the vegetation cover and the trampling and pulverization of the soil. This economic reliance on livestock in certain regions makes large tracts of land susceptible to overgrazing. This is usually followed by the drying of the soil and accelerated erosion. ■
- The raising of livestock is a major economic activity in semiarid lands, where grasses are generally the dominant type of natural vegetation. The consequences of an excessive number of livestock grazing in an area are the reduction of the vegetation cover and the trampling and pulverization of the soil. This is usually followed by the drying of the soil and accelerated erosion. This economic reliance on livestock in certain regions makes large tracts of land susceptible to overgrazing.

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**.

Many factors have contributed to the great increase in desertification in recent decades.

Answer Choices

- Growing human populations and the agricultural demands that come with such growth have upset the ecological balance in some areas and led to the spread of deserts.
- 2 As periods of severe dryness have become more common, failures of a number of different crops have increased.
- Excessive numbers of cattle and the need for firewood for fuel have reduced grasses and trees, leaving the land unprotected and vulnerable.

- Extensive irrigation with poor drainage brings salt to the surface of the soil, a process that reduces water and air absorption.
- 5. Animal dung enriches the soil by providing nutrients for plant growth.
- Grasses are generally the dominant type of natural vegetation in semiarid lands.

PRACTICE SET 2 ANSWERS AND EXPLANATIONS

- 1. **2** This is a Vocabulary question. The word being tested is *threatened*. It is highlighted in the passage. To threaten is to speak or act as if you will cause harm to someone or something. The object of the threat is in danger of being hurt, so the correct answer is choice 2, "endangered."
- 2. 2 This is a Factual Information question asking for specific information that can be found in paragraph 3. The correct answer is choice 2, "reduced water absorption." The paragraph explicitly states that the reduction of vegetation greatly reduces water absorption. Choice 4, "reduced water runoff," explicitly contradicts the paragraph, so it is incorrect. The "spaces in the soil" are mentioned in another context: the paragraph does not say that they increase, so choice 3 is incorrect. The paragraph does not mention choice 1.
- 3. **1** This is a Vocabulary question. The word being tested is *delicate*. It is highlighted in the passage. The correct answer is choice 1, "fragile," meaning "easily broken." *Delicate* has the same meaning as *fragile*.
- 4. This is a Factual Information question asking for specific information that can be found in paragraph 5. The correct answer is choice 1: border areas have difficulty "adjusting to stresses created by settlement." The paragraph says that "expanding populations," or settlement, subject border areas to "pressures," or stress, that the land may not "be able to respond to." Choice 2 is incorrect because the paragraph does not discuss "fertility" after desertification. Choice 3 is also incorrect because "irrigation" is not mentioned here. The paragraph mentions "increasing populations" but not the difficulty of "attracting populations," so choice 4 is incorrect.
- 5. **4** This is a Vocabulary question. The word being tested is *progressively*. It is highlighted in the passage. The correct answer is choice 4, "increasingly." *Progressively* as it is used here means "more," and "more" of something means that it is increasing.
- 6. **3** This is a Factual Information question asking for specific information that can be found in paragraph 6. The correct answer is choice 3, "removal of the original vegetation." Sentence 4 of this paragraph says that "the raising of most crops necessitates the prior removal of the natural vegetation," an explicit statement of answer choice 3. Choice 1, "lack of proper irrigation techniques," is incorrect because the paragraph mentions only "overirrigation" as a cause of desertification. No irrigation "techniques" are discussed. Choices 2 and 4, failure to plant suitable crops and use of animal waste, are not discussed.
- 7. **4** This is a Vocabulary question. A phrase is being tested here, and all of the answer choices are phrases. The phrase is "devoid of." It is highlighted in the passage. "Devoid of" means "without," so the correct answer is choice 4, "lacking in." If you lack something, that means you are without that thing.

- 8. **4** This is a Factual Information question asking for specific information that can be found in paragraph 9. The correct answer is choice 4, "bring salts to the surface." The paragraph says that the final human cause of desertification is salinization resulting from overirrigation. The paragraph goes on to say that the overirrigation causes the water table to rise, bringing salts to the surface. There is no mention of the process as "interfering" with or "limiting" irrigation, or of the "amount of air" the soil is required to absorb, so choices 1, 2, and 3 are all incorrect.
- 9. **3** This is a Negative Factual Information question asking for specific information that can be found in the passage. Choice 3, "insufficient irrigation," is the correct answer. Choice 1, "soil erosion," is explicitly mentioned in paragraph 2 as one of the primary causes of desertification, so it is not the correct answer. Choice 2, "global warming," is mentioned as a cause of desertification in paragraph 4, so it is incorrect. Choice 4, "the raising of livestock," is described in paragraph 7 as another cause of desertification, so it is incorrect. The passage includes excessive irrigation as a cause of desertification, but not its opposite, insufficient irrigation, so that is the correct answer.
- 10. 1 This is a Sentence Simplification question. As with all of these questions, a single sentence in the passage is highlighted:

The extreme seriousness of desertification results from the vast areas of land and the tremendous numbers of people affected, as well as from the great difficulty of reversing or even slowing the process.

The correct answer is choice 1. That choice contains all of the essential information in the highlighted sentence and does not change its meaning. The only substantive difference between choice 1 and the tested sentence is the order in which the information is presented. Two clauses in the highlighted sentence, "the great difficulty of reversing . . . the process" and "the tremendous numbers of people affected," have simply been reversed; no meaning has been changed, and no information has been removed. Choices 2, 3, and 4 are all incorrect because they change the meaning of the highlighted sentence.

11. 3 This is an Inference question asking for an inference that can be supported by the passage. The correct answer is choice 3; the passage suggests that the author believes "Desertification will continue to increase." The last paragraph of the passage says that slowing or reversing the erosion process will be very difficult, but that it *may* occur in those areas that are not too affected already if rigorously enforced anti-erosion processes are implemented. Taken together, this suggests that the author is not confident this will happen; therefore it can be inferred that the author thinks erosion will continue. The passage provides no basis for inferring choices 1, 2, or 4.

- 12. 2 This is an Insert Text question. You can see the four black squares in paragraph 7 that represent the possible answer choices here:
- The raising of livestock is a major economic activity in semiarid lands, where grasses are generally the dominant type of natural vegetation. The consequences of an excessive number of livestock grazing in an area are the reduction of the vegetation cover and the trampling and pulverization of the soil. This is usually followed by the drying of the soil and accelerated erosion. ■

The sentence provided, "This economic reliance on livestock in certain regions makes large tracts of land susceptible to overgrazing," is best inserted at Square 2. The inserted sentence refers explicitly to relying on "livestock in certain regions." Those regions are the ones described in the sentence preceding square 2, which states that raising livestock is "a major economic activity in semiarid lands." The inserted sentence then explains that this reliance "makes large tracts of land susceptible to overgrazing." The sentence that follows square 2 goes on to say that "The consequences of an excessive number of livestock grazing in an area are . . ." Thus the inserted sentence contains references to both the sentence before square 2 and the sentence after square 2. This is not true of any of the other possible insert points, so square 2 is correct.

13. **1 3 4** This is a Prose Summary question. It is completed correctly below. The correct choices are 1, 3, and 4. Choices 2, 5, and 6 are therefore incorrect.

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**.

Many factors have contributed to the great increase in desertification in recent decades.

- Growing human populations and the agricultural demands that come with such growth have upset the ecological balance in some areas and led to the spread of deserts.
- Excessive numbers of cattle and the need for firewood for fuel have reduced grasses and trees, leaving the land unprotected and vulnerable.
- Extensive irrigation with poor drainage brings salt to the surface of the soil, a process that reduces water and air absorption.

Answer Choices

- Growing human populations and the agricultural demands that come with such growth have upset the ecological balance in some areas and led to the spread of deserts.
- 2 As periods of severe dryness have become more common, failures of a number of different crops have increased.
- Excessive numbers of cattle and the need for firewood for fuel have reduced grasses and trees, leaving the land unprotected and vulnerable.

- Extensive irrigation with poor drainage brings salt to the surface of the soil, a process that reduces water and air absorption.
- 5. Animal dung enriches the soil by providing nutrients for plant growth.
- 6. Grasses are generally the dominant type of natural vegetation in semiarid lands.

Correct Choices

- Choice 1, "Growing human populations and the agricultural demands that come with such growth have upset the ecological balance in some areas and led to the spread of deserts," is correct because it is a recurring theme in the passage, one of the main ideas. Paragraphs 5, 6, 7, and 9 all provide details in support of this statement.
- Choice 3, "Excessive numbers of cattle and the need for firewood for fuel have reduced grasses and trees, leaving the land unprotected and vulnerable," is correct because these are two of the human activities that are major causes of desertification. The causes of desertification is the main theme of the passage. Paragraphs 6, 7, and 8 are devoted to describing how these activities contribute to desertification.
- Choice 4, "Extensive irrigation with poor drainage brings salt to the surface of the soil, a process that reduces water and air absorption," is correct because it is another of the human activities that are a major cause of desertification, the main theme of the passage. Paragraph 6 mentions this first, then all of paragraph 9 is devoted to describing how this activity contributes to desertification.

Incorrect Choices

- *Choice* 2, "As periods of severe dryness have become more common, failures of a number of different crops have increased," is incorrect because it is a supporting detail, not a main idea of the passage.
- *Choice 5*, "Animal dung enriches the soil by providing nutrients for plant growth," is incorrect because it is contradicted by paragraph 8 of the passage.
- *Choice* 6, "Grasses are generally the dominant type of natural vegetation in semiarid lands," is incorrect because it is a minor detail, mentioned once in passing in paragraph 7.

PRACTICE SET 3

EARLY CINEMA

The cinema did not emerge as a form of mass consumption until its technology evolved from the initial "peepshow" format to the point where images were projected on a screen in a darkened theater. In the peepshow format, a film was viewed through a small opening in a machine that was created for that purpose. Thomas Edison's peepshow device, the Kinetoscope, was introduced to the public in 1894. It was designed for use in Kinetoscope parlors, or arcades, which contained only a few individual machines and permitted only one customer to view a short, 50-foot film at any one time. The first Kinetoscope parlors contained five machines. For the price of 25 cents (or 5 cents per machine), customers moved from machine to machine to watch five different films (or, in the case of famous prizefights, successive rounds of a single fight).

These Kinetoscope arcades were modeled on phonograph parlors, which had proven successful for Edison several years earlier. In the phonograph parlors, customers listened to recordings through individual ear tubes, moving from one machine to the next to hear different recorded speeches or pieces of music. The Kinetoscope parlors functioned in a similar way. Edison was more interested in the sale of Kinetoscopes (for roughly \$1,000 apiece) to these parlors than in the films that would be run in them (which cost approximately \$10 to \$15 each). He refused to develop projection technology, reasoning that if he made and sold projectors, then exhibitors would purchase only one machine—a projector—from him instead of several.

Exhibitors, however, wanted to maximize their profits, which they could do more readily by projecting a handful of films to hundreds of customers at a time (rather than one at a time) and by charging 25 to 50 cents admission. About a year after the opening of the first Kinetoscope parlor in 1894, showmen such as Louis and Auguste Lumière, Thomas Armat and Charles Francis Jenkins, and Orville and Woodville Latham (with the assistance of Edison's former assistant, William Dickson) perfected projection devices. These early projection devices were used in vaudeville theaters, legitimate theaters, local town halls, makeshift storefront theaters, fairgrounds, and amusement parks to show films to a mass audience.

With the advent of projection in 1895–1896, motion pictures became the ultimate form of mass consumption. Previously, large audiences had viewed spectacles at the theater, where vaudeville, popular dramas, musical and minstrel shows, classical plays, lectures, and slide-and-lantern shows had been presented to several hundred spectators at a time. But the movies differed significantly from these other forms of entertainment, which depended on either live performance or (in the case of the slide-and-lantern shows) the active involvement of a master of ceremonies who assembled the final program.

Although early exhibitors regularly accompanied movies with live acts, the substance of the movies themselves is mass-produced, prerecorded material that can easily be reproduced by theaters with little or no active participation by the exhibitor. Even though early exhibitors shaped their film programs by mixing films and other entertainments together in whichever way they thought would be most attractive to

audiences or by accompanying them with lectures, their creative control remained limited. What audiences came to see was the technological marvel of the movies; the lifelike reproduction of the commonplace motion of trains, of waves striking the shore, and of people walking in the street; and the magic made possible by trick photography and the manipulation of the camera.

With the advent of projection, the viewer's relationship with the image was no longer private, as it had been with earlier peepshow devices such as the Kinetoscope and the Mutoscope, which was a similar machine that reproduced motion by means of successive images on individual photographic cards instead of on strips of celluloid. It suddenly became public—an experience that the viewer shared with dozens, scores, and even hundreds of others. At the same time, the image that the spectator looked at expanded from the minuscule peepshow dimensions of 1 or 2 inches (in height) to the life-size proportions of 6 or 9 feet.

The cinema did not emerge as a form of mass consumption until its technology evolved from the initial "peepshow" format to the point where images were projected on a screen in a darkened theater. In the peepshow format, a film was viewed through a small opening in a machine that was created for that purpose. Thomas Edison's peepshow device, the Kinetoscope, was introduced to the public in 1894. It was designed for use in Kinetoscope parlors, or arcades, which contained only a few individual machines and permitted only one customer to view a short, 50-foot film at any one time. The first Kinetoscope parlors contained five machines. For the price of 25 cents (or 5 cents per machine), customers moved from machine to machine to watch five different films (or, in the case of famous prizefights, successive rounds of a single fight).

Directions: Mark your answer by filling in the oval next to your choice.

1.	Acco	ord	inç	g to	ра	raç	grap	h 1	, all	of t	he	foll	owi	ng	we	re t	rue	e of	fvi	ew	/ing	filr	ns	ir
	Kine	etos	sco	ре	pa	rlo	rs E	XCI	EPT	:														
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- One individual at a time viewed a film.
- Customers could view one film after another.
- Prizefights were the most popular subjects for films.
- Each film was short.

These Kinetoscope arcades were modeled on phonograph parlors, which had proven successful for Edison several years earlier. In the phonograph parlors, customers listened to recordings through individual ear tubes, moving from one machine to the next to hear different recorded speeches or pieces of music. The Kinetoscope parlors functioned in a similar way. Edison was more interested in the sale of Kinetoscopes (for roughly \$1,000 apiece) to these parlors than in the films that would be run in them (which cost approximately \$10 to \$15 each). He refused to develop projection technology, reasoning that if he made and sold projectors, then exhibitors would purchase only one machine—a projector—from him instead of several.

- 2. The author discusses phonograph parlors in paragraph 2 in order to
- explain Edison's financial success
- describe the model used to design Kinetoscope parlors
- contrast their popularity to that of Kinetoscope parlors
- illustrate how much more technologically advanced Kinetoscope parlors were
- Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect answer choices change the meaning in important ways or leave out essential information.
- Edison was more interested in developing a variety of machines than in developing a technology based on only one.
- Edison refused to work on projection technology because he did not think exhibitors would replace their projectors with newer machines.
- Edison did not want to develop projection technology because it limited the number of machines he could sell
- Edison would not develop projection technology unless exhibitors agreed to purchase more than one projector from him.

Exhibitors, however, wanted to maximize their profits, which they could do more readily by projecting a handful of films to hundreds of customers at a time (rather than one at a time) and by charging 25 to 50 cents admission. About a year after the opening of the first Kinetoscope parlor in 1894, showmen such as Louis and Auguste Lumière, Thomas Armat and Charles Francis Jenkins, and Orville and Woodville Latham (with the assistance of Edison's former assistant, William Dickson) perfected projection devices. These early projection devices were used in vaudeville theaters, legitimate theaters, local town halls, makeshift storefront theaters, fairgrounds, and amusement parks to show films to a mass audience.

4.	The word "readily" in the passage is closest in meaning to	5.	The word "assistance" in the passage is closest in meaning to
\bigcirc	frequently	\bigcirc	criticism
\bigcirc	easily	\bigcirc	leadership
\bigcirc	intelligently	\bigcirc	help
\bigcirc	obviously	\bigcirc	approval

PARAGRAPH

With the advent of projection in 1895–1896, motion pictures became the ultimate form of mass consumption. Previously, large audiences had viewed spectacles at the theater, where vaudeville, popular dramas, musical and minstrel shows, classical plays, lectures, and slide-and-lantern shows had been presented to several hundred spectators at a time. But the movies differed significantly from these other forms of entertainment, which depended on either live performance or (in the case of the slide-and-lantern shows) the active involvement of a master of ceremonies who assembled the final program.

- 6. According to paragraph 4, how did the early movies differ from previous spectacles that were presented to large audiences?
- They were a more expensive form of entertainment.
- They were viewed by larger audiences.
- They were more educational.
- They did not require live entertainers.

Although early exhibitors regularly accompanied movies with live acts, the substance of the movies themselves is mass-produced, prerecorded material that can easily be reproduced by theaters with little or no active participation by the exhibitor. Even though early exhibitors shaped their film programs by mixing films and other entertainments together in whichever way they thought would be most attractive to audiences or by accompanying them with lectures, their creative control remained limited. What audiences came to see was the technological marvel of the movies; the lifelike reproduction of the commonplace motion of trains, of waves striking the shore, and of people walking in the street; and the magic made possible by trick photography and the manipulation of the camera.

7.	According to paragraph 5, what role did early exhibitors play in the presentation of movies in theaters?
\bigcirc	They decided how to combine various components of the film program.
\bigcirc	They advised filmmakers on appropriate movie content.
\bigcirc	They often took part in the live-action performances.
\bigcirc	They produced and prerecorded the material that was shown in the theaters.

With the advent of projection, the viewer's relationship with the image was no longer private, as it had been with earlier peepshow devices such as the Kinetoscope and the Mutoscope, which was a similar machine that reproduced motion by means of successive images on individual photographic cards instead of on strips of celluloid. It suddenly became public—an experience that the viewer shared with dozens, scores, and even hundreds of others. At the same time, the image that the spectator looked at expanded from the minuscule peepshow dimensions of 1 or 2 inches (in height) to the life-size proportions of 6 or 9 feet.

8. Which of the following is mentioned in paragraph 6 as one of the ways the Mutoscope differed from the Kinetoscope?
Sound and motion were simultaneously produced in the Mutoscope.
More than one person could view the images at the same time with the Mutoscope.
The Mutoscope was a less sophisticated earlier prototype of the Kinetoscope.
A different type of material was used to produce the images used in the Mutoscope.

9. The word "It" in the passage refers to

the viewer's relationship with the

the advent of projection

image

celluloid

a similar machine

images seen by viewers in the earlier peepshows, compared with the images projected on the screen, were relatively

small in size
inexpensive to create
unfocused
limited in subject matter

11. The word "expanded" in the passage is closest in meaning to
was enlarged
was improved
was varied
was rejected

10. According to paragraph 6, the

- Exhibitors, however, wanted to maximize their profits, which they could do more readily by projecting a handful of films to hundreds of customers at a time (rather than one at a time) and by charging 25 to 50 cents admission. About a year after the opening of the first Kinetoscope parlor in 1894, showmen such as Louis and Auguste Lumière, Thomas Armat and Charles Francis Jenkins, and Orville and Woodville Latham (with the assistance of Edison's former assistant, William Dickson) perfected projection devices. These early projection devices were used in vaudeville theaters, legitimate theaters, local town halls, makeshift storefront theaters, fairgrounds, and amusement parks to show films to a mass audience. ■
- 12. Look at the four squares [■] that indicate where the following sentence can be added to the passage.

When this widespread use of projection technology began to hurt his Kinetoscope business, Edison acquired a projector developed by Armat and introduced it as "Edison's latest marvel, the Vitascope."

Where would the sentence best fit?

- When this widespread use of projection technology began to hurt his Kinetoscope business, Edison acquired a projector developed by Armat and introduced it as "Edison's latest marvel, the Vitascope." Exhibitors, however, wanted to maximize their profits, which they could do more readily by projecting a handful of films to hundreds of customers at a time (rather than one at a time) and by charging 25 to 50 cents admission. About a year after the opening of the first Kinetoscope parlor in 1894, showmen such as Louis and Auguste Lumière, Thomas Armat and Charles Francis Jenkins, and Orville and Woodville Latham (with the assistance of Edison's former assistant, William Dickson) perfected projection devices. These early projection devices were used in vaudeville theaters, legitimate theaters, local town halls, makeshift storefront theaters, fairgrounds, and amusement parks to show films to a mass audience. ■
- Exhibitors, however, wanted to maximize their profits, which they could do more readily by projecting a handful of films to hundreds of customers at a time (rather than one at a time) and by charging 25 to 50 cents admission. When this widespread use of projection technology began to hurt his Kinetoscope business, Edison acquired a projector developed by Armat and introduced it as "Edison's latest marvel, the Vitascope." About a year after the opening of the first Kinetoscope parlor in 1894, showmen such as Louis and Auguste Lumière, Thomas Armat and Charles Francis Jenkins, and Orville and Woodville Latham (with the assistance of Edison's former assistant, William Dickson) perfected projection devices. These early projection devices were used in vaudeville theaters, legitimate theaters, local town halls, makeshift storefront theaters, fairgrounds, and amusement parks to show films to a mass audience. ■
- Exhibitors, however, wanted to maximize their profits, which they could do more readily by projecting a handful of films to hundreds of customers at a time (rather than one at a time) and by charging 25 to 50 cents admission.
 About a year after the opening of the first Kinetoscope parlor in 1894, showmen such

as Louis and Auguste Lumière, Thomas Armat and Charles Francis Jenkins, and Orville and Woodville Latham (with the assistance of Edison's former assistant, William Dickson) perfected projection devices. When this widespread use of projection technology began to hurt his Kinetoscope business, Edison acquired a projector developed by Armat and introduced it as "Edison's latest marvel, the Vitascope." These early projection devices were used in vaudeville theaters, legitimate theaters, local town halls, makeshift storefront theaters, fairgrounds, and amusement parks to show films to a mass audience.

- Exhibitors, however, wanted to maximize their profits, which they could do more readily by projecting a handful of films to hundreds of customers at a time (rather than one at a time) and by charging 25 to 50 cents admission. About a year after the opening of the first Kinetoscope parlor in 1894, showmen such as Louis and Auguste Lumière, Thomas Armat and Charles Francis Jenkins, and Orville and Woodville Latham (with the assistance of Edison's former assistant, William Dickson) perfected projection devices. These early projection devices were used in vaudeville theaters, legitimate theaters, local town halls, makeshift storefront theaters, fairgrounds, and amusement parks to show films to a mass audience. When this widespread use of projection technology began to hurt his Kinetoscope business, Edison acquired a projector developed by Armat and introduced it as "Edison's latest marvel, the Vitascope."
- 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**.

The technology for modern cinema evolved at the end of the nineteenth century.

•			
•			
•			

Answer Choices

- Kinetoscope parlors for viewing films were modeled on phonograph parlors.
- 2. Thomas Edison's design of the Kinetoscope inspired the development of large-screen projection.
- Early cinema allowed individuals to use special machines to view films privately.
- Slide-and-lantern shows had been presented to audiences of hundreds of spectators.
- 5. The development of projection technology made it possible to project images on a large screen.
- Once film images could be projected, the cinema became a form of mass consumption.

PRACTICE SET 3 ANSWERS AND EXPLANATIONS

- 1. 3 This is a Negative Factual Information question asking for specific information that can be found in paragraph 1. Choice 3 is the correct answer. The paragraph does mention that one viewer at a time could view the films (choice 1), that films could be viewed one after another (choice 2), and that films were short (choice 4). Prizefights are mentioned as one subject of these short films, but not necessarily the most popular one.
- 2. **2** This is a Rhetorical Purpose question. It asks why the author mentions "phonograph parlors" in paragraph 2. The correct answer is choice 2. The author is explaining why Edison designed his arcades like phonograph parlors; that design had been successful for him in the past. The paragraph does not mention the phonograph parlors to explain Edison's financial success, so choice 1 is incorrect. The paragraph does not directly discuss the situations described in choices 3 and 4, so those answers too are incorrect.
- 3. **3** This is a Sentence Simplification question. As with all of these questions, a single sentence in the passage is highlighted:

He refused to develop projection technology, reasoning that if he made and sold projectors, then exhibitors would purchase only one machine—a projector—from him, instead of several.

The correct answer is choice 3. That choice contains all of the essential ideas in the highlighted sentence. It is also the only choice that does not change the meaning of the sentence. Choice 1 says that Edison was more interested in developing a variety of machines, which is not true. Choice 2 says that the reason Edison refused to work on projection technology was that exhibitors would never replace the projectors. That also is not true; the highlighted sentence implies that he refused to do this because he wanted exhibitors to buy several Kinetoscope machines at a time instead of a single projector. Choice 4 says that Edison refused to develop projection technology unless exhibitors agreed to purchase more than one projector from him. The highlighted sentence actually says that Edison had already reasoned or concluded that exhibitors would not buy more than one, so choice 4 is a change in essential meaning.

- 4. **2** This is a Vocabulary question. The word being tested is *readily*. It is highlighted in the passage. *Readily* means "easily," so choice 2 is the correct answer. The other choices do not fit in the context of the sentence.
- 5. **3** This is a Vocabulary question. The word being tested is *assistance*. It is highlighted in the passage. An assistant is a person who helps a leader, so choice 3, "help," is the correct answer.
- 6. **4** This is a Factual Information question asking for specific information that can be found in paragraph 4. The correct answer is choice 4. Early movies were different from previous spectacles because they did not require live actors. The paragraph states (emphasis added):

"But the movies differed significantly from these other forms of entertainment, which depended on either *live performance* or (in the case of the slide-and-lantern shows) the active involvement of a master of ceremonies who assembled the final program."

So the fact that previous spectacles depended on live performances is explicitly stated as one of the ways (but not the only way) that those earlier entertainments differed from movies. The other answer choices are not mentioned in the paragraph.

7. This is a Factual Information question asking for specific information that can be found in paragraph 5. The correct answer is choice 1, "They decided how to combine various components of the film program," because that idea is stated explicitly in the paragraph:

"Early exhibitors shaped their film programs by mixing films and other entertainments together."

The other choices, while possibly true, are not explicitly mentioned in the paragraph as being among the exhibitors' roles.

- 8. 4 This is a Factual Information question asking for specific information that can be found in paragraph 6. The correct answer is choice 4, "A different type of material was used to produce the images used in the Mutoscope." The paragraph says that these machines were very similar but that they differed in one particular way:
- "... the Mutoscope, which was a similar machine that reproduced motion by means of successive images on individual photographic cards instead of on strips of celluloid."
- 9. **2** This is a Reference question. The word being tested is *It*. That word is highlighted in the passage. Choice 2, "the viewer's relationship with the image," is the correct answer. This is a simple pronoun-referent item. The sentence says that "It" suddenly became "public," which implies that whatever "It" is, it was formerly private. The paragraph says that "the viewer's relationship with the image was no longer private," so that relationship is the "It" referred to here.
- 10. 1 This is a Factual Information question asking for specific information that can be found in paragraph 6. The correct answer is choice 1. The paragraph says that the images expanded from an inch or two to life-size proportions, so "small in size" must be correct. The paragraph does not mention the other choices.
- 11. **1** This is a Vocabulary question. The word being tested is *expanded*. It is highlighted in the passage. Choice 1, "was enlarged," is the correct answer. If something *expanded*, it grew or got bigger. *Enlarged* also means "grew or got bigger."

- 12. **4** This is an Insert Text question. You can see the four black squares in paragraph 3 that represent the possible answer choices here.
- Exhibitors, however, wanted to maximize their profits, which they could do more readily by projecting a handful of films to hundreds of customers at a time (rather than one at a time) and by charging 25 to 50 cents admission. About a year after the opening of the first Kinetoscope parlor in 1894, showmen such as Louis and Auguste Lumière, Thomas Armat and Charles Francis Jenkins, and Orville and Woodville Latham (with the assistance of Edison's former assistant, William Dickson) perfected projection devices. These early projection devices were used in vaudeville theaters, legitimate theaters, local town halls, makeshift storefront theaters, fairgrounds, and amusement parks to show films to a mass audience. ■

The inserted sentence fits best at square 4 because it represents the final result of the general use of projectors. After projectors became popular, Edison lost money, and although he had previously refused to develop projection technology, now he was forced to do so. To place the sentence anyplace else would interrupt the logical narrative sequence of the events described. None of the sentences in this paragraph can logically follow the inserted sentence, so squares 1, 2, and 3 are all incorrect.

13. **3 6 6** This is a Prose Summary question. It is completed correctly below. The correct choices are 3, 5, and 6. Choices 1, 2, and 4 are therefore incorrect.

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.**

The technology for modern cinema evolved at the end of the nineteenth century.

- Early cinema allowed individuals to use special machines to view films privately.
- The development of projection technology made it possible to project images on a large screen.
- Once film images could be projected, the cinema became a form of mass consumption.

Answer Choices

- Kinetoscope parlors for viewing films were modeled on phonograph parlors.
- Thomas Edison's design of the Kinetoscope inspired the development of large-screen projection.
- Early cinema allowed individuals to use special machines to view films privately.
- Slide-and-lantern shows had been presented to audiences of hundreds of spectators.
- 5. The development of projection technology made it possible to project images on a large screen.
- Once film images could be projected, the cinema became a form of mass consumption.

Correct Choices

- Choice 3, "Early cinema allowed individuals to use special machines to view films privately," is correct because it represents one of the chief differences between Kinetoscope and projection viewing. This idea is discussed at several places in the passage. It is mentioned in paragraphs 1, 3, 4, and 6. Thus it is a basic, recurring theme of the passage and, as such, a "major idea."
- *Choice 5*, "The development of projection technology made it possible to project images on a large screen," is correct because this is a major idea that is treated in paragraphs 3, 4, 5, and 6. This development was essentially the reason that the cinema did "emerge as a form of mass consumption."
- *Choice* 6, "Once film images could be projected, the cinema became a form of mass consumption," is correct because it represents the primary theme of the passage. It is explicitly stated in the passage's opening sentence; then the remainder of the passage describes that evolution.

Incorrect Choices

- *Choice 1*, "Kinetoscope parlors for viewing films were modeled on phonograph parlors," is incorrect because, while true, it is a minor detail. The Kinetoscope parlors are described in paragraph 2, but the fact that they were modeled on phonograph parlors is not central to the "evolution" of cinema.
- Choice 2, "Thomas Edison's design of the Kinetoscope inspired the development of large-screen projection," is incorrect because it is not clear that it is true, based on the passage. While it may be inferred from paragraph 3 that the Kinetoscope inspired the development of large-screen projection, it seems more likely that the pursuit of greater profits is what really inspired large-screen-projection development. Since this answer is not clearly supported in the passage, it cannot be considered a "main idea" and is incorrect.
- *Choice 4*, "Slide-and-lantern shows had been presented to audiences of hundreds of spectators," is incorrect because it is a minor detail, mentioned only once in paragraph 4 as part of a larger list of theatrical spectacles.

PRACTICE SET 4

AGGRESSION

When one animal attacks another, it engages in the most obvious example of aggressive behavior. Psychologists have adopted several approaches to understanding aggressive behavior in people.

The Biological Approach. Numerous biological structures and chemicals appear to be involved in aggression. One is the hypothalamus, a region of the brain. In response to certain stimuli, many animals show instinctive aggressive reactions. The hypothalamus appears to be involved in this inborn reaction pattern: electrical stimulation of part of the hypothalamus triggers stereotypical aggressive behaviors in many animals. In people, however, whose brains are more complex, other brain structures apparently moderate possible instincts.

An offshoot of the biological approach called *sociobiology* suggests that aggression is natural and even desirable for people. Sociobiology views much social behavior, including aggressive behavior, as genetically determined. Consider Darwin's theory of evolution. Darwin held that many more individuals are produced than can find food and survive into adulthood. A struggle for survival follows. Those individuals who possess characteristics that provide them with an advantage in the struggle for existence are more likely to survive and contribute their genes to the next generation. In many species, such characteristics include aggressiveness. Because aggressive individuals are more likely to survive and reproduce, whatever genes are linked to aggressive behavior are more likely to be transmitted to subsequent generations.

The sociobiological view has been attacked on numerous grounds. One is that people's capacity to outwit other species, not their aggressiveness, appears to be the dominant factor in human survival. Another is that there is too much variation among people to believe that they are dominated by, or at the mercy of, aggressive impulses.

The Psychodynamic Approach. Theorists adopting the psychodynamic approach hold that inner conflicts are crucial for understanding human behavior, including aggression. Sigmund Freud, for example, believed that aggressive impulses are inevitable reactions to the frustrations of daily life. Children normally desire to vent aggressive impulses on other people, including their parents, because even the most attentive parents cannot gratify all of their demands immediately. Yet children, also fearing their parents' punishment and the loss of parental love, come to repress most aggressive impulses. The Freudian perspective, in a sense, sees us as "steam engines." By holding in rather than venting "steam," we set the stage for future explosions. Pent-up aggressive impulses demand outlets. They may be expressed toward parents in indirect ways such as destroying furniture, or they may be expressed toward strangers later in life.

According to psychodynamic theory, the best ways to prevent harmful aggression may be to encourage less harmful aggression. In the steam-engine analogy, verbal aggression may vent some of the aggressive steam. So might cheering on one's favorite sports team. Psychoanalysts, therapists adopting a psychodynamic approach, refer to the venting of aggressive impulses as "catharsis." Catharsis is theorized to be a safety valve. But research findings on the usefulness of catharsis are mixed. Some

studies suggest that catharsis leads to reductions in tension and a lowered likelihood of future aggression. Other studies, however, suggest that letting some steam escape actually encourages more aggression later on.

The Cognitive Approach. Cognitive psychologists assert that our behavior is influenced by our values, by the ways in which we interpret our situations, and by choice. For example, people who believe that aggression is necessary and justified—as during wartime—are likely to act aggressively, whereas people who believe that a particular war or act of aggression is unjust, or who think that aggression is never justified, are less likely to behave aggressively.

One cognitive theory suggests that aggravating and painful events trigger unpleasant feelings. These feelings, in turn, can lead to aggressive action, but *not* automatically. Cognitive factors intervene. People *decide* whether they will act aggressively or not on the basis of factors such as their experiences with aggression and their interpretation of other people's motives. Supporting evidence comes from research showing that aggressive people often distort other people's motives. For example, they assume that other people mean them harm when they do not.

1. Catharsis: In psychodynamic theory, the purging of strong emotions or the relieving of tensions

The Biological Approach. Numerous biological structures and chemicals appear to be involved in aggression. One is the hypothalamus, a region of the brain. In response to certain stimuli, many animals show instinctive aggressive reactions. The hypothalamus appears to be involved in this inborn reaction pattern: electrical stimulation of part of the hypothalamus triggers stereotypical aggressive behaviors in many animals. In people, however, whose brains are more complex, other brain structures apparently moderate possible instincts.

Directions: Mark your answer by filling in the oval next to your choice.

- 1. According to paragraph 2, what evidence indicates that aggression in animals is related to the hypothalamus?
- Some aggressive animal species have a highly developed hypothalamus.
- Electrical stimulation of the hypothalamus delays animals' inborn reaction patterns.
- Animals behaving aggressively show increased activity in the hypothalamus.
- Animals who lack a hypothalamus display few aggressive tendencies.

An offshoot of the biological approach called *sociobiology* suggests that aggression is natural and even desirable for people. Sociobiology views much social behavior, including aggressive behavior, as genetically determined. Consider Darwin's theory of evolution. Darwin held that many more individuals are produced than can find food and survive into adulthood. A struggle for survival follows. Those individuals who possess characteristics that provide them with an advantage in the struggle for existence are more likely to survive and contribute their genes to the next generation. In many species, such characteristics include aggressiveness. Because aggressive individuals are more likely to survive and reproduce, whatever genes are linked to aggressive behavior are more likely to be transmitted to subsequent generations.

2.	According to Darwin's theory of evolution, members of a species are forced to
	struggle for survival because
\bigcirc	not all individuals are skilled in finding food
\bigcirc	individuals try to defend their young against attackers
\bigcirc	many more individuals are born than can survive until the age of reproduction
\bigcirc	individuals with certain genes are more likely to reach adulthood

The Psychodynamic Approach. Theorists adopting the psychodynamic approach hold that inner conflicts are crucial for understanding human behavior, including aggression. Sigmund Freud, for example, believed that aggressive impulses are inevitable reactions to the frustrations of daily life. Children normally desire to vent aggressive impulses on other people, including their parents, because even the most attentive parents cannot gratify all of their demands immediately. Yet children, also fearing their parents' punishment and the loss of parental love, come to repress most aggressive impulses. The Freudian perspective, in a sense, sees us as "steam engines." By holding in rather than venting "steam," we set the stage for future explosions. Pent-up aggressive impulses demand outlets. They may be expressed toward parents in indirect ways such as destroying furniture, or they may be expressed toward strangers later in life.

3.	The word "inevitable" in the passage is closest in meaning to unavoidable regrettable	6.	According to paragraph 5, Freud believed that children experience conflict between a desire to vent aggression on their parents and
	controllable	\bigcirc	a frustration that their parents do not
0	unsuitable		give them everything they want a fear that their parents will punish
4.	The word "gratify" in the passage is		them and stop loving them
	closest in meaning to	\circ	a desire to take care of their parents
\bigcirc	identify	\bigcirc	a desire to vent aggression on other
\bigcirc	modify		family members
\bigcirc	satisfy		
0	simplify	7.	Freud describes people as "steam engines" in order to make the point
5.	The word "they" in the passage		that people
	refers to	\bigcirc	deliberately build up their aggres-
\bigcirc	future explosions		sion to make themselves stronger
\bigcirc	pent-up aggressive impulses	\bigcirc	usually release aggression in explo-
\bigcirc	outlets		sive ways
0	indirect ways	\bigcirc	must vent their aggression to prevent it from building up
		\bigcirc	typically lose their aggression if they

do not express it

The Cognitive Approach. Cognitive psychologists assert that our behavior is influenced by our values, by the ways in which we interpret our situations, and by choice. For example, people who believe that aggression is necessary and justified—as during wartime—are likely to act aggressively, whereas people who believe that a particular war or act of aggression is unjust, or who think that aggression is never justified, are less likely to behave aggressively.

One cognitive theory suggests that aggravating and painful events trigger unpleasant feelings. These feelings, in turn, can lead to aggressive action, but *not* automatically. Cognitive factors intervene. People *decide* whether they will act aggressively or not on the basis of factors such as their experiences with aggression and their interpretation of other people's motives. Supporting evidence comes from research showing that aggressive people often distort other people's motives. For example, they assume that other people mean them harm when they do not.

- 8. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect answer choices change the meaning in important ways or leave out essential information.
- People who believe that they are fighting a just war act aggressively while those who believe that they are fighting an unjust war do not.
- People who believe that aggression is necessary and justified are more likely to act aggressively than those who believe differently.
- People who normally do not believe that aggression is necessary and justified may act aggressively during wartime.
- People who believe that aggression is necessary and justified do not necessarily act aggressively during wartime.

- According to the cognitive approach described in paragraphs 7 and 8, all of the following may influence the decision whether to act aggressively EXCEPT a person's
- moral values
- previous experiences with aggression
- \bigcirc instinct to avoid aggression
- beliefs about other people's intentions
- 10. The word "distort" in the passage is closest in meaning to
- mistrust
- misinterpret
- criticize
- resent

The Psychodynamic Approach. Theorists adopting the psychodynamic approach hold that inner conflicts are crucial for understanding human behavior, including aggression. Sigmund Freud, for example, believed that aggressive impulses are inevitable reactions to the frustrations of daily life. Children normally desire to vent aggressive impulses on other people, including their parents, because even the most attentive parents cannot gratify all of their demands immediately. ■ Yet children, also fearing their parents' punishment and the loss of parental love, come to repress most aggressive impulses. ■ The Freudian perspective, in a sense, sees us as "steam engines."

- By holding in rather than venting "steam," we set the stage for future explosions.
- Pent-up aggressive impulses demand outlets. They may be expressed toward parents in indirect ways such as destroying furniture, or they may be expressed toward strangers later in life.
- Look at the four squares [■] that indicate where the following sentence can be added to the passage.

According to Freud, however, impulses that have been repressed continue to exist and demand expression.

Where would the sentence best fit?

- The Psychodynamic Approach. Theorists adopting the psychodynamic approach hold that inner conflicts are crucial for understanding human behavior, including aggression. Sigmund Freud, for example, believed that aggressive impulses are inevitable reactions to the frustrations of daily life. Children normally desire to vent aggressive impulses on other people, including their parents, because even the most attentive parents cannot gratify all of their demands immediately. According to Freud, however, impulses that have been repressed continue to exist and demand expression. Yet children, also fearing their parents' punishment and the loss of parental love, come to repress most aggressive impulses. The Freudian perspective, in a sense, sees us as "steam engines." By holding in rather than venting "steam," we set the stage for future explosions. Pent-up aggressive impulses demand outlets. They may be expressed toward parents in indirect ways such as destroying furniture, or they may be expressed toward strangers later in life.
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 Yet children, also fearing their parents' punishment and the loss of parental love, come to repress most aggressive impulses. According to Freud, however, impulses that have been repressed continue to exist and demand expression.

impulses that have been repressed continue to exist and demand expression.

The Freudian perspective, in a sense, sees us as "steam engines." ■ By holding in rather than venting "steam," we set the stage for future explosions. ■ Pent-up aggressive impulses demand outlets. They may be expressed toward parents in

indirect ways such as destroying furniture, or they may be expressed toward strangers later in life.

- The Psychodynamic Approach. Theorists adopting the psychodynamic approach hold that inner conflicts are crucial for understanding human behavior, including aggression. Sigmund Freud, for example, believed that aggressive impulses are inevitable reactions to the frustrations of daily life. Children normally desire to vent aggressive impulses on other people, including their parents, because even the most attentive parents cannot gratify all of their demands immediately.
 Yet children, also fearing their parents' punishment and the loss of parental love, come to repress most aggressive impulses.
 The Freudian perspective, in a sense, sees us as "steam engines." According to Freud, however, impulses that have been repressed continue to exist and demand expression. By holding in rather than venting "steam," we set the stage for future explosions.
 Pent-up aggressive impulses demand outlets. They may be expressed toward parents in indirect ways such as destroying furniture, or they may be expressed toward strangers later in life.
- The Psychodynamic Approach. Theorists adopting the psychodynamic approach hold that inner conflicts are crucial for understanding human behavior, including aggression. Sigmund Freud, for example, believed that aggressive impulses are inevitable reactions to the frustrations of daily life. Children normally desire to vent aggressive impulses on other people, including their parents, because even the most attentive parents cannot gratify all of their demands immediately. Yet children, also fearing their parents' punishment and the loss of parental love, come to repress most aggressive impulses. The Freudian perspective, in a sense, sees us as "steam engines." By holding in rather than venting "steam," we set the stage for future explosions. According to Freud, however, impulses that have been repressed continue to exist and demand expression. Pent-up aggressive impulses demand outlets. They may be expressed toward parents in indirect ways such as destroying furniture, or they may be expressed toward strangers later in life.

12. **Directions:** Complete the table below by matching five of the six answer choices with the approach to aggression that they exemplify. **This question is worth 3 points.**

Approach to Understanding Aggression	Associated Claims
Biological Approach	•
Psychodynamic Approach	•
	•
Cognitive Approach	•
	•

Answer Choices

- Aggressive impulses toward people are sometimes expressed in indirect ways.
- Aggressiveness is often useful for individuals in the struggle for survival.
- Aggressive behavior may involve a misunderstanding of other people's intentions.
- 4. The need to express aggressive impulses declines with age.
- Acting aggressively is the result of a choice influenced by a person's values and beliefs.
- 6. Repressing aggressive impulses can result in aggressive behavior.

PRACTICE SET 4 ANSWERS AND EXPLANATIONS

- 1. 3 This is a Factual Information question asking for specific information that can be found in paragraph 2. The correct answer is choice 3. The question asks specifically for evidence that "indicates that aggression in animals is related to the hypothalamus." Answer choice 1 is not supported by the passage. It does not discuss more and less aggressive species or relative development of the hypothalamus. Answer choice 2 contradicts the passage. Electrical stimulation of the hypothalamus causes the instinctive reaction of aggression; it does not delay it. Answer choice 4 is incorrect because the passage does not cite as evidence, or even mention, the removal of the hypothalamus.
- 2. 3 This is a Factual Information question asking for specific information that can be found in the passage. The correct answer is choice 3, "many more individuals are born than can survive until the age of reproduction." This answer choice is essentially a paraphrase of paragraph 3, sentence 4: "Darwin held that many more individuals are produced than can find food and survive into adulthood." Choices 1 and 2 are not mentioned at all. Choice 4 may be true, but it is not stated in the passage as a fact; an inference is needed to support it.

- 3. 1 This is a Vocabulary question. The word being tested is *inevitable*. It is highlighted in the passage. The correct answer is choice 1, "unavoidable." If something is *inevitable*, that means that it will occur no matter what; in other words, it is unavoidable.
- 4. **3** This is a Vocabulary question. The word being tested is *gratify*. It is highlighted in the passage. The correct answer is choice 3, "satisfy." If a person's desires are gratified, those desires are fulfilled. Thus the person is satisfied.
- 5. **2** This is a Reference question. The word being tested is *they*. It is highlighted in the passage. The correct answer is choice 2, "pent-up aggressive impulses." This is a simple pronoun-referent item. The word *they* here refers to something that "may be expressed toward strangers later in life." This is the "outlet" toward which the "aggressive impulses" mentioned may be directed.
- 6. 2 This is a Factual Information question asking for specific information that can be found in paragraph 5. The correct answer is choice 2, "a fear that their parents will punish them and stop loving them." The question asks what causes the conflict between the desire to vent aggression and children's fears. The answer is found in paragraph 5 in the sentence that reads, "Yet children, also fearing their parents' punishment and the loss of parental love, come to repress most aggressive impulses." Answer choice 2 is the only choice that correctly identifies the cause of the conflict created by repressing aggression in children.
- 7. 3 This is a Rhetorical Purpose question. It asks you why the author mentions that Freud described people as "steam engines" in the passage. The phrase being tested is highlighted in the passage. The correct answer is choice 3, "must vent their aggression to prevent it from building up." Steam engines will explode if their steam builds up indefinitely. The same is true of people, as choice 3 indicates. The other choices are not necessarily true of both people and steam engines, so they are incorrect.
- 8. **2** This is a Sentence Simplification question. As with all of these questions, a single sentence in the passage is highlighted:

For example, people who believe that aggression is necessary and justified—as during wartime—are likely to act aggressively, whereas people who believe that a particular war or act of aggression is unjust, or who think that aggression is never justified, are less likely to behave aggressively.

The correct answer is choice 2. It contains all of the essential information in the highlighted sentence. The highlighted sentence compares people who believe particular acts of aggression are necessary and those who do not, in terms of their relative likelihood to act aggressively under certain conditions. This is precisely what choice 2 says: "People who believe that aggression is necessary and justified are more likely to act aggressively than those who believe differently." It compares the behavior of one type of person with that of another type of person. Nothing essential has been left out, and the meaning has not been changed.

Choice 1 changes the meaning of the sentence; it says categorically that "those [people] who believe that they are fighting an unjust war do not [act aggressively]." The highlighted sentence merely says that such people are "less likely" to act aggressively, not that they never will; this changes the meaning.

Choice 3 says, "People who normally do not believe that aggression is necessary and justified may act aggressively during wartime." This is incorrect because it leaves out critical information: it does not mention people who do believe aggression is necessary. This choice does not make the same comparison as the highlighted sentence.

Choice 4, "People who believe that aggression is necessary and justified do not necessarily act aggressively during wartime," also changes the meaning of the sentence by leaving out essential information. In this choice, no mention is made of people who do not believe aggression is necessary. This choice does not make the same comparison as the highlighted sentence.

9. 3 This is a Negative Factual Information question asking for specific information that can be found in paragraphs 7 and 8. Choice 3 is the correct answer.

Choice 1, "moral values," is explicitly mentioned as one of the influences on aggressive behavior, so it is incorrect. Choices 2 ("previous experiences") and 4 ("beliefs about other people") are both explicitly mentioned in this context. The sentence in paragraph 8 says, "People decide whether they will act aggressively or not on the basis of factors such as their experiences with aggression and their interpretation of other people's motives." Choice 3, the "instinct to avoid aggression," is not mentioned, so it is the correct answer here.

- 10. 2 This is a Vocabulary question. The word being tested is *distort*. It is highlighted in the passage. The correct answer is choice 2, "misinterpret." To distort other people's motives is to twist them, or view them incorrectly and thereby not understand them properly. Something that is not understood properly is misinterpreted.
- 11. 2 This is an Insert Text question. You can see the four black squares in paragraph 5 that represent the possible answer choices here.

The Psychodynamic Approach. Theorists adopting the psychodynamic approach hold that inner conflicts are crucial for understanding human behavior, including aggression. Sigmund Freud, for example, believed that aggressive impulses are inevitable reactions to the frustrations of daily life. Children normally desire to vent aggressive impulses on other people, including their parents, because even the most attentive parents cannot gratify all of their demands immediately. ■ Yet children, also fearing their parents' punishment and the loss of parental love, come to repress most aggressive impulses. ■ The Freudian perspective, in a sense, sees us as "steam engines." ■ By holding in rather than venting "steam," we set the stage for future explosions. ■

Pent-up aggressive impulses demand outlets. They may be expressed toward parents in indirect ways such as destroying furniture, or they may be expressed toward strangers later in life.

The sentence provided, "According to Freud, however, impulses that have been repressed continue to exist and demand expression," is best inserted at square 2.

Square 2 is correct because the sentence being inserted is a connective sentence, connecting the idea of childhood repression in the preceding sentence to the "Freudian perspective" in the sentence that follows. The use of the word *however* in this sentence indicates that an idea already introduced (the repression of children's aggressive impulses) is being modified. Here, the inserted sentence tells us that Freud thought that even though these impulses are repressed, they continue to exist. This serves as a connection to the next sentence and the "Freudian perspective." Inserting the sentence at square 1 would place the modification ("however, impulses . . . continue to exist") before the idea that it modifies (repression of impulses). This makes no logical sense. Inserting the sentence at square 3 would move the modifying sentence away from its logical position immediately following the idea that it modifies (repression of impulses). Placing the insert sentence at square 4 moves the sentence farther from its logical antecedent and with no connection to the sentence that follows it.

12. This is a Fill in a Table question. It is completed correctly below. Choice 2 is the correct answer for the "Biological Approach" row. Choices 1 and 6 are the correct answers for the "Psychodynamic Approach" row. Choices 3 and 5 are the correct answers for the "Cognitive Approach" row. Choice 4 should not be used in any row.

Directions: Complete the table below by matching five of the six answer choices with the approach to aggression that they exemplify. **This question is worth 3 points**.

Approach to Understanding Aggression	Associated Claims
Biological Approach	 Aggressiveness is often useful for individuals in the struggle for survival.
Psychodynamic Approach	 Aggressive impulses toward people are sometimes expressed in indirect ways. Repressing aggressive impulses can result in aggressive behavior.
Cognitive Approach	 Aggressive behavior may involve a misunderstanding of other people's intentions. Acting aggressively is the result of a choice influenced by a person's values and beliefs.

Answer Choices

- Aggressive impulses toward people are sometimes expressed in indirect ways.
- Aggressiveness is often useful for individuals in the struggle for survival.
- Aggressive behavior may involve a misunderstanding of other people's intentions.
- The need to express aggressive impulses declines with age.
- Acting aggressively is the result of a choice influenced by a person's values and beliefs.
- 6. Repressing aggressive impulses can result in aggressive behavior.

Correct Choices

- Choice 1: "Aggressive impulses toward people are sometimes expressed in indirect ways" belongs in the "Psychodynamic Approach" row based on paragraph 5. That paragraph, in explaining the psychodynamic approach, states, "Pent-up aggressive impulses demand outlets. They may be expressed toward parents in indirect ways such as destroying furniture . . ."
- Choice 2: "Aggressiveness is often useful for individuals in the struggle for survival" belongs in the "Biological Approach" row because, as stated in paragraph 3, "An offshoot of the biological approach called *sociobiology* suggests that aggression is natural and even desirable for people." The remainder of that paragraph explains the ways in which aggressive behavior can be useful in the struggle for survival. Neither of the other approaches discusses this idea, so this answer choice belongs here.
- Choice 3: "Aggressive behavior may involve a misunderstanding of other people's intentions" belongs in the "Cognitive Approach" row based on paragraph 8. The theme of that paragraph is that people decide to be aggressive (or not) largely based upon their interpretations of other people's motives. It goes on to say that these interpretations may be "distorted," or misunderstood. Accordingly, this answer choice belongs in this row.
- Choice 5: "Acting aggressively is the result of a choice influenced by a person's values and beliefs" belongs in the "Cognitive Approach" row based on paragraph 7, which states, "Cognitive psychologists assert that our behavior is influenced by our values, by the ways in which we interpret our situations, and by choice." Thus this is an important aspect of the cognitive approach.
- *Choice 6:* "Repressing aggressive impulses can result in aggressive behavior" belongs in the "Psychodynamic Approach" row based on paragraphs 5 and 6. Both of those paragraphs explicitly make this point in the section of the passage on the psychodynamic approach.

Incorrect Choice

Choice 4: "The need to express aggressive impulses declines with age" is not mentioned in connection with any of the approaches to aggression discussed in the passage, so it should not be used.

PRACTICE SET 5

ARTISANS AND INDUSTRIALIZATION

Before 1815 manufacturing in the United States had been done in homes or shops by skilled artisans. As master craftworkers, they imparted the knowledge of their trades to apprentices and journeymen. In addition, women often worked in their homes part-time, making finished articles from raw material supplied by merchant capitalists. After 1815 this older form of manufacturing began to give way to factories with machinery tended by unskilled or semiskilled laborers. Cheap transportation networks, the rise of cities, and the availability of capital and credit all stimulated the shift to factory production.

The creation of a labor force that was accustomed to working in factories did not occur easily. Before the rise of the factory, artisans had worked within the home. Apprentices were considered part of the family, and masters were responsible not only for teaching their apprentices a trade but also for providing them some education and for supervising their moral behavior. Journeymen knew that if they perfected their skill, they could become respected master artisans with their own shops. Also, skilled artisans did not work by the clock, at a steady pace, but rather in bursts of intense labor alternating with more leisurely time.

The factory changed that. Goods produced by factories were not as finished or elegant as those done by hand, and pride in craftsmanship gave way to the pressure to increase rates of productivity. The new methods of doing business involved a new and stricter sense of time. Factory life necessitated a more regimented schedule, where work began at the sound of a bell and workers kept machines going at a constant pace. At the same time, workers were required to discard old habits, for industrialism demanded a worker who was alert, dependable, and self-disciplined. Absenteeism and lateness hurt productivity and, since work was specialized, disrupted the regular factory routine. Industrialization not only produced a fundamental change in the way work was organized; it transformed the very nature of work.

The first generation to experience these changes did not adopt the new attitudes easily. The factory clock became the symbol of the new work rules. One mill worker who finally quit complained revealingly about "obedience to the ding-dong of the bell—just as though we are so many living machines." With the loss of personal freedom also came the loss of standing in the community. Unlike artisan workshops in which apprentices worked closely with the masters supervising them, factories sharply separated workers from management. Few workers rose through the ranks to supervisory positions, and even fewer could achieve the artisan's dream of setting up one's own business. Even well-paid workers sensed their decline in status.

In this newly emerging economic order, workers sometimes organized to protect their rights and traditional ways of life. Craftworkers such as carpenters, printers, and tailors formed unions, and in 1834 individual unions came together in the National Trades' Union. The labor movement gathered some momentum in the decade before the Panic of 1837, but in the depression that followed, labor's strength collapsed. During hard times, few workers were willing to strike¹ or engage in collective action. And skilled craftworkers, who spearheaded the union movement, did not feel a particu-

networks.

larly strong bond with semiskilled factory workers and unskilled laborers. More than a decade of agitation did finally bring a workday shortened to 10 hours to most industries by the 1850s, and the courts also recognized workers' right to strike, but these gains had little immediate impact.

Workers were united in resenting the industrial system and their loss of status, but they were divided by ethnic and racial antagonisms, gender, conflicting religious perspectives, occupational differences, political party loyalties, and disagreements over tactics. For them, the factory and industrialism were not agents of opportunity but reminders of their loss of independence and a measure of control over their lives. As United States society became more specialized and differentiated, greater extremes of wealth began to appear. And as the new markets created fortunes for the few, the factory system lowered the wages of workers by dividing labor into smaller, less skilled tasks.

1. Strike: A stopping of work that is organized by workers

Before 1815 manufacturing in the United States had been done in homes or shops by skilled artisans. As master craftworkers, they imparted the knowledge of their trades to apprentices and journeymen. In addition, women often worked in their homes part-time, making finished articles from raw material supplied by merchant capitalists. After 1815 this older form of manufacturing began to give way to factories with machinery tended by unskilled or semiskilled laborers. Cheap transportation networks, the rise of cities, and the availability of capital and credit all stimulated the shift to factory production.

Directions: Mark your answer by filling in the oval next to your choice.

1.	Which of the following can be inferred from the passage about articles
	manufactured before 1815?
\bigcirc	They were primarily produced by women.
\bigcirc	They were generally produced in shops rather than in homes.
\bigcirc	They were produced with more concern for quality than for speed of production.
\bigcirc	They were produced mostly in large cities with extensive transportation

The creation of a labor force that was accustomed to working in factories did not occur easily. Before the rise of the factory, artisans had worked within the home. Apprentices were considered part of the family, and masters were responsible not only for teaching their apprentices a trade but also for providing them some education and for supervising their moral behavior. Journeymen knew that if they perfected their skill, they could become respected master artisans with their own shops. Also, skilled artisans did not work by the clock, at a steady pace, but rather in bursts of intense labor alternating with more leisurely time.

- 2. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect answer choices change the meaning in important ways or leave out essential information.
- Masters demanded moral behavior from apprentices but often treated them irresponsibly.
- The responsibilities of the master to the apprentice went beyond the teaching of a trade.
- Masters preferred to maintain the trade within the family by supervising and educating the younger family members.
- Masters who trained members of their own family as apprentices demanded excellence from them.

The factory changed that. Goods produced by factories were not as finished or elegant as those done by hand, and pride in craftsmanship gave way to the pressure to increase rates of productivity. The new methods of doing business involved a new and stricter sense of time. Factory life necessitated a more regimented schedule, where work began at the sound of a bell and workers kept machines going at a constant pace. At the same time, workers were required to discard old habits, for industrialism demanded a worker who was alert, dependable, and self-disciplined. Absenteeism and lateness hurt productivity and, since work was specialized, disrupted the regular factory routine. Industrialization not only produced a fundamental change in the way work was organized; it transformed the very nature of work.

- 3. The word "disrupted" in the passage is closest in meaning to
- prolonged
- established
- followed
- upset

The first generation to experience these changes did not adopt the new attitudes easily. The factory clock became the symbol of the new work rules. One mill worker who finally quit complained revealingly about "obedience to the ding-dong of the bell—just as though we are so many living machines." With the loss of personal freedom also came the loss of standing in the community. Unlike artisan workshops in which apprentices worked closely with the masters supervising them, factories sharply separated workers from management. Few workers rose through the ranks to supervisory positions, and even fewer could achieve the artisan's dream of setting up one's own business. Even well-paid workers sensed their decline in status.

- 4. In paragraph 4, the author includes the quotation from a mill worker in order to
- support the idea that it was difficult for workers to adjust to working in factories
- show that workers sometimes quit because of the loud noise made by factory machinery
- argue that clocks did not have a useful function in factories
- emphasize that factories were most successful when workers revealed their complaints

- All of the following are mentioned in paragraph 4 as consequences of the new system for workers EXCEPT a loss of
- O freedom
- status in the community
- opportunities for advancement
- contact among workers who were not managers

In this newly emerging economic order, workers sometimes organized to protect their rights and traditional ways of life. Craftworkers such as carpenters, printers, and tailors formed unions, and in 1834 individual unions came together in the National Trades' Union. The labor movement gathered some momentum in the decade before the Panic of 1837, but in the depression that followed, labor's strength collapsed. During hard times, few workers were willing to strike or engage in collective action. And skilled craftworkers, who spearheaded the union movement, did not feel a particularly strong bond with semiskilled factory workers and unskilled laborers. More than a decade of agitation did finally bring a workday shortened to 10 hours to most industries by the 1850s, and the courts also recognized workers' right to strike, but these gains had little immediate impact.

- The phrase "gathered some momentum" in the passage is closest in meaning to
- made progress
- became activecaused changes
- combined forces

- 7. The word "spearheaded" in the passage is closest in meaning to
- O led
- accepted
- changed
- resisted

8.	Which of the following statements about the labor movement of the 1800s is supported by paragraph 5?
\bigcirc	It was successful during times of economic crisis.
\bigcirc	Its primary purpose was to benefit unskilled laborers
\bigcirc	It was slow to improve conditions for workers.
\bigcirc	It helped workers of all skill levels form a strong bond with each other.

Workers were united in resenting the industrial system and their loss of status, but they were divided by ethnic and racial antagonisms, gender, conflicting religious perspectives, occupational differences, political party loyalties, and disagreements over tactics. For them, the factory and industrialism were not agents of opportunity but reminders of their loss of independence and a measure of control over their lives. As United States society became more specialized and differentiated, greater extremes of wealth began to appear. And as the new markets created fortunes for the few, the factory system lowered the wages of workers by dividing labor into smaller, less skilled tasks.

- 9. The author identifies "political party loyalties" and "disagreements over tactics" as two of several factors that
- encouraged workers to demand higher wages
- created divisions among workers
- caused work to become more specialized
- increased workers' resentment of the industrial system

- The word "them" in the passage refers to
- workers
- political party loyalties
- disagreements over tactics
- agents of opportunity

PARAGRAPH 1

Before 1815 manufacturing in the United States had been done in homes or shops by skilled artisans. ■ As master craftworkers, they imparted the knowledge of their trades to apprentices and journeymen. ■ In addition, women often worked in their homes part-time, making finished articles from raw material supplied by merchant capitalists. ■ After 1815 this older form of manufacturing began to give way to factories with machinery tended by unskilled or semiskilled laborers. ■ Cheap transportation networks, the rise of cities, and the availability of capital and credit all stimulated the shift to factory production.

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

This new form of manufacturing depended on the movement of goods to distant locations and a centralized source of laborers.

Where would the sentence best fit?

- Before 1815 manufacturing in the United States had been done in homes or shops by skilled artisans. This new form of manufacturing depended on the movement of goods to distant locations and a centralized source of laborers.
 As master craftworkers, they imparted the knowledge of their trades to apprentices and journeymen. In addition, women often worked in their homes parttime, making finished articles from raw material supplied by merchant capitalists.
 After 1815 this older form of manufacturing began to give way to factories with machinery tended by unskilled or semiskilled laborers. Cheap transportation networks, the rise of cities, and the availability of capital and credit all stimulated the shift to factory production.
- Before 1815 manufacturing in the United States had been done in homes or shops by skilled artisans. As master craftworkers, they imparted the knowledge of their trades to apprentices and journeymen. This new form of manufacturing depended on the movement of goods to distant locations and a centralized source of laborers. In addition, women often worked in their homes part-time, making finished articles from raw material supplied by merchant capitalists. After 1815 this older form of manufacturing began to give way to factories with machinery tended by unskilled or semiskilled laborers. Cheap transportation networks, the rise of cities, and the availability of capital and credit all stimulated the shift to factory production.
- Before 1815 manufacturing in the United States had been done in homes or shops by skilled artisans. As master craftworkers, they imparted the knowledge of their trades to apprentices and journeymen. In addition, women often worked in their homes part-time, making finished articles from raw material supplied by merchant capitalists. This new form of manufacturing depended on the movement of goods to distant locations and a centralized source of laborers.

 After 1815 this older form of manufacturing began to give way to factories with machinery tended by unskilled or semiskilled laborers. Cheap transportation networks, the rise of cities, and the availability of capital and credit all stimulated the shift to factory production.
- Before 1815 manufacturing in the United States had been done in homes or shops by skilled artisans. As master craftworkers, they imparted the knowledge of their trades to apprentices and journeymen. In addition, women often worked in their homes part-time, making finished articles from raw material supplied by merchant capitalists. After 1815 this older form of manufacturing began to give way to factories with machinery tended by unskilled or semiskilled laborers. This new form of manufacturing depended on the movement of goods to distant locations and a centralized source of laborers. Cheap transportation networks, the rise of cities, and the availability of capital and credit all stimulated the shift to factory production.

12. **Directions**: Complete the table below by indicating which of the answer choices describe characteristics of the period before 1815 and which describe characteristics of the 1815–1850 period. **This question is worth 3 points**.

Before 1815	1815–1850
•	•
•	•
	•

Answer Choices

- A united, highly successful labor movement took shape.
- Workers took pride in their workmanship.
- 3. The income gap between the rich and the poor increased greatly.
- 4. Transportation networks began to decline.
- 5. Emphasis was placed on following schedules.
- Workers went through an extensive period of training.
- 7. Few workers expected to own their own businesses.

PRACTICE SET 5 ANSWERS AND EXPLANATIONS

1. 3 This is an Inference question asking for an inference that can be supported by the passage. The correct answer is choice 3, "They were produced with more concern for quality than for speed of production."

A number of statements throughout the passage support choice 3. Paragraph 1 states, "Before 1815 manufacturing in the United States had been done in homes or shops by skilled artisans . . . After 1815 this older form of manufacturing began to give way to factories with machinery tended by unskilled or semiskilled laborers."

Paragraph 2 states, "Before the rise of the factory . . . skilled artisans did not work by the clock, at a steady pace, but rather in bursts of intense labor alternating with more leisurely time."

Paragraph 3 states, "The factory changed that. Goods produced by factories were not as finished or elegant as those done by hand, and pride in craftsmanship gave way to the pressure to increase rates of productivity."

Taken together, these three statements, about production rates, the rise of factories after 1815, and the decline of craftsmanship after 1815, support the inference that before 1815, the emphasis had been on quality rather than on speed of production. Answer choices 1, 2, and 4 are all contradicted by the passage.

2. **2** This is a Sentence Simplification question. As with all of these questions, a single sentence in the passage is highlighted:

Apprentices were considered part of the family, and masters were responsible not only for teaching their apprentices a trade but also for providing them some education and for supervising their moral behavior.

The correct answer is choice 2. Choice 2 contains all of the essential information in the highlighted sentence. The highlighted sentence explains why (part of the family) and how (education, moral behavior) a master's responsibility went beyond teaching a trade. The essential information is the fact that the master's responsibility went beyond teaching a trade. Therefore choice 2 contains all that is essential without changing the meaning of the highlighted sentence.

Choice 1 changes the meaning of the highlighted sentence by stating that masters often treated apprentices irresponsibly.

Choice 3 contradicts the essential meaning of the highlighted sentence. The fact that "Apprentices were considered part of the family" suggests that they were not actual family members.

Choice 4, like choice 3, changes the meaning of the highlighted sentence by discussing family members as apprentices.

- 3. **4** This is a Vocabulary question. The word being tested is *disrupted*. It is highlighted in the passage. The correct answer is choice 4, "upset." The word *upset* here is used in the context of "hurting productivity." When something is hurt or damaged, it is "upset."
- 4. 1 This is a Factual Information question asking for specific information that can be found in paragraph 4. The correct answer is choice 1, "support the idea that it was difficult for workers to adjust to working in factories." The paragraph begins by stating that workers did not adopt new attitudes toward work easily and that the clock symbolized the new work rules. The author provides the quotation as evidence of that difficulty. There is no indication in the paragraph that workers quit due to loud noise, so choice 2 is incorrect. Choice 3 (usefulness of clocks) is contradicted by the paragraph. The factory clock was "useful," but workers hated it. Choice 4 (workers' complaints as a cause of a factory's success) is not discussed in this paragraph.
- 5. This is a Negative Factual Information question asking for specific information that can be found in paragraph 4. Choice 4, "contact among workers who were not managers," is the correct answer. The paragraph explicitly contradicts this by stating that "factories sharply separated workers from management." The paragraph explicitly states that workers lost choice 1 (freedom), choice 2 (status in the community), and choice 3 (opportunities for advancement) in the new system, so those choices are all incorrect.
- 6. This is a Vocabulary question. The phrase being tested is *gathered some momentum*. It is highlighted in the passage. The correct answer is choice 1, "made progress." To *gather momentum* is to advance with increasing speed.

- 7. This is a Vocabulary question. The word being tested is *spearheaded*. It is highlighted in the passage. The correct answer is choice 1, "led." The head of a spear leads the rest of the spear, so the craftsworkers who "spearheaded" this movement led it.
- 8. 3 This is a Factual Information question asking for specific information that can be found in paragraph 5. The correct answer is choice 3, "It was slow to improve conditions for workers." The paragraph states, "More than a decade of agitation did finally bring a workday shortened to 10 hours to most industries by the 1850s, and the courts also recognized workers' right to strike, but these gains had little immediate impact." This statement explicitly supports choice 3. All three other choices are contradicted by the paragraph.
- 9. **2** This is a Factual Information question asking for specific information about a particular phrase in the passage. The phrase in question is highlighted in the passage. The correct answer is choice 2, "created divisions among workers." The paragraph states, "they (workers) were divided by ethnic and racial antagonisms, gender, conflicting religious perspectives, occupational differences, political party loyalties, and disagreements over tactics." So "political party loyalties" and "disagreements over tactics" are explicitly stated as two causes of division among workers. The other choices are not stated and are incorrect.
- 10. 1 This is a Reference question. The word being tested is *them*. It is highlighted in the passage. This is a simple pronoun-referent item. The word *them* in this sentence refers to those people to whom "the factory and industrialism were not agents of opportunity but reminders of their loss of independence and a measure of control over their lives." Choice 1, "workers," is the only choice that refers to this type of person, so it is the correct answer.
- 11. **4** This is an Insert Text question. You can see the four black squares in paragraph 1 that represent the possible answer choices here.

Before 1815 manufacturing in the United States had been done in homes or shops by skilled artisans. ■ As master craftworkers, they imparted the knowledge of their trades to apprentices and journeymen. ■ In addition, women often worked in their homes part-time, making finished articles from raw material supplied by merchant capitalists. ■ After 1815 this older form of manufacturing began to give way to factories with machinery tended by unskilled or semiskilled laborers. ■ Cheap transportation networks, the rise of cities, and the availability of capital and credit all stimulated the shift to factory production.

The sentence provided, "This new form of manufacturing depended on the movement of goods to distant locations and a centralized source of laborers," is best inserted at square 4. The inserted sentence refers explicitly to a "new form of manufacturing." This "new form of manufacturing" is the one mentioned in the sentence preceding square 4, "factories with machinery tended by unskilled or semiskilled laborers." The inserted sentence then explains that this new system "depended on the movement of goods to distant locations

and a centralized source of laborers." The sentence that follows square 4 goes on to say, "Cheap transportation networks, the rise of cities, and the availability of capital and credit all stimulated the shift to factory production." Thus the inserted sentence contains references to both the sentence before square 4 and the sentence after square 4. This is not true of any of the other possible insert points, so square 4 is the correct answer.

12. This is a Fill in a Table question. It is completed correctly below. The correct choices for the "Before 1815" column are 2 and 6. Choices 3, 5, and 7 belong in the "1815–1850" column. Choices 1 and 4 should not be used in either column.

Directions: Complete the table below by indicating which of the answer choices describe characteristics of the period before 1815 and which describe characteristics of the 1815–1850 period. **This question is worth 3 points.**

Before 1815	1815–1850
 Workers took pride in their workmanship. Workers went through an extensive period of training. 	 The income gap between the rich and the poor increased greatly. Emphasis was placed on following schedules. Few workers expected to own their own businesses.

Answer Choices

- A united, highly successful labor movement took shape.
- Workers took pride in their workmanship.
- 3. The income gap between the rich and the poor increased greatly.
- 4. Transportation networks began to decline.
- 5. Emphasis was placed on following schedules.
- 6. Workers went through an extensive period of training.
- 7. Few workers expected to own their own businesses.

Correct Choices

- Choice 2: "Workers took pride in their workmanship" belongs in the "Before 1815" column because it is mentioned in the passage as one of the characteristics of labor before 1815.
- Choice 3: "The income gap between the rich and the poor increased greatly" belongs in the "1815–1850" column because it is mentioned in the passage as one of the characteristics of society that emerged in the period between 1815 and 1850.

- Choice 5: "Emphasis was placed on following schedules" belongs in the "1815–1850" column because it is mentioned in the passage as one of the characteristics of labor in the factory system that emerged between 1815 and 1850.
- *Choice 6:* "Workers went through an extensive period of training" belongs in the "Before 1815" column because it is mentioned in the passage as one of the characteristics of labor before 1815.
- Choice 7: "Few workers expected to own their own businesses" belongs in the "1815–1850" column because it is mentioned in the passage as one of the characteristics of society that emerged in the period between 1815 and 1850.

Incorrect Choices

- *Choice 1:* "A united, highly successful labor movement took shape" does not belong in the table because it contradicts the passage.
- *Choice 4:* "Transportation networks began to decline" does not belong in the table because it is not mentioned in the passage in connection with either the period before 1815 or the period between 1815 and 1850.

PRACTICE SET 6

SWIMMING MACHINES

Tunas, mackerels, and billfishes (marlins, sailfishes, and swordfish) swim continuously. Feeding, courtship, reproduction, and even "rest" are carried out while in constant motion. As a result, practically every aspect of the body form and function of these swimming "machines" is adapted to enhance their ability to swim.

Many of the adaptations of these fishes serve to reduce water resistance (drag). Interestingly enough, several of these hydrodynamic adaptations resemble features designed to improve the aerodynamics of high-speed aircraft. Though human engineers are new to the game, tunas and their relatives evolved their "high-tech" designs long ago.

Tunas, mackerels, and billfishes have made streamlining into an art form. Their bodies are sleek and compact. The body shapes of tunas, in fact, are nearly ideal from an engineering point of view. Most species lack scales over most of the body, making it smooth and slippery. The eyes lie flush with the body and do not protrude at all. They are also covered with a slick, transparent lid that reduces drag. The fins are stiff, smooth, and narrow, qualities that also help cut drag. When not in use, the fins are tucked into special grooves or depressions so that they lie flush with the body and do not break up its smooth contours. Airplanes retract their landing gear while in flight for the same reason.

Tunas, mackerels, and billfishes have even more sophisticated adaptations than these to improve their hydrodynamics. The long bill of marlins, sailfishes, and sword-fish probably helps them slip through the water. Many supersonic aircraft have a similar needle at the nose.

Most tunas and billfishes have a series of keels and finlets near the tail. Although most of their scales have been lost, tunas and mackerels retain a patch of coarse scales near the head called the corselet. The keels, finlets, and corselet help direct the flow of water over the body surface in such a way as to reduce resistance (see the figure). Again, supersonic jets have similar features.

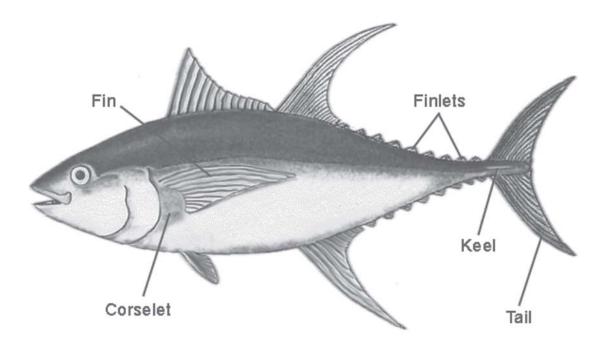
Because they are always swimming, tunas simply have to open their mouths and water is forced in and over their gills. Accordingly, they have lost most of the muscles that other fishes use to suck in water and push it past the gills. In fact, tunas must swim to breathe. They must also keep swimming to keep from sinking, since most have largely or completely lost the swim bladder, the gas-filled sac that helps most other fish remain buoyant.

One potential problem is that opening the mouth to breathe detracts from the streamlining of these fishes and tends to slow them down. Some species of tuna have specialized grooves in their tongue. It is thought that these grooves help to channel water through the mouth and out the gill slits, thereby reducing water resistance.

There are adaptations that increase the amount of forward thrust as well as those that reduce drag. Again, these fishes are the envy of engineers. Their high, narrow tails with swept-back tips are almost perfectly adapted to provide propulsion with the least possible effort. Perhaps most important of all to these and other fast swimmers is their ability to sense and make use of swirls and eddies (circular currents) in the

water. They can glide past eddies that would slow them down and then gain extra thrust by "pushing off" the eddies. Scientists and engineers are beginning to study this ability of fishes in the hope of designing more efficient propulsion systems for ships.

The muscles of these fishes and the mechanism that maintains a warm body temperature are also highly efficient. A bluefin tuna in water of 7°C (45°F) can maintain a core temperature of over 25°C (77°F). This warm body temperature may help not only the muscles to work better, but also the brain and the eyes. The billfishes have gone one step further. They have evolved special "heaters" of modified muscle tissue that warm the eyes and brain, maintaining peak performance of these critical organs.



Tunas, mackerels, and billfishes (marlins, sailfishes, and swordfish) swim continuously. Feeding, courtship, reproduction, and even "rest" are carried out while in constant motion. As a result, practically every aspect of the body form and function of these swimming "machines" is adapted to enhance their ability to swim.

Directions: Mark your answer by filling in the oval next to your choice.

1	The word	"anhanca"	in the passage	ie cloeget in	maaning t	t۸
Ι.	The word	ennance	in the bassage	e is closest in	i meaning i	ιO

- O use
- improve
- counteract
- balance

Tunas, mackerels, and billfishes have made streamlining into an art form. Their bodies are sleek and compact. The body shapes of tunas, in fact, are nearly ideal from an engineering point of view. Most species lack scales over most of the body, making it smooth and slippery. The eyes lie flush with the body and do not protrude at all. They are also covered with a slick, transparent lid that reduces drag. The fins are stiff, smooth, and narrow, qualities that also help cut drag. When not in use, the fins are tucked into special grooves or depressions so that they lie flush with the body and do not break up its smooth contours. Airplanes retract their landing gear while in flight for the same reason.

The word "they" in the passage refers to qualities	3.	Why does the author mention that "Airplanes retract their landing gear while in flight"?
fins	\bigcirc	To show that air resistance and water resistance work differently
grooves depressions		from each other
	\bigcirc	To argue that some fishes are better designed than airplanes are
		To provide evidence that airplane engineers have studied the design of fish bodies
	\bigcirc	To demonstrate a similarity in design between certain fishes and airplanes

PARAGRAPH 4

Tunas, mackerels, and billfishes have even more sophisticated adaptations than these to improve their hydrodynamics. The long bill of marlins, sailfishes, and swordfish probably helps them slip through the water. Many supersonic aircraft have a similar needle at the nose.

4.	The word "sophisticated" in the passage is closest in meaning to complex	5.	According to paragraph 4, the long bills of marlins, sailfish, and sword- fish probably help these fishes by
	amazing	\bigcirc	increasing their ability to defend
	creative		themselves
$\overline{\bigcirc}$	practical	\bigcirc	allowing them to change direction
			easily
		\bigcirc	increasing their ability to detect
			odors
		\bigcirc	reducing water resistance as they
			swim

Because they are always swimming, tunas simply have to open their mouths and water is forced in and over their gills. Accordingly, they have lost most of the muscles that other fishes use to suck in water and push it past the gills. In fact, tunas must swim to breathe. They must also keep swimming to keep from sinking, since most have largely or completely lost the swim bladder, the gas-filled sac that helps most other fish remain buoyant.

6.	According to the passage, which of the following is one of the reasons that tunas are in constant motion?
\bigcirc	They lack a swim bladder.
\bigcirc	They need to suck in more water than other fishes do.
\bigcirc	They have large muscles for breathing.
\bigcirc	They cannot open their mouths unless they are in motion.

PARAGRAPH 7

One potential problem is that opening the mouth to breathe detracts from the streamlining of these fishes and tends to slow them down. Some species of tuna have specialized grooves in their tongue. It is thought that these grooves help to channel water through the mouth and out the gill slits, thereby reducing water resistance.

- 7. Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect answer choices change the meaning in important ways or leave out essential information.
- These fishes often have a problem opening their mouths while swimming.
- The streamlining of these fishes prevents them from slowing down.
- The streamlining of these fishes tends to slow down their breathing.
- Opening the mouth to breathe can reduce the speed of these fishes.

- 8. The word "channel" in the passage is closest in meaning to
- reduce
- remove
- O direct
- provide

There are adaptations that increase the amount of forward thrust as well as those that reduce drag. Again, these fishes are the envy of engineers. Their high, narrow tails with swept-back tips are almost perfectly adapted to provide propulsion with the least possible effort. Perhaps most important of all to these and other fast swimmers is their ability to sense and make use of swirls and eddies (circular currents) in the water. They can glide past eddies that would slow them down and then gain extra thrust by "pushing off" the eddies. Scientists and engineers are beginning to study this ability of fishes in the hope of designing more efficient propulsion systems for ships.

- 9. According to the passage, one of the adaptations of fast-swimming fishes that might be used to improve the performance of ships is these fishes' ability to
- swim directly through eddies
- make efficient use of water currents
- cover great distances without stopping
- ogain speed by forcing water past their gills

PARAGRAPH (

The muscles of these fishes and the mechanism that maintains a warm body temperature are also highly efficient. A bluefin tuna in water of 7°C (45°F) can maintain a core temperature of over 25°C (77°F). This warm body temperature may help not only the muscles to work better, but also the brain and the eyes. The billfishes have gone one step further. They have evolved special "heaters" of modified muscle tissue that warm the eyes and brain, maintaining peak performance of these critical organs.

- 10. According to paragraph 9, which of the following is true of bluefin tunas?
- Their eyes and brain are more efficient than those of any other fish.
- Their body temperature can change greatly depending on the water temperature.
- They can swim in waters that are much colder than their own bodies.
- They have special muscle tissue that warms their eyes and brain.

Again, supersonic jets have similar features.

- Because they are always swimming, tunas simply have to open their mouths and water is forced in and over their gills. Accordingly, they have lost most of the muscles that other fishes use to suck in water and push it past the gills. In fact, tunas must swim to breathe. They must also keep swimming to keep from sinking, since most have largely or completely lost the swim bladder, the gas-filled sac that helps most other fish remain buoyant.
- 11. Look at the four squares [■] that indicate where the following sentence can be added to the passage.

Consequently, tunas do not need to suck in water.

Where would the sentence best fit?

Again, supersonic jets have similar features.

Consequently, tunas do not need to suck in water. Because they are always swimming, tunas simply have to open their mouths and water is forced in and over their gills. ■ Accordingly, they have lost most of the muscles that other fishes use to suck in water and push it past the gills. ■ In fact, tunas must swim to breathe. ■ They must also keep swimming to keep from sinking, since most have largely or completely lost the swim bladder, the gas-filled sac that helps most other fish remain buoyant.

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- Again, supersonic jets have similar features.
 - Because they are always swimming, tunas simply have to open their mouths and water is forced in and over their gills. Accordingly, they have lost most of the muscles that other fishes use to suck in water and push it past the gills.
 - In fact, tunas must swim to breathe. Consequently, tunas do not need to suck in water. They must also keep swimming to keep from sinking, since most have largely or completely lost the swim bladder, the gas-filled sac that helps most other fish remain buoyant.

12. **Directions**: Complete the table below by indicating which features of fishes are associated in the passage with reducing water resistance and which are associated with increasing thrust. **This question is worth 3 points**.

Reducing Water Resistance	Increasing Thrust
•	•
•	•
•	

Answer Choices

- The absence of scales from most of the body
- The ability to take advantage of eddies
- The ability to feed and reproduce while swimming
- 4. Eyes that do not protrude

- Fins that are stiff, narrow, and smooth
- 6. The habit of swimming with the mouth open
- A high, narrow tail with swept-back tips

PRACTICE SET 6 ANSWERS AND EXPLANATIONS

- 1. **2** This is a Vocabulary question. The word being tested is *enhance*. It is highlighted in the passage. The correct answer is choice 2, "improve." To *enhance* something means to "make it better." If something has been "improved," it has been made better.
- 2. **2** This is a Reference question. The word being tested is *they*. It is highlighted in the passage. Choice 2, "fins," is the correct answer. This is a simple pronoun-referent item. The word *they* refers to something that lies flush with the body when not in use. This is true only of "fins."
- 3. This is a Rhetorical Purpose question. It asks why the author mentions that "Airplanes retract their landing gear while in flight." The phrase being tested is highlighted in the passage. The correct answer is choice 4, "To demonstrate a similarity in design between certain fishes and airplanes." The paragraph in which the highlighted phrase appears describes how certain fish use their fins. The highlighted phrase is used to provide a more familiar example (airplanes) of the principle involved to help the reader visualize how fins work. The paragraph does not discuss airplanes in any other context, so choices 2 and 3 are incorrect. Air and water resistance are not mentioned in this paragraph, so choice 1 is incorrect.
- 4. **1** This is a Vocabulary question. The word being tested is *sophisticated*. It is highlighted in the passage. The correct answer is choice 1, "complex." If something is *sophisticated*, it is "not simple," so it must be "complex."

5. 4 This is a Factual Information question asking for specific information that can be found in paragraph 4. The correct answer is choice 4, "reducing water resistance as they swim." The overall theme of the passage is how certain fish swim so efficiently. Paragraphs 1 and 2 make the general statement that "practically every aspect of the body form and function of these swimming 'machines' is adapted to enhance their ability to swim. Many of the adaptations of these fishes serve to reduce water resistance (drag)."

Paragraph 4 explicitly states (emphasis added), "Tunas, mackerels, and bill-fishes have even more sophisticated *adaptations than these to improve their hydrodynamics. The long bill* of marlins, sailfishes, and swordfish probably helps them slip through the water." This is a specific example of one adaptation that these fish have made to increase their swimming efficiency. None of the other choices is mentioned in the paragraph.

6. This is a Factual Information question asking for specific information that can be found in the passage. The correct answer is choice 1, "They lack a swim bladder."

Paragraph 6 explicitly states, "tunas must swim to breathe. They must also keep swimming to keep from sinking, since most have largely or completely lost the swim bladder." The other choices are not supported by the passage.

7. 4 This is a Sentence Simplification question. As with all of these questions, a single sentence in the passage is highlighted:

One potential problem is that opening the mouth to breathe detracts from the streamlining of these fishes and tends to slow them down.

The correct answer is choice 4. That choice contains all of the essential ideas in the highlighted sentence. It is also the only choice that does not change the meaning of the sentence. It omits the fact that this is a "problem" and also that it "detracts from the streamlining" because that information is not essential to the meaning.

Choice 1 says that these fish have trouble opening their mouths while swimming, which is not true. Choice 2, that streamlining prevents fish from slowing down, may be true, but it is not mentioned in this sentence. The fish are slowed down when they open their mouths, which reduces streamlining. Choice 3, that streamlining slows the fishes' breathing, is also not mentioned.

- 8. **3** This is a Vocabulary question. The word being tested is *channel*. It is highlighted in the passage. The correct answer is choice 3, "direct." *Channel* here is used as a verb, meaning "move" or "push."
- 9. 2 This is a Factual Information question asking for specific information that can be found in the passage. The correct answer is choice 2, "make efficient use of water currents." Paragraph 8 explicitly states, "Perhaps most important of all to these and other fast swimmers is their ability to sense and make use of swirls and eddies (circular currents) in the water. They can glide past eddies that would slow them down and then gain extra thrust by 'pushing off'

the eddies. Scientists and engineers are beginning to study this ability of fishes in the hope of designing more efficient propulsion systems for ships." The other choices are not mentioned in connection with the performance of ships.

- 10. 3 This is a Factual Information question asking for specific information that can be found in paragraph 9. The correct answer is choice 3, "They can swim in waters that are much colder than their own bodies." That paragraph says, "A bluefin tuna in water of 7°C (45°F) can maintain a core temperature of over 25°C (77°F)." So it is clear that choice 3 is correct. Choice 1 is not stated in the paragraph. Choice 2 is contradicted by the paragraph. Choice 4 is true of billfish, not bluefin tuna.
- 11. 2 This is an Insert Text question. You can see the four black squares in paragraph 6 that represent the possible answer choices here. The last sentence of paragraph 5 is also reproduced below.

Again, supersonic jets have similar features.

■ Because they are always swimming, tunas simply have to open their mouths and water is forced in and over their gills. ■ Accordingly, they have lost most of the muscles that other fishes use to suck in water and push it past the gills. ■ In fact, tunas must swim to breathe. ■ They must also keep swimming to keep from sinking, since most have largely or completely lost the swim bladder, the gas-filled sac that helps most other fish remain buoyant.

The sentence provided, "Consequently, tunas do not need to suck in water," is best inserted at square 2. The sentence offers an explanation for the muscle loss described in the sentence that follows square 2 and is a result of the fact described in the preceding sentence, which says that because the fish are always swimming, they only have to open their mouths to suck in water. Thus if the provided sentence is inserted at square 2, it offers a logical bridge between cause and effect. The sentence makes no logical sense anywhere else.

12. This is a Fill in a Table question. It is completed correctly below. The correct choices for the "Reducing Water Resistance" column are 1, 4, and 5. Choices 2 and 7 belong in the "Increasing Thrust" column. Choices 3 and 6 should not be used in either column.

Directions: Complete the table below by indicating which features of fishes are associated in the passage with reducing water resistance and which are associated with increasing thrust. **This question is worth 3 points**.

Reducing Water Resistance	Increasing Thrust
 The absence of scales from most of the body Eyes that do not protrude Fins that are stiff, narrow, and smooth 	 The ability to take advantage of eddies A high, narrow tail with swept-back tips

Answer Choices

- The absence of scales from most of the body
- 2. The ability to take advantage of eddies
- The ability to feed and reproduce while swimming
- 4. Eyes that do not protrude

- 5. Fins that are stiff, narrow, and smooth
- 6. The habit of swimming with the mouth open
- 7. A high, narrow tail with swept-back tips

Correct Choices

- Choice 1: "The absence of scales from most of the body" belongs in the "Reducing Water Resistance" column because it is mentioned in paragraphs 3 and 5 as a factor that reduces water resistance.
- Choice 2: "The ability to take advantage of eddies" belongs in the "Increasing Thrust" column because it is mentioned in paragraph 8 as a characteristic that helps increase thrust.
- *Choice 4:* "Eyes that do not protrude" belongs in the "Reducing Water Resistance" column because it is mentioned in paragraph 3 as a factor that reduces water resistance.
- Choice 5: "Fins that are stiff, narrow, and smooth" belongs in the "Reducing Water Resistance" column because it is mentioned in paragraph 3 as a factor that reduces water resistance.
- Choice 7: "A high, narrow tail with swept-back tips" belongs in the "Increasing Thrust" column because it is mentioned in paragraph 8 as a characteristic that helps increase thrust.

Incorrect Choices

- *Choice 3:* "The ability to feed and reproduce while swimming" does not belong in the table because it is not mentioned in the passage in connection with either reducing water resistance or increasing thrust.
- *Choice 6:* "The habit of swimming with the mouth open" does not belong in the table because it is not mentioned in the passage in connection with either reducing water resistance or increasing thrust.

TOEFL iBT Practice Test 1 READING

Directions: This section measures your ability to understand academic passages in English.

The Reading section is divided into separately timed parts.

Most questions are worth 1 point, but the last question for each passage is worth more than 1 point. The directions for the last question indicate how many points you may receive.

You will now begin the Reading section. There are three passages in the section. You should allow **20 minutes** to read each passage and answer the questions about it. You should allow **60 minutes** to complete the entire section.

At the end of this Practice Test, you will find an answer key, information to help you determine your score, and explanations of the answers.

NINETEENTH-CENTURY POLITICS IN THE UNITED STATES

The development of the modern presidency in the United States began with Andrew Jackson, who swept to power in 1829 at the head of the Democratic Party and served until 1837. During his administration he immeasurably enlarged the power of the presidency. "The President is the direct representative of the American people," he lectured the Senate when it opposed him. "He was elected by the people, and is responsible to them." With this declaration, Jackson redefined the character of the presidential office and its relationship to the people.

During Jackson's second term, his opponents had gradually come together to form the Whig Party. Whigs and Democrats held different attitudes toward the changes brought about by the market, banks, and commerce. The Democrats tended to view society as a continuing conflict between "the people"—farmers, planters, and workers—and a set of greedy aristocrats. This "paper money aristocracy" of bankers and investors manipulated the banking system for their own profit, Democrats claimed, and sapped the nation's virtue by encouraging speculation and the desire for sudden, unearned wealth. The Democrats wanted the rewards of the market without sacrificing the features of a simple agrarian republic. They wanted the wealth that the market offered without the competitive, changing society; the complex dealing; the dominance of urban centers; and the loss of independence that came with it.

Whigs, on the other hand, were more comfortable with the market. For them, commerce and economic development were agents of civilization. Nor did the Whigs envision any conflict in society between farmers and workers on the one hand and businesspeople and bankers on the other. Economic growth would benefit everyone by raising national income and expanding opportunity. The government's responsibility was to provide a well-regulated economy that guaranteed opportunity for citizens of ability.

Whigs and Democrats differed not only in their attitudes toward the market but also about how active the central government should be in people's lives. Despite Andrew Jackson's inclination to be a strong President, Democrats as a rule believed in limited government. Government's role in the economy was to promote competition by destroying monopolies¹ and special privileges. In keeping with this philosophy of limited government, Democrats also rejected the idea that moral beliefs were the proper sphere of government action. Religion and politics, they believed, should be kept clearly separate, and they generally opposed humanitarian legislation.

The Whigs, in contrast, viewed government power positively. They believed that it should be used to protect individual rights and public liberty, and that it had a special role where individual effort was ineffective. By regulating the economy and competition, the government could ensure equal opportunity. Indeed, for Whigs the concept of government promoting the general welfare went beyond the economy. In particular, Whigs in the northern sections of the United States also believed that government power should be used to foster the moral welfare of the country. They were much more likely to favor social-reform legislation and aid to education.

In some ways the social makeup of the two parties was similar. To be competitive in winning votes, Whigs and Democrats both had to have significant support among farmers, the largest group in society, and workers. Neither party could win an election by appealing exclusively to the rich or the poor. The Whigs, however, enjoyed disproportionate strength among the business and commercial classes. Whigs appealed to planters who needed credit to finance their cotton and rice trade in the world market, to farmers who were eager to sell their surpluses, and to workers who wished to improve themselves. Democrats attracted farmers isolated from the market or uncomfortable with it, workers alienated from the emerging industrial system, and rising entrepreneurs who wanted to break monopolies and open the economy to newcomers like themselves. The Whigs were strongest in the towns, cities, and those rural areas that were fully integrated into the market economy, whereas Democrats dominated areas of semisubsistence farming that were more isolated and languishing economically.

1. Monopolies: Companies or individuals that exclusively own or control commercial enterprises with no competitors

2

The development of the modern presidency in the United States began with Andrew Jackson, who swept to power in 1829 at the head of the Democratic Party and served until 1837. During his administration he immeasurably enlarged the power of the presidency. "The President is the direct representative of the American people," he lectured the Senate when it opposed him. "He was elected by the people, and is responsible to them." With this declaration, Jackson redefined the character of the presidential office and its relationship to the people.

Directions: Mark your answer by filling in the oval next to your choice.

1.	The word '	'immeasurably"	in the
	passage is	closest in meani	ing to

- frequently
- greatly
- rapidly
- reportedly

- 2. According to paragraph 1, the presidency of Andrew Jackson was especially significant for which of the following reasons?
- The President granted a portion of his power to the Senate.
- The President began to address the Senate on a regular basis.
- It was the beginning of the modern presidency in the United States.
- It was the first time that the Senate had been known to oppose the President.

During Jackson's second term, his opponents had gradually come together to form the Whig Party. Whigs and Democrats held different attitudes toward the changes brought about by the market, banks, and commerce. The Democrats tended to view society as a continuing conflict between "the people"—farmers, planters, and workers—and a set of greedy aristocrats. This "paper money aristocracy" of bankers and investors manipulated the banking system for their own profit, Democrats claimed, and sapped the nation's virtue by encouraging speculation and the desire for sudden, unearned wealth. The Democrats wanted the rewards of the market without sacrificing the features of a simple agrarian republic. They wanted the wealth that the market offered without the competitive, changing society; the complex dealing; the dominance of urban centers; and the loss of independence that came with it.

3.	The author mentions '	'bankers and investors"	' in the passage	as an example of
	which of the following	?		

- The Democratic Party's main source of support
- The people that Democrats claimed were unfairly becoming rich
- The people most interested in a return to a simple agrarian republic
- One of the groups in favor of Andrew Jackson's presidency

ARAGRAPH

Whigs, on the other hand, were more comfortable with the market. For them, commerce and economic development were agents of civilization. Nor did the Whigs envision any conflict in society between farmers and workers on the one hand and businesspeople and bankers on the other. Economic growth would benefit everyone by raising national income and expanding opportunity. The government's responsibility was to provide a well-regulated economy that guaranteed opportunity for citizens of ability.

4.	According to paragraph 3, Whigs believed that commerce and economic development would have which of the following effects on society?
0	They would promote the advancement of society as a whole. They would cause disagreements between Whigs and Democrats. They would supply new positions for Whig Party members. They would prevent conflict between farmers and workers.
5.	According to paragraph 3, which of the following describes the Whig Party's view of the role of government?
0	To regulate the continuing conflict between farmers and businesspeople To restrict the changes brought about by the market To maintain an economy that allowed all capable citizens to benefit To reduce the emphasis on economic development

PARAGRAPH

Whigs and Democrats differed not only in their attitudes toward the market but also about how active the central government should be in people's lives. Despite Andrew Jackson's inclination to be a strong President, Democrats as a rule believed in limited government. Government's role in the economy was to promote competition by destroying monopolies¹ and special privileges. In keeping with this philosophy of limited government, Democrats also rejected the idea that moral beliefs were the proper sphere of government action. Religion and politics, they believed, should be kept clearly separate, and they generally opposed humanitarian legislation.

1. Monopolies: Companies or individuals that exclusively own or control commercial enterprises with no competitors

6.	The word "inclination" in the passage is closest in meaning to
\bigcirc	argument
\bigcirc	tendency
\bigcirc	example
\bigcirc	warning
7.	According to paragraph 4, a Democrat would be most likely to support government action in which of the following areas?
\bigcirc	Creating a state religion
\bigcirc	Supporting humanitarian legislation
\bigcirc	Destroying monopolies
\bigcirc	Recommending particular moral beliefs

PARAGRAPH 5

The Whigs, in contrast, viewed government power positively. They believed that it should be used to protect individual rights and public liberty, and that it had a special role where individual effort was ineffective. By regulating the economy and competition, the government could ensure equal opportunity. Indeed, for Whigs the concept of government promoting the general welfare went beyond the economy. In particular, Whigs in the northern sections of the United States also believed that government power should be used to foster the moral welfare of the country. They were much more likely to favor social-reform legislation and aid to education.

ŏ.	The word concept in the passage is closest in meaning to
0	power reality difficulty idea
9.	Which of the following can be inferred from paragraph 5 about variations in political beliefs within the Whig Party?
\bigcirc	They were focused on issues of public liberty.
\bigcirc	They caused some members to leave the Whig Party.
\bigcirc	They were unimportant to most Whigs.
\bigcirc	They reflected regional interests.

In some ways the social makeup of the two parties was similar. To be competitive in winning votes, Whigs and Democrats both had to have significant support among farmers, the largest group in society, and workers. Neither party could win an election by appealing exclusively to the rich or the poor. The Whigs, however, enjoyed disproportionate strength among the business and commercial classes. Whigs appealed to planters who needed credit to finance their cotton and rice trade in the world market, to farmers who were eager to sell their surpluses, and to workers who wished to improve themselves. Democrats attracted farmers isolated from the market or uncomfortable with it, workers alienated from the emerging industrial system, and rising entrepreneurs who wanted to break monopolies and open the economy to newcomers like themselves. The Whigs were strongest in the towns, cities, and those rural areas that were fully integrated into the market economy, whereas Democrats dominated areas of semisubsistence farming that were more isolated and languishing economically.

10.	According to paragraph 6, the Democrats were supported by all of the following groups EXCEPT
0 0 0 0	workers unhappy with the new industrial system planters involved in international trade rising entrepreneurs individuals seeking to open the economy to newcomers
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.
\bigcirc	Whigs were able to attract support only in the wealthiest parts of the economy because Democrats dominated in other areas.
\bigcirc	Whig and Democratic areas of influence were naturally split between urban and rural areas, respectively.
\bigcirc	The semisubsistence farming areas dominated by Democrats became increasingly isolated by the Whigs' control of the market economy.
0	The Democrats' power was greatest in poorer areas, while the Whigs were strongest in those areas where the market was already fully operating.

During Jackson's second term, his opponents had gradually come together to form the Whig Party.
Whigs and Democrats held different attitudes toward the changes brought about by the market, banks, and commerce.
The Democrats tended to view society as a continuing conflict between "the people"—farmers, planters, and workers—and a set of greedy aristocrats.
This "paper money aristocracy" of bankers and investors manipulated the banking system for their own profit, Democrats claimed, and sapped the nation's virtue by encouraging speculation and the desire for sudden, unearned wealth.
The Democrats wanted the rewards of the market without sacrificing the features of a simple agrarian republic. They wanted the wealth that the market offered without the competitive, changing society; the complex dealing; the dominance of urban centers; and the loss of independence that came with it.

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

This new party argued against the policies of Jackson and his party in a number of important areas, beginning with the economy.

Where would the sentence best fit?

- During Jackson's second term, his opponents had gradually come together to form the Whig Party. This new party argued against the policies of Jackson and his party in a number of important areas, beginning with the economy. Whigs and Democrats held different attitudes toward the changes brought about by the market, banks, and commerce. The Democrats tended to view society as a continuing conflict between "the people"—farmers, planters, and workers—and a set of greedy aristocrats. This "paper money aristocracy" of bankers and investors manipulated the banking system for their own profit, Democrats claimed, and sapped the nation's virtue by encouraging speculation and the desire for sudden, unearned wealth. The Democrats wanted the rewards of the market without sacrificing the features of a simple agrarian republic. They wanted the wealth that the market offered without the competitive, changing society; the complex dealing; the dominance of urban centers; and the loss of independence that came with it.
- During Jackson's second term, his opponents had gradually come together to form the Whig Party. Whigs and Democrats held different attitudes toward the changes brought about by the market, banks, and commerce. This new party argued against the policies of Jackson and his party in a number of important areas, beginning with the economy. The Democrats tended to view society as a continuing conflict between "the people"—farmers, planters, and workers—and a set of greedy aristocrats. This "paper money aristocracy" of bankers and investors manipulated the banking system for their own profit, Democrats claimed, and sapped the nation's virtue by encouraging speculation and the desire for sudden, unearned wealth. The Democrats wanted the rewards of the market

without sacrificing the features of a simple agrarian republic. They wanted the wealth that the market offered without the competitive, changing society; the complex dealing; the dominance of urban centers; and the loss of independence that came with it.

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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**.

The political system of the United States in the mid-nineteenth century was strongly influenced by the social and economic circumstances of the time.

Answer Choices

- The Democratic and Whig Parties developed in response to the needs of competing economic and political constituencies.
- During Andrew Jackson's two terms as President, he served as leader of both the Democratic and Whig Parties.
- 3. The Democratic Party primarily represented the interests of the market, banks, and commerce.

- 4. In contrast to the Democrats, the Whigs favored government aid for education.
- A fundamental difference between Whigs and Democrats involved the importance of the market in society.
- The role of government in the lives of the people was an important political distinction between the two parties.

THE EXPRESSION OF EMOTIONS

Joy and sadness are experienced by people in all cultures around the world, but how can we tell when other people are happy or despondent? It turns out that the expression of many emotions may be universal. Smiling is apparently a universal sign of friendliness and approval. Baring the teeth in a hostile way, as noted by Charles Darwin in the nineteenth century, may be a universal sign of anger. As the originator of the theory of evolution, Darwin believed that the universal recognition of facial expressions would have survival value. For example, facial expressions could signal the approach of enemies (or friends) in the absence of language.

Most investigators concur that certain facial expressions suggest the same emotions in all people. Moreover, people in diverse cultures recognize the emotions manifested by the facial expressions. In classic research Paul Ekman took photographs of people exhibiting the emotions of anger, disgust, fear, happiness, and sadness. He then asked people around the world to indicate what emotions were being depicted in them. Those queried ranged from European college students to members of the Fore, a tribe that dwells in the New Guinea highlands. All groups, including the Fore, who had almost no contact with Western culture, agreed on the portrayed emotions. The Fore also displayed familiar facial expressions when asked how they would respond if they were the characters in stories that called for basic emotional responses. Ekman and his colleagues more recently obtained similar results in a study of ten cultures in which participants were permitted to report that multiple emotions were shown by facial expressions. The participants generally agreed on which two emotions were being shown and which emotion was more intense.

Psychological researchers generally recognize that facial expressions reflect emotional states. In fact, various emotional states give rise to certain patterns of electrical activity in the facial muscles and in the brain. The facial-feedback hypothesis argues, however, that the causal relationship between emotions and facial expressions can also work in the opposite direction. According to this hypothesis, signals from the facial muscles ("feedback") are sent back to emotion centers of the brain, and so a person's facial expression can influence that person's emotional state. Consider Darwin's words: "The free expression by outward signs of an emotion intensifies it. On the other hand, the repression, as far as possible, of all outward signs softens our emotions." Can smiling give rise to feelings of goodwill, for example, and frowning to anger?

Psychological research has given rise to some interesting findings concerning the facial-feedback hypothesis. Causing participants in experiments to smile, for example, leads them to report more positive feelings and to rate cartoons (humorous drawings of people or situations) as being more humorous. When they are caused to frown, they rate cartoons as being more aggressive.

What are the possible links between facial expressions and emotion? One link is arousal, which is the level of activity or preparedness for activity in an organism. Intense contraction of facial muscles, such as those used in signifying fear, heightens arousal. Self-perception of heightened arousal then leads to heightened emotional activity. Other links may involve changes in brain temperature and the release of neurotransmitters (substances that transmit nerve impulses). The contraction of facial muscles both influences the internal emotional state and reflects it. Ekman has found

that the so-called Duchenne smile, which is characterized by "crow's-feet" wrinkles around the eyes and a subtle drop in the eye cover fold so that the skin above the eye moves down slightly toward the eyeball, can lead to pleasant feelings.

Ekman's observation may be relevant to the British expression "keep a stiff upper lip" as a recommendation for handling stress. It might be that a "stiff" lip suppresses emotional response—as long as the lip is not quivering with fear or tension. But when the emotion that leads to stiffening the lip is more intense, and involves strong muscle tension, facial feedback may heighten emotional response.

1. "Keep a stiff upper lip": Avoid showing emotions in difficult situations

Joy and sadness are experienced by people in all cultures around the world, but how can we tell when other people are happy or despondent? It turns out that the expression of many emotions may be universal. Smiling is apparently a universal sign of friendliness and approval. Baring the teeth in a hostile way, as noted by Charles Darwin in the nineteenth century, may be a universal sign of anger. As the originator of the theory of evolution, Darwin believed that the universal recognition of facial expressions would have survival value. For example, facial expressions could signal the approach of enemies (or friends) in the absence of language.

Directions: Mark your answer by filling in the oval next to your choice.

1.	The word "despondent" in the passage is closest in meaning to
\bigcirc	curious
\bigcirc	unhappy
\bigcirc	thoughtful
\bigcirc	uncertain
2.	The author mentions "Baring the teeth in a hostile way" in order to
\bigcirc	differentiate one possible meaning of a particular facial expression from
	other meanings of it
\bigcirc	support Darwin's theory of evolution
\bigcirc	provide an example of a facial expression whose meaning is widely
	understood
\bigcirc	contrast a facial expression that is easily understood with other facial
	expressions

Most investigators concur that certain facial expressions suggest the same emotions in all people. Moreover, people in diverse cultures recognize the emotions manifested by the facial expressions. In classic research Paul Ekman took photographs of people exhibiting the emotions of anger, disgust, fear, happiness, and sadness. He then asked people around the world to indicate what emotions were being depicted in them. Those queried ranged from European college students to members of the Fore, a tribe that dwells in the New Guinea highlands. All groups, including the Fore, who had almost no contact with Western culture, agreed on the portrayed emotions. The Fore also displayed familiar facial expressions when asked how they would respond if they were the characters in stories that called for basic emotional responses. Ekman and his colleagues more recently obtained similar results in a study of ten cultures in which participants were permitted to report that multiple emotions were shown by facial expressions. The participants generally agreed on which two emotions were being shown and which emotion was more intense.

3. The word "concur" in the passage is closest in meaning to

\bigcirc	estimate
\bigcirc	agree
\bigcirc	expect
\bigcirc	understand
4.	The word "them" in the passage refers to
\bigcirc	emotions
\bigcirc	people
\bigcirc	photographs
\bigcirc	cultures
5.	According to paragraph 2, which of the following was true of the Fore people of New Guinea?
\bigcirc	They did not want to be shown photographs.
\bigcirc	They were famous for their storytelling skills.
\bigcirc	They knew very little about Western culture.
\bigcirc	They did not encourage the expression of emotions.
6.	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.
0	The Fore's facial expressions indicated their unwillingness to pretend to be story characters.
0	The Fore were asked to display familiar facial expressions when they told their stories.
0	The Fore exhibited the same relationship of facial expressions and basic emotions that is seen in Western culture when they acted out stories.
0	The Fore were familiar with the facial expressions and basic emotions of characters in stories.

Psychological researchers generally recognize that facial expressions reflect emotional states. In fact, various emotional states give rise to certain patterns of electrical activity in the facial muscles and in the brain. The facial-feedback hypothesis argues, however, that the causal relationship between emotions and facial expressions can also work in the opposite direction. According to this hypothesis, signals from the facial muscles ("feedback") are sent back to emotion centers of the brain, and so a person's facial expression can influence that person's emotional state. Consider Darwin's words: "The free expression by outward signs of an emotion intensifies it. On the other hand, the repression, as far as possible, of all outward signs softens our emotions." Can smiling give rise to feelings of goodwill, for example, and frowning to anger?

7.	According to the passage, what did Darwin believe would happen to
	human emotions that were not expressed?

- They would become less intense.
- They would last longer than usual.
- They would cause problems later.
- They would become more negative.

Psychological research has given rise to some interesting findings concerning the facial-feedback hypothesis. Causing participants in experiments to smile, for example, leads them to report more positive feelings and to rate cartoons (humorous drawings of people or situations) as being more humorous. When they are caused to frown, they rate cartoons as being more aggressive.

8.	According to the passage, research involving which of the following
	supported the "facial-feedback hypothesis"?

- The reactions of people in experiments to cartoons
- The tendency of people in experiments to cooperate
- The release of neurotransmitters by people during experiments
- The long-term effects of repressing emotions
- 9. The word "rate" in the passage is closest in meaning to
- judge
- reject
- O draw
- want

Ekman's observation may be relevant to the British expression "keep a stiff upper lip" as a recommendation for handling stress. It might be that a "stiff" lip suppresses emotional response—as long as the lip is not quivering with fear or tension. But when the emotion that leads to stiffening the lip is more intense, and involves strong muscle tension, facial feedback may heighten emotional response.

	read and the passage is elected in incaming to
\bigcirc	contradictory
\bigcirc	confusing
\bigcirc	dependent
\bigcirc	applicable
11.	According to the passage, stiffening the upper lip may have which of the following effects?
\bigcirc	It first suppresses stress, then intensifies it.
\bigcirc	It may cause fear and tension in those who see it.
\bigcirc	It can damage the lip muscles.
\bigcirc	It may either heighten or reduce emotional response.

10. The word "relevant" in the passage is closest in meaning to

PARAGRAPH 2 Most investigators concur that certain facial expressions suggest the same emotions in all people. ■ Moreover, people in diverse cultures recognize the emotions manifested by the facial expressions. ■ In classic research Paul Ekman took photographs of people exhibiting the emotions of anger, disgust, fear, happiness, and sadness. ■ He then asked people around the world to indicate what emotions were being depicted in them. Those queried ranged from European college students to members of the Fore, a tribe that dwells in the New Guinea highlands. All groups, including the Fore, who had almost no contact with Western culture, agreed on the portrayed emotions. The Fore also displayed familiar facial expressions when asked how they would respond if they were the characters in stories that called for basic emotional responses. Ekman and his colleagues more recently obtained similar results in a study of ten cultures in which participants were permitted to report that multiple emotions were shown by facial expressions. The participants generally agreed on which two emotions were being shown and which emotion was more intense.

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

This universality in the recognition of emotions was demonstrated by using rather simple methods.

Where would the sentence best fit?

 This universality in the recognition of emotions was demonstrated by using rather simple methods. Most investigators concur that certain facial expressions suggest the same emotions in all people. ■ Moreover, people in diverse cultures recognize the emotions manifested by the facial expressions. ■ In classic research Paul Ekman took photographs of people exhibiting the emotions of anger, disgust, fear, happiness, and sadness. ■ He then asked people around the world to indicate what emotions were being depicted in them. Those queried ranged from European college students to members of the Fore, a tribe that dwells in the New Guinea highlands. All groups, including the Fore, who had almost no contact with Western culture, agreed on the portrayed emotions. The Fore also displayed familiar facial expressions when asked how they would respond if they were the characters in stories that called for basic emotional responses. Ekman and his colleagues more recently obtained similar results in a study of ten cultures in which participants were permitted to report that multiple emotions were shown by facial expressions. The participants generally agreed on which two emotions were being shown and which emotion was more intense.

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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**.

Psychological research seems to confirm that people associate particular facial expressions with the same emotions across cultures.

Answer Choices

- Artificially producing the Duchenne smile can cause a person to have pleasant feelings.
- Facial expressions and emotional states interact with each other through a variety of feedback mechanisms.
- People commonly believe that they can control their facial expressions so that their true emotions remain hidden.

- 4. A person's facial expression may reflect the person's emotional state.
- Ekman argued that the ability to accurately recognize the emotional content of facial expressions was valuable for human beings.
- Facial expressions that occur as a result of an individual's emotional state may themselves feed back information that influences the person's emotions.

GEOLOGY AND LANDSCAPE

Most people consider the landscape to be unchanging, but Earth is a dynamic body, and its surface is continually altering—slowly on the human time scale, but relatively rapidly when compared to the great age of Earth (about 4.5 billion years). There are two principal influences that shape the terrain: constructive processes such as uplift, which create new landscape features, and destructive forces such as erosion, which gradually wear away exposed landforms.

Hills and mountains are often regarded as the epitome of permanence, successfully resisting the destructive forces of nature, but in fact they tend to be relatively short-lived in geological terms. As a general rule, the higher a mountain is, the more recently it was formed; for example, the high mountains of the Himalayas are only about 50 million years old. Lower mountains tend to be older, and are often the eroded relics of much higher mountain chains. About 400 million years ago, when the present-day continents of North America and Europe were joined, the Caledonian mountain chain was the same size as the modern Himalayas. Today, however, the relics of the Caledonian orogeny (mountain-building period) exist as the comparatively low mountains of Greenland, the northern Appalachians in the United States, the Scottish Highlands, and the Norwegian coastal plateau.

The Earth's crust is thought to be divided into huge, movable segments, called plates, which float on a soft plastic layer of rock. Some mountains were formed as a result of these plates crashing into each other and forcing up the rock at the plate margins. In this process, sedimentary rocks that originally formed on the seabed may be folded upwards to altitudes of more than 26,000 feet. Other mountains may be raised by earthquakes, which fracture the Earth's crust and can displace enough rock to produce block mountains. A third type of mountain may be formed as a result of volcanic activity which occurs in regions of active fold mountain belts, such as in the Cascade Range of western North America. The Cascades are made up of lavas and volcanic materials. Many of the peaks are extinct volcanoes.

Whatever the reason for mountain formation, as soon as land rises above sea level it is subjected to destructive forces. The exposed rocks are attacked by the various weather processes and gradually broken down into fragments, which are then carried away and later deposited as sediments. Thus, any landscape represents only a temporary stage in the continuous battle between the forces of uplift and those of erosion.

The weather, in its many forms, is the main agent of erosion. Rain washes away loose soil and penetrates cracks in the rocks. Carbon dioxide in the air reacts with the rainwater, forming a weak acid (carbonic acid) that may chemically attack the rocks. The rain seeps underground and the water may reappear later as springs. These springs are the sources of streams and rivers, which cut through the rocks and carry away debris from the mountains to the lowlands.

Under very cold conditions, rocks can be shattered by ice and frost. Glaciers may form in permanently cold areas, and these slowly moving masses of ice cut out valleys, carrying with them huge quantities of eroded rock debris. In dry areas the wind is the principal agent of erosion. It carries fine particles of sand, which bombard exposed rock surfaces, thereby wearing them into yet more sand. Even living things contribute to the formation of landscapes. Tree roots force their way into cracks in

rocks and, in so doing, speed their splitting. In contrast, the roots of grasses and other small plants may help to hold loose soil fragments together, thereby helping to prevent erosion by the wind.

Most people consider the landscape to be unchanging, but Earth is a dynamic body, and its surface is continually altering—slowly on the human time scale, but relatively rapidly when compared to the great age of Earth (about 4.5 billion years). There are two principal influences that shape the terrain: constructive processes such as uplift, which create new landscape features, and destructive forces such as erosion, which gradually wear away exposed landforms.

Directions: Mark your answer by filling in the oval next to your choice.

1.	According to paragraph 1, which of the following statements is true of changes in Earth's landscape?
0	They occur more often by uplift than by erosion. They occur only at special times. They occur less frequently now than they once did. They occur quickly in geological terms.
2.	The word "relatively" in the passage is closest in meaning to
\bigcirc	unusually
\bigcirc	comparatively
\bigcirc	occasionally
\bigcirc	naturally

Hills and mountains are often regarded as the epitome of permanence, successfully resisting the destructive forces of nature, but in fact they tend to be relatively short-lived in geological terms. As a general rule, the higher a mountain is, the more recently it was formed; for example, the high mountains of the Himalayas are only about 50 million years old. Lower mountains tend to be older, and are often the eroded relics of much higher mountain chains. About 400 million years ago, when the present-day continents of North America and Europe were joined, the Caledonian mountain chain was the same size as the modern Himalayas. Today, however, the relics of the Caledonian orogeny (mountain-building period) exist as the comparatively low mountains of Greenland, the northern Appalachians in the United States, the Scottish Highlands, and the Norwegian coastal plateau.

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.
When they are relatively young, hills and mountains successfully resist the destructive forces of nature.
Although they seem permanent, hills and mountains exist for a relatively short period of geological time.
Hills and mountains successfully resist the destructive forces of nature, but only for a short time.
Hills and mountains resist the destructive forces of nature better than other types of landforms.
Which of the following can be inferred from paragraph 2 about the mountains of the Himalayas?
Their current height is not an indication of their age. At present, they are much higher than the mountains of the Caledonian range. They were a uniform height about 400 million years ago. They are not as high as the Caledonian mountains were 400 million years ago.
The word "relics" in the passage is closest in meaning to
resemblances regions remains restorations

The Earth's crust is thought to be divided into huge, movable segments, called plates, which float on a soft plastic layer of rock. Some mountains were formed as a result of these plates crashing into each other and forcing up the rock at the plate margins. In this process, sedimentary rocks that originally formed on the seabed may be folded upwards to altitudes of more than 26,000 feet. Other mountains may be raised by earthquakes, which fracture the Earth's crust and can displace enough rock to produce block mountains. A third type of mountain may be formed as a result of volcanic activity which occurs in regions of active fold mountain belts, such as in the Cascade Range of western North America. The Cascades are made up of lavas and volcanic materials. Many of the peaks are extinct volcanoes.

6.	According to paragraph 3, one cause of mountain formation is the
\bigcirc	effect of climatic change on sea level
$\overline{}$	

slowing down of volcanic activity

of force of Earth's crustal plates hitting each other

O replacement of sedimentary rock with volcanic rock

PARAGRAPH 5

The weather, in its many forms, is the main agent of erosion. Rain washes away loose soil and penetrates cracks in the rocks. Carbon dioxide in the air reacts with the rainwater, forming a weak acid (carbonic acid) that may chemically attack the rocks. The rain seeps underground and the water may reappear later as springs. These springs are the sources of streams and rivers, which cut through the rocks and carry away debris from the mountains to the lowlands.

7.	Why	doe	s the	author	mention	"Carbon	dioxide"	in the	passage?
	_								

To explain the origin of a chemical that can erode rocks
 To contrast carbon dioxide with carbonic acid

O To give an example of how rainwater penetrates soil

 \bigcirc To argue for the desirability of preventing erosion

8. The word "seeps" in the passage is closest in meaning to

dries gradually

flows slowly

freezes quickly

warms slightly

Under very cold conditions, rocks can be shattered by ice and frost. Glaciers may form in permanently cold areas, and these slowly moving masses of ice cut out valleys, carrying with them huge quantities of eroded rock debris. In dry areas the wind is the principal agent of erosion. It carries fine particles of sand, which bombard exposed rock surfaces, thereby wearing them into yet more sand. Even living things contribute to the formation of landscapes. Tree roots force their way into cracks in rocks and, in so doing, speed their splitting. In contrast, the roots of grasses and other small plants may help to hold loose soil fragments together, thereby helping to prevent erosion by the wind.

			•	•		
\bigcirc	cold areas					
\bigcirc	masses of id	ce				
\bigcirc	valleys					

9. The word "them" in the passage refers to

- 10. According to paragraph 6, which of the following is both a cause and result
- of erosion?
- Glacial activity
- Rock debris

orock debris

- Tree roots
- Sand

Under very cold conditions, rocks can be shattered by ice and frost. Glaciers may form in permanently cold areas, and these slowly moving masses of ice cut out valleys, carrying with them huge quantities of eroded rock debris. ■ In dry areas the wind is the principal agent of erosion. ■ It carries fine particles of sand, which bombard exposed rock surfaces, thereby wearing them into yet more sand. ■ Even living things contribute to the formation of landscapes. ■ Tree roots force their way into cracks in rocks and, in so doing, speed their splitting. In contrast, the roots of grasses and other small plants may help to hold loose soil fragments together, thereby helping to prevent erosion by the wind.

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

Under different climatic conditions, another type of destructive force contributes to erosion.

Where would the sentence best fit?

 Under very cold conditions, rocks can be shattered by ice and frost. Glaciers may form in permanently cold areas, and these slowly moving masses of ice cut out valleys, carrying with them huge quantities of eroded rock debris. Under different climatic conditions, another type of destructive force contributes to erosion. In dry areas the wind is the principal agent of erosion. ■ It carries fine particles of sand, which bombard exposed rock surfaces, thereby wearing them into yet more sand. ■ Even living things contribute to the formation of landscapes. ■ Tree roots force their way into cracks in rocks and, in so doing, speed their splitting. In contrast, the roots of grasses and other small plants may help to hold loose soil fragments together, thereby helping to prevent erosion by the wind.

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12. **Directions:** Three of the answer choices below are used in the passage to illustrate constructive processes, and two are used to illustrate destructive processes. Complete the table by matching appropriate answer choices to the processes they are used to illustrate. **This question is worth 3 points.**

Constructive Processes	Destructive Processes
•	•
•	•
•	

Answer Choices

- 1. Collision of Earth's crustal plates
- 2. Separation of continents
- 3. Wind-driven sand
- 4. Formation of grass roots in soil
- 5. Earthquakes
- 6. Volcanic activity
- 7. Weather processes

STOP. This is the end of the Reading section of TOEFL iBT Practice Test 1.

TOEFL iBT Practice Test 2 READING

Directions: This section measures your ability to understand academic passages in English.

The Reading section is divided into separately timed parts.

Most questions are worth 1 point, but the last question for each passage is worth more than 1 point. The directions for the last question indicate how many points you may receive.

You will now begin the Reading section. There are three passages in the section. You should allow **20 minutes** to read each passage and answer the questions about it. You should allow **60 minutes** to complete the entire section.

At the end of this Practice Test you will find an answer key, information to help you determine your score, and explanations of the answers.

FEEDING HABITS OF EAST AFRICAN HERBIVORES

Buffalo, zebras, wildebeests, topi, and Thomson's gazelles live in huge groups that together make up some 90 percent of the total weight of mammals living on the Serengeti Plain of East Africa. They are all herbivores (plant-eating animals), and they all appear to be living on the same diet of grasses, herbs, and small bushes. This appearance, however, is illusory. When biologist Richard Bell and his colleagues analyzed the stomach contents of four of the five species (they did not study buffalo), they found that each species was living on a different part of the vegetation. The different vegetational parts differ in their food qualities: lower down, there are succulent, nutritious leaves; higher up are the harder stems. There are also sparsely distributed, highly nutritious fruits, and Bell found that only the Thomson's gazelles eat much of these. The other three species differ in the proportion of lower leaves and higher stems that they eat: zebras eat the most stem matter, wildebeests eat the most leaves, and topi are intermediate.

How are we to understand their different feeding preferences? The answer lies in two associated differences among the species, in their digestive systems and body sizes. According to their digestive systems, these herbivores can be divided into two categories: the nonruminants (such as the zebra, which has a digestive system like a horse) and the ruminants (such as the wildebeest, topi, and gazelle, which are like the cow). Nonruminants cannot extract much energy from the hard parts of a plant; however, this is more than made up for by the fast speed at which food passes through

their guts. Thus, when there is only a short supply of poor-quality food, the wildebeest, topi, and gazelle enjoy an advantage. They are ruminants and have a special structure (the rumen) in their stomachs, which contains microorganisms that can break down the hard parts of plants. Food passes only slowly through the ruminant's gut because ruminating—digesting the hard parts—takes time. The ruminant continually regurgitates food from its stomach back to its mouth to chew it up further (that is what a cow is doing when "chewing cud"). Only when it has been chewed up and digested almost to a liquid can the food pass through the rumen and on through the gut. Larger particles cannot pass through until they have been chewed down to size. Therefore, when food is in short supply, a ruminant can last longer than a nonruminant because it can derive more energy out of the same food. The difference can partially explain the eating habits of the Serengeti herbivores. The zebra chooses areas where there is more low-quality food. It migrates first to unexploited areas and chomps the abundant low-quality stems before moving on. It is a fast-in/fast-out feeder, relying on a high output of incompletely digested food. By the time the wildebeests (and other ruminants) arrive, the grazing and trampling of the zebras will have worn the vegetation down. As the ruminants then set to work, they eat down to the lower, leafier parts of the vegetation. All of this fits in with the differences in stomach contents with which we began.

The other part of the explanation is body size. Larger animals require more food than smaller animals, but smaller animals have a higher metabolic rate. Smaller animals can therefore live where there is less food, provided that such food is of high energy content. That is why the smallest of the herbivores, Thomson's gazelle, lives on fruit that is very nutritious but too thin on the ground to support a larger animal. By contrast, the large zebra lives on the masses of low-quality stem material.

The differences in feeding preferences lead, in turn, to differences in migratory habits. The wildebeests follow, in their migration, the pattern of local rainfall. The other species do likewise. But when a new area is fueled by rain, the mammals migrate toward it in a set order to exploit it. The larger, less fastidious feeders, the zebras, move in first; the choosier, smaller wildebeests come later; and the smallest species of all, Thomson's gazelle, arrives last. The later species all depend on the preparations of the earlier one, for the actions of the zebra alter the vegetation to suit the stomachs of the wildebeest, topi, and gazelle.

Buffalo, zebras, wildebeests, topi, and Thomson's gazelles live in huge groups that together make up some 90 percent of the total weight of mammals living on the Serengeti Plain of East Africa. They are all herbivores (plant-eating animals), and they all appear to be living on the same diet of grasses, herbs, and small bushes. This appearance, however, is illusory. When biologist Richard Bell and his colleagues analyzed the stomach contents of four of the five species (they did not study buffalo), they found that each species was living on a different part of the vegetation. The different vegetational parts differ in their food qualities: lower down, there are succulent, nutritious leaves; higher up are the harder stems. There are also sparsely distributed, highly nutritious fruits, and Bell found that only the Thomson's gazelles eat much of these. The other three species differ in the proportion of lower leaves and higher stems that they eat: zebras eat the most stem matter, wildebeests eat the most leaves, and topi are intermediate.

Directions: Mark your answer by filling in the oval next to your choice.

1.	The word "illusory" in the passage is closest in meaning to
\bigcirc	definite
\bigcirc	illuminating
\bigcirc	misleading
\bigcirc	exceptional
2.	The word "sparsely" in the passage is closest in meaning to
\bigcirc	widely
\bigcirc	thinly
\bigcirc	clearly
\bigcirc	freshly
3.	Which of the following questions about Richard Bell's research is NOT answered in paragraph 1?
\bigcirc	Which of the herbivores studied is the only one to eat much fruit?
\bigcirc	Which part of the plants do wildebeests prefer to eat?
\bigcirc	Where did the study of herbivores' eating habits take place?
\bigcirc	Why were buffalo excluded from the research study?

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- 4. The word "associated" in the passage is closest in meaning to
- obvious
- significant
- expected
- connected

- 5. The author mentions the cow and the horse in paragraph 2 in order to
- distinguish the functioning of their digestive systems from those of East African mammals
- emphasize that their relatively large body size leads them to have feeding practices similar to those of East African mammals
- illustrate differences between ruminants and nonruminants through the use of animals likely to be familiar to most readers
- emphasize similarities between the diets of cows and horses and the diets of East African mammals

6. According to paragraph 2, which 8. According to paragraph 2, all of the of the following herbivores has to following are true of East African eat large quantities of plant stems gazelles EXCEPT: because it gains relatively little They digest their food very quickly. energy from each given quantity of Microorganisms help them digest this food? their food. The gazelle They are unable to digest large food The wildebeest particles unless these are chewed The zebra down considerably. ○ The topi They survive well even if food supplies are not abundant. 7. Paragraph 2 suggests that which of the following is one of the most important factors in determining differences in feeding preferences of East African herbivores? The availability of certain foods The differences in stomach structure The physical nature of vegetation in the environment The ability to migrate when food supplies are low

PARAGRAPH 3

The other part of the explanation is body size. Larger animals require more food than smaller animals, but smaller animals have a higher metabolic rate. Smaller animals can therefore live where there is less food, provided that such food is of high energy content. That is why the smallest of the herbivores, Thomson's gazelle, lives on fruit that is very nutritious but too thin on the ground to support a larger animal. By contrast, the large zebra lives on the masses of low-quality stem material.

- 9. The phrase "provided that" in the passage is closest in meaning toas long asunless
- as ifeven though

The differences in feeding preferences lead, in turn, to differences in migratory habits. The wildebeests follow, in their migration, the pattern of local rainfall. The other species do likewise. But when a new area is fueled by rain, the mammals migrate toward it in a set order to exploit it. The larger, less fastidious feeders, the zebras, move in first; the choosier, smaller wildebeests come later; and the smallest species of all, Thomson's gazelle, arrives last. The later species all depend on the preparations of the earlier one, for the actions of the zebra alter the vegetation to suit the stomachs of the wildebeest, topi, and gazelle.

10	. The word "fastidious" in the passage is closest in meaning to	12.	According to the passage, which of the following is true of wildebeests?
0	rapid determined	0	They eat more stem matter than zebras do.
0	flexible demanding	0	They are able to digest large food particles if the food is of a high quality.
11	. According to paragraph 4, which of the following mammals exhibits a feeding behavior that is beneficial to the other herbivores that share the same habitat?		They tend to choose feeding areas in which the vegetation has been worn down. They are likely to choose low-quality food to eat in periods when the
0	Topi Zebra		quantity of rainfall is low.
	Wildebeest		
	Gazelle		

The differences in feeding preferences lead, in turn, to differences in migratory habits. ■ The wildebeests follow, in their migration, the pattern of local rainfall. ■ The other species do likewise. ■ But when a new area is fueled by rain, the mammals migrate toward it in a set order to exploit it. ■ The larger, less fastidious feeders, the zebras, move in first; the choosier, smaller wildebeests come later; and the smallest species of all, Thomson's gazelle, arrives last. The later species all depend on the preparations of the earlier one, for the actions of the zebra alter the vegetation to suit the stomachs of the wildebeest, topi, and gazelle.

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

The sequence in which they migrate correlates with their body size.

Where would the sentence best fit?

- The differences in feeding preferences lead, in turn, to differences in migratory habits. The sequence in which they migrate correlates with their body size. The wildebeests follow, in their migration, the pattern of local rainfall. The other species do likewise. But when a new area is fueled by rain, the mammals migrate toward it in a set order to exploit it. The larger, less fastidious feeders, the zebras, move in first; the choosier, smaller wildebeests come later; and the smallest species of all, Thomson's gazelle, arrives last. The later species all depend on the preparations of the earlier one, for the actions of the zebra alter the vegetation to suit the stomachs of the wildebeest, topi, and gazelle.
- The differences in feeding preferences lead, in turn, to differences in migratory habits. The wildebeests follow, in their migration, the pattern of local rainfall. The sequence in which they migrate correlates with their body size. The other species do likewise. But when a new area is fueled by rain, the mammals migrate toward it in a set order to exploit it. The larger, less fastidious feeders, the zebras, move in first; the choosier, smaller wildebeests come later; and the smallest species of all, Thomson's gazelle, arrives last. The later species all depend on the preparations of the earlier one, for the actions of the zebra alter the vegetation to suit the stomachs of the wildebeest, topi, and gazelle.
- The differences in feeding preferences lead, in turn, to differences in migratory habits. The wildebeests follow, in their migration, the pattern of local rainfall.
 The other species do likewise. The sequence in which they migrate correlates with their body size. But when a new area is fueled by rain, the mammals migrate toward it in a set order to exploit it. The larger, less fastidious feeders, the zebras, move in first; the choosier, smaller wildebeests come later; and the smallest species of all, Thomson's gazelle, arrives last. The later species all depend on the preparations of the earlier one, for the actions of the zebra alter the vegetation to suit the stomachs of the wildebeest, topi, and gazelle.

- The differences in feeding preferences lead, in turn, to differences in migratory habits. The wildebeests follow, in their migration, the pattern of local rainfall. The other species do likewise. But when a new area is fueled by rain, the mammals migrate toward it in a set order to exploit it. The sequence in which they migrate correlates with their body size. The larger, less fastidious feeders, the zebras, move in first; the choosier, smaller wildebeests come later; and the smallest species of all, Thomson's gazelle, arrives last. The later species all depend on the preparations of the earlier one, for the actions of the zebra alter the vegetation to suit the stomachs of the wildebeest, topi, and gazelle.
- 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**.

East African herbivores, though they all live in the same environment, have a range of feeding preferences.

Answer Choices

- The survival of East African mammals depends more than anything else on the quantity of highly nutritious fruits that they are able to find.
- An herbivore's size and metabolic rate affect the kinds of food and the quantities of food it needs to eat.
- 3. Zebras and wildebeests rarely compete for the same food resources in the same locations.
- The different digestive systems of herbivores explain their feeding preferences.
- 5. Migratory habits are influenced by feeding preferences.
- 6. Patterns in the migratory habits of East African herbivores are hard to establish.

LOIE FULLER

The United States dancer Loie Fuller (1862–1928) found theatrical dance in the late nineteenth century artistically unfulfilling. She considered herself an artist rather than a mere entertainer, and she, in turn, attracted the notice of other artists.

Fuller devised a type of dance that focused on the shifting play of lights and colors on the voluminous skirts or draperies she wore, which she kept in constant motion principally through movements of her arms, sometimes extended with wands concealed under her costumes. She rejected the technical virtuosity of movement in ballet, the most prestigious form of theatrical dance at that time, perhaps because her formal dance training was minimal. Although her early theatrical career had included stints as an actress, she was not primarily interested in storytelling or expressing emotions through dance; the drama of her dancing emanated from her visual effects.

Although she discovered and introduced her art in the United States, she achieved her greatest glory in Paris, where she was engaged by the Folies Bergère in 1892 and soon became "La Loie," the darling of Parisian audiences. Many of her dances represented elements or natural objects—Fire, the Lily, the Butterfly, and so on—and thus accorded well with the fashionable Art Nouveau style, which emphasized nature imagery and fluid, sinuous lines. Her dancing also attracted the attention of French poets and painters of the period, for it appealed to their liking for mystery, their belief in art for art's sake, a nineteenth-century idea that art is valuable in itself rather than because it may have some moral or educational benefit, and their efforts to synthesize form and content.

Fuller had scientific leanings and constantly experimented with electrical lighting (which was then in its infancy), colored gels, slide projections, and other aspects of stage technology. She invented and patented special arrangements of mirrors and concocted chemical dyes for her draperies. Her interest in color and light paralleled the research of several artists of the period, notably the painter Seurat, famed for his Pointillist technique of creating a sense of shapes and light on canvas by applying extremely small dots of color rather than by painting lines. One of Fuller's major inventions was underlighting, in which she stood on a pane of frosted glass illuminated from underneath. This was particularly effective in her *Fire Dance* (1895), performed to the music of Richard Wagner's "Ride of the Valkyries." The dance caught the eye of artist Henri de Toulouse-Lautrec, who depicted it in a lithograph.

As her technological expertise grew more sophisticated, so did the other aspects of her dances. Although she gave little thought to music in her earliest dances, she later used scores by Gluck, Beethoven, Schubert, Chopin, and Wagner, eventually graduating to Stravinsky, Fauré, Debussy, and Mussorgsky, composers who were then considered progressive. She began to address more ambitious themes in her dances such as *The Sea*, in which her dancers invisibly agitated a huge expanse of silk, played upon by colored lights. Always open to scientific and technological innovations, she befriended the scientists Marie and Pierre Curie upon their discovery of radium and created a *Radium Dance*, which simulated the phosphorescence of that element. She both appeared in films—then in an early stage of development—and made them herself; the hero of her fairy-tale film *Le Lys de la Vie* (1919) was played by René Clair, later a leading French film director.

At the Paris Exposition in 1900, she had her own theater, where, in addition to her own dances, she presented pantomimes by the Japanese actress Sada Yocco. She assembled an all-female company at this time and established a school around 1908, but neither survived her. Although she is remembered today chiefly for her innovations in stage lighting, her activities also touched Isadora Duncan and Ruth St. Denis, two other United States dancers who were experimenting with new types of dance. She sponsored Duncan's first appearance in Europe. Her theater at the Paris Exposition was visited by St. Denis, who found new ideas about stagecraft in Fuller's work and fresh sources for her art in Sada Yocco's plays. In 1924 St. Denis paid tribute to Fuller with the duet *Valse à la Loie*.

The United States dancer Loie Fuller (1862–1928) found theatrical dance in the late nineteenth century artistically unfulfilling. She considered herself an artist rather than a mere entertainer, and she, in turn, attracted the notice of other artists.

Directions: Mark your answer by filling in the oval next to your choice.

- What can be inferred from paragraph 1 about theatrical dance in the late nineteenth century?
- It influenced many artists outside of the field of dance.
- It was very similar to theatrical dance of the early nineteenth century.
- It was more a form of entertainment than a form of serious art.
- It was a relatively new art form in the United States.

Fuller devised a type of dance that focused on the shifting play of lights and colors on the voluminous skirts or draperies she wore, which she kept in constant motion principally through movements of her arms, sometimes extended with wands concealed under her costumes. She rejected the technical virtuosity of movement in ballet, the most prestigious form of theatrical dance at that time, perhaps because her formal dance training was minimal. Although her early theatrical career had included stints as an actress, she was not primarily interested in storytelling or expressing emotions through dance; the drama of her dancing emanated from her visual effects.

- PARAGRAPH 2
- According to paragraph 2, all of the following are characteristic of Fuller's type of dance EXCEPT
- experimentation using color
- large and full costumes
- continuous movement of her costumes
- technical virtuosity of movement
- 3. The word "prestigious" in the passage is closest in meaning to
- highly regarded
- financially rewarding
- demanding
- serious

4.	highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.
0	Fuller was more interested in dance's visual impact than in its narrative or emotional possibilities.
0	Fuller used visual effects to dramatize the stories and emotions expressed in her work.
0	Fuller believed that the drama of her dancing sprang from her emotional style of storytelling.
0	Fuller's focus on the visual effects of dance resulted from her early theatrical training as an actress.

Although she discovered and introduced her art in the United States, she achieved her greatest glory in Paris, where she was engaged by the Folies Bergère in 1892 and soon became "La Loie," the darling of Parisian audiences. Many of her dances represented elements or natural objects—Fire, the Lily, the Butterfly, and so on—and thus accorded well with the fashionable Art Nouveau style, which emphasized nature imagery and fluid, sinuous lines. Her dancing also attracted the attention of French poets and painters of the period, for it appealed to their liking for mystery, their belief in art for art's sake, a nineteenth-century idea that art is valuable in itself rather than because it may have some moral or educational benefit, and their efforts to synthesize form and content.

5.	The word "engaged" in the passage is closest in meaning to
\bigcirc	noticed
\bigcirc	praised
\bigcirc	hired
\bigcirc	attracted
6.	The word "synthesize" in the passage is closest in meaning to
\bigcirc	improve
\bigcirc	define
\bigcirc	simplify
\bigcirc	integrate
7.	According to paragraph 3, why was Fuller's work well received in Paris?
\bigcirc	Parisian audiences were particularly interested in artists and artistic movements from the United States.
	Influential poets tried to interest dancers in Fuller's work when she arrived in
	Paris.
\bigcirc	Fuller's work at this time borrowed directly from French artists working in other media.
\bigcirc	Fuller's dances were in harmony with the artistic values already present in Paris.

Fuller had scientific leanings and constantly experimented with electrical lighting (which was then in its infancy), colored gels, slide projections, and other aspects of stage technology. She invented and patented special arrangements of mirrors and concocted chemical dyes for her draperies. Her interest in color and light paralleled the research of several artists of the period, notably the painter Seurat, famed for his Pointillist technique of creating a sense of shapes and light on canvas by applying extremely small dots of color rather than by painting lines. One of Fuller's major inventions was underlighting, in which she stood on a pane of frosted glass illuminated from underneath. This was particularly effective in her *Fire Dance* (1895), performed to the music of Richard Wagner's "Ride of the Valkyries." The dance caught the eye of artist Henri de Toulouse-Lautrec, who depicted it in a lithograph.

- 8. According to paragraph 4, Fuller's Fire Dance was notable in part for its
- ouse of colored gels to illuminate glass
- use of dyes and paints to create an image of fire
- technique of lighting the dancer from beneath
- draperies with small dots resembling the Pointillist technique of Seurat

As her technological expertise grew more sophisticated, so did the other aspects of her dances. Although she gave little thought to music in her earliest dances, she later used scores by Gluck, Beethoven, Schubert, Chopin, and Wagner, eventually graduating to Stravinsky, Fauré, Debussy, and Mussorgsky, composers who were then considered progressive. She began to address more ambitious themes in her dances such as *The Sea*, in which her dancers invisibly agitated a huge expanse of silk, played upon by colored lights. Always open to scientific and technological innovations, she befriended the scientists Marie and Pierre Curie upon their discovery of radium and created a *Radium Dance*, which simulated the phosphorescence of that element. She both appeared in films—then in an early stage of development—and made them herself; the hero of her fairy-tale film *Le Lys de la Vie* (1919) was played by René Clair, later a leading French film director.

- 9. Why does the author mention Fuller's "The Sea"?
- To point out a dance of Fuller's in which music did not play an important role
- To explain why Fuller sometimes used music by progressive composers
- To illustrate a particular way in which Fuller developed as an artist
- O To illustrate how Fuller's interest in science was reflected in her work
- 10. The word "agitated" in the passage is closest in meaning to
- emerged from beneath
- created movement in
- arranged themselves in
- pretended to be

At the Paris Exposition in 1900, she had her own theater, where, in addition to her own dances, she presented pantomimes by the Japanese actress Sada Yocco. She assembled an all-female company at this time and established a school around 1908, but neither survived her. Although she is remembered today chiefly for her innovations in stage lighting, her activities also touched Isadora Duncan and Ruth St. Denis, two other United States dancers who were experimenting with new types of dance. She sponsored Duncan's first appearance in Europe. Her theater at the Paris Exposition was visited by St. Denis, who found new ideas about stagecraft in Fuller's work and fresh sources for her art in Sada Yocco's plays. In 1924 St. Denis paid tribute to Fuller with the duet *Valse à la Loie*.

11.	According to paragraph 6, what was true of Fuller's theater at the Paris Exposition?
0	It presented some works that were not by Fuller. It featured performances by prominent male as well as female dancers. It became a famous school that is still named in honor of Fuller. It continued to operate as a theater after Fuller died.
12.	The passage mentions which of the following as a dance of Fuller's that was set to music?
0	Fire Dance Radium Dance Le Lys de la Vie Valse à la Loie

As her technological expertise grew more sophisticated, so did the other aspects of her dances. ■ Although she gave little thought to music in her earliest dances, she later used scores by Gluck, Beethoven, Schubert, Chopin, and Wagner, eventually graduating to Stravinsky, Fauré, Debussy, and Mussorgsky, composers who were then considered progressive. ■ She began to address more ambitious themes in her dances such as *The Sea*, in which her dancers invisibly agitated a huge expanse of silk, played upon by colored lights. ■ Always open to scientific and technological innovations, she befriended the scientists Marie and Pierre Curie upon their discovery of radium and created a *Radium Dance*, which simulated the phosphorescence of that element. ■ She both appeared in films—then in an early stage of development—and made them herself; the hero of her fairy-tale film *Le Lys de la Vie* (1919) was played by René Clair, later a leading French film director.

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

For all her originality in dance, her interests expanded beyond it into newly emerging artistic media.

Where would the sentence best fit?

- As her technological expertise grew more sophisticated, so did the other aspects of her dances. For all her originality in dance, her interests expanded beyond it into newly emerging artistic media. Although she gave little thought to music in her earliest dances, she later used scores by Gluck, Beethoven, Schubert, Chopin, and Wagner, eventually graduating to Stravinsky, Fauré, Debussy, and Mussorgsky, composers who were then considered progressive. She began to address more ambitious themes in her dances such as *The Sea*, in which her dancers invisibly agitated a huge expanse of silk, played upon by colored lights. Always open to scientific and technological innovations, she befriended the scientists Marie and Pierre Curie upon their discovery of radium and created a *Radium Dance*, which simulated the phosphorescence of that element. She both appeared in films—then in an early stage of development—and made them herself; the hero of her fairy-tale film *Le Lys de la Vie* (1919) was played by René Clair, later a leading French film director.
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both appeared in films—then in an early stage of development—and made them herself; the hero of her fairy-tale film *Le Lys de la Vie* (1919) was played by René Clair, later a leading French film director.

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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**.

Loie Fuller was an important and innovative dancer.

•

Answer Choices

- Fuller believed that audiences in the late nineteenth century had lost interest in most theatrical dance.
- Fuller transformed dance in part by creating dance interpretations of works by poets and painters.
- 3. Fuller's work influenced a number of other dancers who were interested in experimental dance.
- Fuller introduced many technical innovations to the staging of theatrical dance.
- Fuller continued to develop throughout her career, creating more complex works and exploring new artistic media.
- By the 1920s, Fuller's theater at the Paris Exposition had become the world center for innovative dance.

GREEN ICEBERGS

Icebergs are massive blocks of ice, irregular in shape; they float with only about 12 percent of their mass above the sea surface. They are formed by glaciers—large rivers of ice that begin inland in the snows of Greenland, Antarctica, and Alaska—and move slowly toward the sea. The forward movement, the melting at the base of the glacier where it meets the ocean, and waves and tidal action cause blocks of ice to break off and float out to sea.

lcebergs are ordinarily blue to white, although they sometimes appear dark or opaque because they carry gravel and bits of rock. They may change color with changing light conditions and cloud cover, glowing pink or gold in the morning or evening light, but this color change is generally related to the low angle of the Sun above the horizon. However, travelers to Antarctica have repeatedly reported seeing green icebergs in the Weddell Sea and, more commonly, close to the Amery Ice Shelf in East Antarctica.

One explanation for green icebergs attributes their color to an optical illusion when blue ice is illuminated by a near-horizon red Sun, but green icebergs stand out among white and blue icebergs under a great variety of light conditions. Another suggestion is that the color might be related to ice with high levels of metallic compounds, including copper and iron. Recent expeditions have taken ice samples from green icebergs and ice cores—vertical, cylindrical ice samples reaching down to great depths—from the glacial ice shelves along the Antarctic continent. Analyses of these cores and samples provide a different solution to the problem.

The ice shelf cores, with a total length of 215 meters (705 feet), were long enough to penetrate through glacial ice—which is formed from the compaction of snow and contains air bubbles—and to continue into the clear, bubble-free ice formed from seawater that freezes onto the bottom of the glacial ice. The properties of this clear sea ice were very similar to the ice from the green iceberg. The scientists concluded that green icebergs form when a two-layer block of shelf ice breaks away and capsizes (turns upside down), exposing the bubble-free shelf ice that was formed from seawater.

A green iceberg that stranded just west of the Amery Ice Shelf showed two distinct layers: bubbly blue-white ice and bubble-free green ice separated by a one-meter-long ice layer containing sediments. The green ice portion was textured by seawater erosion. Where cracks were present, the color was light green because of light scattering; where no cracks were present, the color was dark green. No air bubbles were present in the green ice, suggesting that the ice was not formed from the compression of snow but instead from the freezing of seawater. Large concentrations of single-celled organisms with green pigments (coloring substances) occur along the edges of the ice shelves in this region, and the seawater is rich in their decomposing organic material. The green iceberg did not contain large amounts of particles from these organisms, but the ice had accumulated dissolved organic matter from the seawater. It appears that unlike salt, dissolved organic substances are not excluded from the ice in the freezing process. Analysis shows that the dissolved organic material absorbs enough blue wavelengths from solar light to make the ice appear green.

Chemical evidence shows that platelets (minute flat portions) of ice form in the

water and then accrete and stick to the bottom of the ice shelf to form a slush (partially melted snow). The slush is compacted by an unknown mechanism, and solid, bubble-free ice is formed from water high in soluble organic substances. When an iceberg separates from the ice shelf and capsizes, the green ice is exposed.

The Amery Ice Shelf appears to be uniquely suited to the production of green icebergs. Once detached from the ice shelf, these bergs drift in the currents and wind systems surrounding Antarctica and can be found scattered among Antarctica's less colorful icebergs.

Icebergs are massive blocks of ice, irregular in shape; they float with only about 12 percent of their mass above the sea surface. They are formed by glaciers—large rivers of ice that begin inland in the snows of Greenland, Antarctica, and Alaska—and move slowly toward the sea. The forward movement, the melting at the base of the glacier where it meets the ocean, and waves and tidal action cause blocks of ice to break off and float out to sea.

Directions: Mark your answer by filling in the oval next to your choice.

- According to paragraph 1, all of the following are true of icebergs EXCEPT:
- They do not have a regular shape.
- They are formed where glaciers meet the ocean.
- Most of their mass is above the sea surface.
- Waves and tides cause them to break off glaciers.

ARAGRAPH 2 lcebergs are ordinarily blue to white, although they sometimes appear dark or opaque because they carry gravel and bits of rock. They may change color with changing light conditions and cloud cover, glowing pink or gold in the morning or evening light, but this color change is generally related to the low angle of the Sun above the horizon. However, travelers to Antarctica have repeatedly reported seeing green icebergs in the Weddell Sea and, more commonly, close to the Amery Ice Shelf in East Antarctica.

- 2. According to paragraph 2, what causes icebergs to sometimes appear dark or opaque?
- A heavy cloud cover
- The presence of gravel or bits of rock
- The low angle of the Sun above the horizon
- The presence of large cracks in their surface

One explanation for green icebergs attributes their color to an optical illusion when blue ice is illuminated by a near-horizon red Sun, but green icebergs stand out among white and blue icebergs under a great variety of light conditions. Another suggestion is that the color might be related to ice with high levels of metallic compounds, including copper and iron. Recent expeditions have taken ice samples from green icebergs and ice cores—vertical, cylindrical ice samples reaching down to great depths—from the glacial ice shelves along the Antarctic continent. Analyses of these cores and samples provide a different solution to the problem.

- 3. 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.
 One explanation notes that green icebergs stand out among other icebergs under a great variety of light conditions, but this is attributed to an optical illusion.
 One explanation for the color of green icebergs attributes their color to an optical illusion that occurs when the light from a near-horizon red Sun shines on a blue
- iceberg.

 One explanation for green icebergs attributes their color to a great variety of light conditions, but green icebergs stand out best among other icebergs when illuminated by a near-horizon red Sun.
- One explanation attributes the color of green icebergs to an optical illusion under special light conditions, but green icebergs appear distinct from other icebergs under a great variety of light conditions.

The ice shelf cores, with a total length of 215 meters (705 feet), were long enough to penetrate through glacial ice—which is formed from the compaction of snow and contains air bubbles—and to continue into the clear, bubble-free ice formed from seawater that freezes onto the bottom of the glacial ice. The properties of this clear sea ice were very similar to the ice from the green iceberg. The scientists concluded that green icebergs form when a two-layer block of shelf ice breaks away and capsizes (turns upside down), exposing the bubble-free shelf ice that was formed from seawater.

4.	The word "penetrate" in the passage is closest in meaning to
	collect pierce
	melt endure
5.	According to paragraph 4, how is glacial ice formed?
0000	By the compaction of snow By the freezing of seawater on the bottom of ice shelves By breaking away from the ice shelf By the capsizing of a two-layer block of shelf ice
6.	According to paragraph 4, ice shelf cores helped scientists explain the formation of green icebergs by showing that
0	the ice at the bottom of green icebergs is bubble-free ice formed from frozen seawater
000	bubble-free ice is found at the top of the ice shelf glacial ice is lighter and floats better than sea ice the clear sea ice at the bottom of the ice shelf is similar to ice from a green iceberg

A green iceberg that stranded just west of the Amery Ice Shelf showed two distinct layers: bubbly blue-white ice and bubble-free green ice separated by a one-meter-long ice layer containing sediments. The green ice portion was textured by seawater erosion. Where cracks were present, the color was light green because of light scattering; where no cracks were present, the color was dark green. No air bubbles were present in the green ice, suggesting that the ice was not formed from the compression of snow but instead from the freezing of seawater. Large concentrations of single-celled organisms with green pigments (coloring substances) occur along the edges of the ice shelves in this region, and the seawater is rich in their decomposing organic material. The green iceberg did not contain large amounts of particles from these organisms, but the ice had accumulated dissolved organic matter from the seawater. It appears that unlike salt, dissolved organic substances are not excluded from the ice in the freezing process. Analysis shows that the dissolved organic material absorbs enough blue wavelengths from solar light to make the ice appear green.

Why does the author mention that "The green ice portion was textured by

٠.	seawater erosion"?
0	To explain why cracks in the iceberg appeared light green instead of dark green To suggest that green ice is more easily eroded by seawater than white ice is To support the idea that the green ice had been the bottom layer before capsizing To explain how the air bubbles had been removed from the green ice
8.	The word "accumulated" in the passage is closest in meaning to
\bigcirc	collected
\bigcirc	frozen
\bigcirc	released
\bigcirc	covered
9.	The word "excluded" in the passage is closest in meaning to
\bigcirc	kept out
\bigcirc	compressed
\bigcirc	damaged
\bigcirc	gathered together

Chemical evidence shows that platelets (minute flat portions) of ice form in the water and then accrete and stick to the bottom of the ice shelf to form a slush (partially melted snow). The slush is compacted by an unknown mechanism, and solid, bubble-free ice is formed from water high in soluble organic substances. When an iceberg separates from the ice shelf and capsizes, the green ice is exposed.

10.	The word "accrete" in the passage is closest in meaning to
	advance transfer
	flatten out
	come together
11.	Which of the following is NOT explained in the passage?
0	Why blocks of ice break off where glaciers meet the ocean Why blocks of shelf ice sometimes capsize after breaking off Why green icebergs are commonly produced in some parts of Antarctica Why green icebergs contain large amounts of dissolved organic pigments
	The passage supports which of the following statements about the Amery Ice Shelf?
	The Amery Ice Shelf produces only green icebergs. The Amery Ice Shelf produces green icebergs because its ice contains high levels of metallic compounds such as copper and iron.
0	The Amery Ice Shelf produces green icebergs because the seawater is rich in a particular kind of soluble organic material.
\bigcirc	No green icebergs are found far from the Amery Ice Shelf.

PARAGRAPHS 2 AND

3

lcebergs are ordinarily blue to white, although they sometimes appear dark or opaque because they carry gravel and bits of rock. They may change color with changing light conditions and cloud cover, glowing pink or gold in the morning or evening light, but this color change is generally related to the low angle of the Sun above the horizon.

- However, travelers to Antarctica have repeatedly reported seeing green icebergs in the Weddell Sea and, more commonly, close to the Amery Ice Shelf in East Antarctica.
- One explanation for green icebergs attributes their color to an optical illusion when blue ice is illuminated by a near-horizon red Sun, but green icebergs stand out among white and blue icebergs under a great variety of light conditions. Another suggestion is that the color might be related to ice with high levels of metallic compounds, including copper and iron. Recent expeditions have taken ice samples from green icebergs and ice cores—vertical, cylindrical ice samples reaching down to great depths—from the glacial ice shelves along the Antarctic continent. Analyses of these cores and samples provide a different solution to the problem.

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

Scientists have differed as to whether icebergs appear green as a result of light conditions or because of something in the ice itself.

Where would the sentence best fit?

- Icebergs are ordinarily blue to white, although they sometimes appear dark or opaque because they carry gravel and bits of rock. They may change color with changing light conditions and cloud cover, glowing pink or gold in the morning or evening light, but this color change is generally related to the low angle of the Sun above the horizon. Scientists have differed as to whether icebergs appear green as a result of light conditions or because of something in the ice itself. However, travelers to Antarctica have repeatedly reported seeing green icebergs in the Weddell Sea and, more commonly, close to the Amery Ice Shelf in East Antarctica.
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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.**

Several suggestions, ranging from light conditions to the presence of metallic compounds, have been offered to explain why some icebergs appear green.

Answer Choices

- Ice cores were used to determine that green icebergs were formed from the compaction of metallic compounds, including copper and iron.
- 2. All ice shelves can produce green icebergs, but the Amery Ice Shelf is especially well suited to do so.
- Green icebergs form when a twolayer block of ice breaks away from a glacier and capsizes, exposing the bottom sea ice to view.
- Ice cores and samples revealed that both ice shelves and green icebergs contain a layer of bubbly glacial ice and a layer of bubble-free sea ice.
- Green icebergs are white until they come into contact with seawater containing platelets and soluble organic green pigments.
- 6. In a green iceberg, the sea ice contains large concentrations of organic matter from the seawater.

STOP. This is the end of the Reading section of TOEFL iBT Practice Test 2.

TOEFL iBT Practice Test 3 READING

Directions: This section measures your ability to understand academic passages in English.

The Reading section is divided into separately timed parts.

Most questions are worth 1 point, but the last question for each passage is worth more than 1 point. The directions for the last question indicate how many points you may receive.

You will now begin the Reading section. There are three passages in the section. You should allow **20 minutes** to read each passage and answer the questions about it. You should allow **60 minutes** to complete the entire section.

At the end of this Practice Test you will find an answer key, information to help you determine your score, and explanations of the answers.

ARCHITECTURE

Architecture is the art and science of designing structures that organize and enclose space for practical and symbolic purposes. Because architecture grows out of human needs and aspirations, it clearly communicates cultural values. Of all the visual arts, architecture affects our lives most directly for it determines the character of the human environment in major ways.

Architecture is a three-dimensional form. It utilizes space, mass, texture, line, light, and color. To be architecture, a building must achieve a working harmony with a variety of elements. Humans instinctively seek structures that will shelter and enhance their way of life. It is the work of architects to create buildings that are not simply constructions but also offer inspiration and delight. Buildings contribute to human life when they provide shelter, enrich space, complement their site, suit the climate, and are economically feasible. The client who pays for the building and defines its function is an important member of the architectural team. The mediocre design of many contemporary buildings can be traced to both clients and architects.

In order for the structure to achieve the size and strength necessary to meet its purpose, architecture employs methods of support that, because they are based on physical laws, have changed little since people first discovered them—even while building materials have changed dramatically. The world's architectural structures have also been devised in relation to the objective limitations of materials. Structures can be analyzed in terms of how they deal with downward forces created by gravity.

They are designed to withstand the forces of *compression* (pushing together), *tension* (pulling apart), *bending*, or a combination of these in different parts of the structure.

Every development in architecture has been the result of major technological changes. Materials and methods of construction are integral parts of the design of architectural structures. In earlier times it was necessary to design structural systems suitable for the materials that were available, such as wood, stone, or brick. Today technology has progressed to the point where it is possible to invent new building materials to suit the type of structure desired. Enormous changes in materials and techniques of construction within the last few generations have made it possible to enclose space with much greater ease and speed and with a minimum of material. Progress in this area can be measured by the difference in weight between buildings built now and those of comparable size built one hundred years ago.

Modern architectural forms generally have three separate components comparable to elements of the human body: a supporting *skeleton* or frame, an outer *skin* enclosing the interior spaces, and *equipment*, similar to the body's vital organs and systems. The equipment includes plumbing, electrical wiring, hot water, and air-conditioning. Of course in early architecture—such as igloos and adobe structures—there was no such equipment, and the skeleton and skin were often one.

Much of the world's great architecture has been constructed of stone because of its beauty, permanence, and availability. In the past, whole cities grew from the arduous task of cutting and piling stone upon stone. Some of the world's finest stone architecture can be seen in the ruins of the ancient Inca city of Machu Picchu high in the eastern Andes Mountains of Peru. The doorways and windows are made possible by placing over the open spaces thick stone beams that support the weight from above. A structural invention had to be made before the physical limitations of stone could be overcome and new architectural forms could be created. That invention was the arch, a curved structure originally made of separate stone or brick segments. The arch was used by the early cultures of the Mediterranean area chiefly for underground drains, but it was the Romans who first developed and used the arch extensively in aboveground structures. Roman builders perfected the semicircular arch made of separate blocks of stone. As a method of spanning space, the arch can support greater weight than a horizontal beam. It works in compression to divert the weight above it out to the sides, where the weight is borne by the vertical elements on either side of the arch. The arch is among the many important structural breakthroughs that have characterized architecture throughout the centuries.

Architecture is the art and science of designing structures that organize and enclose space for practical and symbolic purposes. Because architecture grows out of human needs and aspirations, it clearly communicates cultural values. Of all the visual arts, architecture affects our lives most directly for it determines the character of the human environment in major ways.

Directions: Mark your answer by filling in the oval next to your choice.

1.	According to paragraph 1, all of the following statements about architecture are true EXCEPT:
\bigcirc	Architecture is a visual art.
\bigcirc	Architecture reflects the cultural values of its creators.
\bigcirc	Architecture has both artistic and scientific dimensions.
\bigcirc	Architecture has an indirect effect on life.

Architecture is a three-dimensional form. It utilizes space, mass, texture, line, light, and color. To be architecture, a building must achieve a working harmony with a variety of elements. Humans instinctively seek structures that will shelter and enhance their way of life. It is the work of architects to create buildings that are not simply constructions but also offer inspiration and delight. Buildings contribute to human life when they provide shelter, enrich space, complement their site, suit the climate, and are economically feasible. The client who pays for the building and defines its function is an important member of the architectural team. The mediocre design of many contemporary buildings can be traced to both clients and architects.

2.	The word "enhance" in the passage is closest in meaning to
\bigcirc	protect
\bigcirc	improve
\bigcirc	organize
\bigcirc	match
3.	The word "feasible" in the passage is closest in meaning to
\bigcirc	in existence
\bigcirc	without question
\bigcirc	
	achievable

PARAGRAPH 3 In order for the structure to achieve the size and strength necessary to meet its purpose, architecture employs methods of support that, because they are based on physical laws, have changed little since people first discovered them—even while building materials have changed dramatically. The world's architectural structures have also been devised in relation to the objective limitations of materials. Structures can be analyzed in terms of how they deal with downward forces created by gravity. They are designed to withstand the forces of compression (pushing together), tension (pulling apart), bending, or a combination of these in different parts of the structure.

- 4. 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.
- Unchanging physical laws have limited the size and strength of buildings that can be made with materials discovered long ago.
- Building materials have changed in order to increase architectural size and strength, but physical laws of structure have not changed.
- When people first started to build, the structural methods used to provide strength and size were inadequate because they were not based on physical laws.
- Unlike building materials, the methods of support used in architecture have not changed over time because they are based on physical laws.
- 5. The word "devised" in the passage is closest in meaning to
- combined
- created
- introduced
- suggested

PARAGRAPH

Every development in architecture has been the result of major technological changes. Materials and methods of construction are integral parts of the design of architectural structures. In earlier times it was necessary to design structural systems suitable for the materials that were available, such as wood, stone, or brick. Today technology has progressed to the point where it is possible to invent new building materials to suit the type of structure desired. Enormous changes in materials and techniques of construction within the last few generations have made it possible to enclose space with much greater ease and speed and with a minimum of material. Progress in this area can be measured by the difference in weight between buildings built now and those of comparable size built one hundred years ago.

- 6. The word "integral" is closest in meaning to
- essential
- variable
- practical
- independent

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7.	According to paragraph 4, which of the following is true about materials used in the construction of buildings?
\bigcirc	Because new building materials are hard to find, construction techniques have changed very little from past generations.
\circ	The availability of suitable building materials no longer limits the types of structures that may be built.
\bigcirc	The primary building materials that are available today are wood, stone, and brick.
0	Architects in earlier times did not have enough building materials to enclose large spaces.
8.	In paragraph 4, what does the author imply about modern buildings?
\bigcirc	They occupy much less space than buildings constructed one hundred years ago.
\bigcirc	They are not very different from the buildings of a few generations ago.
0	They weigh less in relation to their size than buildings constructed one hundred years ago.
\bigcirc	They take a long time to build as a result of their complex construction methods.

Modern architectural forms generally have three separate components comparable to elements of the human body: a supporting *skeleton* or frame, an outer *skin* enclosing the interior spaces, and *equipment*, similar to the body's vital organs and systems. The equipment includes plumbing, electrical wiring, hot water, and air-conditioning. Of course in early architecture—such as igloos and adobe structures—there was no such equipment, and the skeleton and skin were often one.

human body and architecture that is described in paragraph 5?

Complex equipment inside buildings is the one element in modern architecture

9. Which of the following correctly characterizes the relationship between the

 Complex equipment inside buildings is the one element in modern architecture that resembles a component of the human body.

 The components in early buildings were similar to three particular elements of the human body.

 Modern buildings have components that are as likely to change as the human body is.

 In general, modern buildings more closely resemble the human body than earlier buildings do.

Much of the world's great architecture has been constructed of stone because of its beauty, permanence, and availability. In the past, whole cities grew from the arduous task of cutting and piling stone upon stone. Some of the world's finest stone architecture can be seen in the ruins of the ancient Inca city of Machu Picchu high in the eastern Andes Mountains of Peru. The doorways and windows are made possible by placing over the open spaces thick stone beams that support the weight from above. A structural invention had to be made before the physical limitations of stone could be overcome and new architectural forms could be created. That invention was the arch, a curved structure originally made of separate stone or brick segments. The arch was used by the early cultures of the Mediterranean area chiefly for underground drains, but it was the Romans who first developed and used the arch extensively in aboveground structures. Roman builders perfected the semicircular arch made of separate blocks of stone. As a method of spanning space, the arch can support greater weight than a horizontal beam. It works in compression to divert the weight above it out to the sides, where the weight is borne by the vertical elements on either side of the arch. The arch is among the many important structural breakthroughs that have characterized architecture throughout the centuries.

\bigcirc	difficult
\bigcirc	necessary
\bigcirc	skilled
0	shared
11.	Why does the author include a description of how the "doorways and windows' of Machu Picchu were constructed?
0	To indicate that the combined skeletons and skins of the stone buildings of Machu Picchu were similar to igloos and adobe structures
\bigcirc	To indicate the different kinds of stones that had to be cut to build Machu Picchu
0	To provide an illustration of the kind of construction that was required before arches were invented
0	To explain how ancient builders reduced the amount of time necessary to construct buildings from stone
12.	According to paragraph 6, which of the following statements is true of the arch?
\bigcirc	The Romans were the first people to use the stone arch.
\bigcirc	The invention of the arch allowed new architectural forms to be developed.
\bigcirc	The arch worked by distributing the structural load of a building toward the cen-
	ter of the arch.
\bigcirc	The Romans followed earlier practices in their use of arches.

10. The word "arduous" in the passage is closest in meaning to

- Modern architectural forms generally have three separate components comparable to elements of the human body: a supporting *skeleton* or frame, an outer *skin* enclosing the interior spaces, and *equipment*, similar to the body's vital organs and systems.
- The equipment includes plumbing, electrical wiring, hot water, and air-conditioning.
- Of course in early architecture—such as igloos and adobe structures—there was no such equipment, and the skeleton and skin were often one. ■
- 13. Look at the four squares [■] where the following sentence could be added to the passage.

However, some modern architectural designs, such as those using folded plates of concrete or air-inflated structures, are again unifying skeleton and skin.

Where would the sentence best fit?

- However, some modern architectural designs, such as those using folded plates of concrete or air-inflated structures, are again unifying skeleton and skin. Modern architectural forms generally have three separate components comparable to elements of the human body: a supporting skeleton or frame, an outer skin enclosing the interior spaces, and equipment, similar to the body's vital organs and systems. The equipment includes plumbing, electrical wiring, hot water, and air-conditioning. Of course in early architecture—such as igloos and adobe structures—there was no such equipment, and the skeleton and skin were often one. ■
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- 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 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.**

Architecture uses forms and space to express cultural values.

•

Answer Choices

- Architects seek to create buildings that are both visually appealing and well suited for human use.
- Both clients and architects are responsible for the mediocre designs of some modern buildings.
- Over the course of the history of building, innovations in materials and methods of construction have given architects ever greater freedom to express themselves.
- Modern buildings tend to lack the beauty of ancient stone buildings such as those of Machu Picchu.
- Throughout history buildings have been constructed like human bodies, needing distinct "organ" systems in order to function.
- The discovery and use of the arch typifies the way in which architecture advances by developing more efficient types of structures.

THE LONG-TERM STABILITY OF ECOSYSTEMS

Plant communities assemble themselves flexibly, and their particular structure depends on the specific history of the area. Ecologists use the term "succession" to refer to the changes that happen in plant communities and ecosystems over time. The first community in a succession is called a pioneer community, while the long-lived community at the end of succession is called a climax community. Pioneer and successional plant communities are said to change over periods from 1 to 500 years. These changes—in plant numbers and the mix of species—are cumulative. Climax communities themselves change but over periods of time greater than about 500 years.

An ecologist who studies a pond today may well find it relatively unchanged in a year's time. Individual fish may be replaced, but the number of fish will tend to be the same from one year to the next. We can say that the properties of an ecosystem are more stable than the individual organisms that compose the ecosystem.

At one time, ecologists believed that species diversity made ecosystems stable. They believed that the greater the diversity the more stable the ecosystem. Support for this idea came from the observation that long-lasting climax communities usually have more complex food webs and more species diversity than pioneer communities. Ecologists concluded that the apparent stability of climax ecosystems depended on their complexity. To take an extreme example, farmlands dominated by a single crop are so unstable that one year of bad weather or the invasion of a single pest can destroy the entire crop. In contrast, a complex climax community, such as a temperate forest, will tolerate considerable damage from weather or pests.

The question of ecosystem stability is complicated, however. The first problem is that ecologists do not all agree what "stability" means. Stability can be defined as simply lack of change. In that case, the climax community would be considered the most stable, since, by definition, it changes the least over time. Alternatively, stability can be defined as the speed with which an ecosystem returns to a particular form following a major disturbance, such as a fire. This kind of stability is also called *resilience*. In that case, climax communities would be the most fragile and the *least* stable, since they can require hundreds of years to return to the climax state.

Even the kind of stability defined as simple lack of change is not always associated with maximum diversity. At least in temperate zones, maximum diversity is often found in mid-successional stages, not in the climax community. Once a redwood forest matures, for example, the kinds of species and the number of individuals growing on the forest floor are reduced. In general, diversity, by itself, does not ensure stability. Mathematical models of ecosystems likewise suggest that diversity does not guarantee ecosystem stability—just the opposite, in fact. A more complicated system is, in general, more likely than a simple system to break down. (A fifteen-speed racing bicycle is more likely to break down than a child's tricycle.)

Ecologists are especially interested in knowing what factors contribute to the resilience of communities because climax communities all over the world are being severely damaged or destroyed by human activities. The destruction caused by the volcanic explosion of Mount St. Helens, in the northwestern United States, for example, pales in comparison to the destruction caused by humans. We need to know what

aspects of a community are most important to the community's resistance to destruction, as well as its recovery.

Many ecologists now think that the relative long-term stability of climax communities comes not from diversity but from the "patchiness" of the environment; an environment that varies from place to place supports more kinds of organisms than an environment that is uniform. A local population that goes extinct is quickly replaced by immigrants from an adjacent community. Even if the new population is of a different species, it can approximately fill the niche vacated by the extinct population and keep the food web intact.

Plant communities assemble themselves flexibly, and their particular structure depends on the specific history of the area. Ecologists use the term "succession" to refer to the changes that happen in plant communities and ecosystems over time. The first community in a succession is called a pioneer community, while the long-lived community at the end of succession is called a climax community. Pioneer and successional plant communities are said to change over periods from 1 to 500 years. These changes—in plant numbers and the mix of species—are cumulative. Climax communities themselves change but over periods of time greater than about 500 years.

Directions: Mark your answer by filling in the oval next to your choice.

1.	The word "particular" in the passage is closest in meaning to
\bigcirc	natural
\bigcirc	final
\bigcirc	specific
\bigcirc	complex
2.	According to paragraph 1, which of the following is NOT true of climax communities?
\bigcirc	They occur at the end of a succession. They last longer than any other type of community. The numbers of plants in them and the mix of species do not change.

PARAGRAPH 2

An ecologist who studies a pond today may well find it relatively unchanged in a year's time. Individual fish may be replaced, but the number of fish will tend to be the same from one year to the next. We can say that the properties of an ecosystem are more stable than the individual organisms that compose the ecosystem.

- 3. According to paragraph 2, which of the following principles of ecosystems can be learned by studying a pond?
- Ecosystem properties change more slowly than individuals in the system.
- The stability of an ecosystem tends to change as individuals are replaced.
- Individual organisms are stable from one year to the next.

They remain stable for at least 500 years at a time.

 A change in the numbers of an organism does not affect an ecosystem's properties. At one time, ecologists believed that species diversity made ecosystems stable. They believed that the greater the diversity the more stable the ecosystem. Support for this idea came from the observation that long-lasting climax communities usually have more complex food webs and more species diversity than pioneer communities. Ecologists concluded that the apparent stability of climax ecosystems depended on their complexity. To take an extreme example, farmlands dominated by a single crop are so unstable that one year of bad weather or the invasion of a single pest can destroy the entire crop. In contrast, a complex climax community, such as a temperate forest, will tolerate considerable damage from weather or pests.

- 4. According to paragraph 3, ecologists once believed that which of the following illustrated the most stable ecosystems?
- Pioneer communities
- Climax communities
- Single-crop farmlands
- Successional plant communities

The question of ecosystem stability is complicated, however. The first problem is that ecologists do not all agree what "stability" means. Stability can be defined as simply lack of change. In that case, the climax community would be considered the most stable, since, by definition, it changes the least over time. Alternatively, stability can be defined as the speed with which an ecosystem returns to a particular form following a major disturbance, such as a fire. This kind of stability is also called *resilience*. In that case, climax communities would be the most fragile and the *least* stable, since they can require hundreds of years to return to the climax state.

- 5. According to paragraph 4, why is the question of ecosystem stability complicated?
- The reasons for ecosystem change are not always clear.
- Ecologists often confuse the word "stability" with the word "resilience."
- The exact meaning of the word "stability" is debated by ecologists.
- There are many different answers to ecological questions.
- 6. According to paragraph 4, which of the following is true of climax communities?
- They are more resilient than pioneer communities.
- They can be considered both the most and the least stable communities.
- They are stable because they recover quickly after major disturbances.
- They are the most resilient communities because they change the least over time.

GO ON TO THE NEXT PAGE

Even the kind of stability defined as simple lack of change is not always associated with maximum diversity. At least in temperate zones, maximum diversity is often found in mid-successional stages, not in the climax community. Once a redwood forest matures, for example, the kinds of species and the number of individuals growing on the forest floor are reduced. In general, diversity, by itself, does not ensure stability. Mathematical models of ecosystems likewise suggest that diversity does not guarantee ecosystem stability—just the opposite, in fact. A more complicated system is, in general, more likely than a simple system to break down. (A fifteen-speed racing bicycle is more likely to break down than a child's tricycle.)

7. Which of the following can be inferred from paragraph 5 about redwood forests?

0 0 0	They become less stable as they mature. They support many species when they reach climax. They are found in temperate zones.
\bigcirc	They have reduced diversity during mid-successional stages.
8.	The word "guarantee" in the passage is closest in meaning to
\bigcirc	increase
\bigcirc	ensure
\bigcirc	favor
\bigcirc	complicate
9.	In paragraph 5, why does the author provide the information that "A fifteen- speed racing bicycle is more likely to break down than a child's tricycle"?
0	To illustrate a general principle about the stability of systems by using an every-day example
0	To demonstrate that an understanding of stability in ecosystems can be applied to help understand stability in other situations
0	To make a comparison that supports the claim that, in general, stability increases with diversity
\bigcirc	To provide an example that contradicts mathematical models of ecosystems

neighboring

Ecologists are especially interested in knowing what factors contribute to the resilience of communities because climax communities all over the world are being severely damaged or destroyed by human activities. The destruction caused by the volcanic explosion of Mount St. Helens, in the northwestern United States, for example, pales in comparison to the destruction caused by humans. We need to know what aspects of a community are most important to the community's resistance to destruction, as well as its recovery.

10.	The word "pales" in the passage is closest in meaning to
\bigcirc	increases proportionally
\bigcirc	differs
\bigcirc	loses significance
\bigcirc	is common

Many ecologists now think that the relative long-term stability of climax communities comes not from diversity but from the "patchiness" of the environment; an environment that varies from place to place supports more kinds of organisms than an environment that is uniform. A local population that goes extinct is quickly replaced by immigrants from an adjacent community. Even if the new population is of a different species, it can approximately fill the niche vacated by the extinct population and keep the food web intact.

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.
0	Ecologists now think that the stability of an environment is a result of diversity rather than patchiness.
\bigcirc	Patchy environments that vary from place to place do not often have high species diversity.
\bigcirc	Uniform environments cannot be climax communities because they do not support as many types of organisms as patchy environments.
0	A patchy environment is thought to increase stability because it is able to support a wide variety of organisms.
12.	The word "adjacent" in the passage is closest in meaning to
\bigcirc	foreign
\bigcirc	stable
\bigcirc	fluid

GO ON TO THE NEXT PAGE

PARAGRAPH 6

- Ecologists are especially interested in knowing what factors contribute to the resilience of communities because climax communities all over the world are being severely damaged or destroyed by human activities. The destruction caused by the volcanic explosion of Mount St. Helens, in the northwestern United States, for example, pales in comparison to the destruction caused by humans. We need to know what aspects of a community are most important to the community's resistance to destruction, as well as its recovery. ■
- 13. Look at the four squares [■] that indicate where the following sentence could be added to the passage.

In fact, damage to the environment by humans is often much more severe than by natural events and processes.

Where would the sentence best fit?

- In fact, damage to the environment by humans is often much more severe than by natural events and processes. Ecologists are especially interested in knowing what factors contribute to the resilience of communities because climax communities all over the world are being severely damaged or destroyed by human activities. The destruction caused by the volcanic explosion of Mount St. Helens, in the northwestern United States, for example, pales in comparison to the destruction caused by humans. We need to know what aspects of a community are most important to the community's resistance to destruction, as well as its recovery. ■
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- 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 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.**

The process of succession and the stability of a climax community can change over time.

•

Answer Choices

- The changes that occur in an ecosystem from the pioneer to the climax community can be seen in one human generation.
- Ecologists agree that climax communities are the most stable types of ecosystems.
- A high degree of species diversity does not always result in a stable ecosystem.
- Disagreements over the meaning of the term "stability" make it difficult to identify the most stable ecosystems.
- The level of resilience in a plant community contributes to its long-term stability.
- The resilience of climax communities makes them resistant to destruction caused by humans.

GO ON TO THE NEXT PAGE

DEPLETION OF THE OGALLALA AQUIFER

The vast grasslands of the High Plains in the central United States were settled by farmers and ranchers in the 1880s. This region has a semiarid climate, and for 50 years after its settlement, it supported a low-intensity agricultural economy of cattle ranching and wheat farming. In the early twentieth century, however, it was discovered that much of the High Plains was underlain by a huge aquifer (a rock layer containing large quantities of groundwater). This aquifer was named the Ogallala aquifer after the Ogallala Sioux Indians, who once inhabited the region.

The Ogallala aquifer is a sandstone formation that underlies some 583,000 square kilometers of land extending from northwestern Texas to southern South Dakota. Water from rains and melting snows has been accumulating in the Ogallala for the past 30,000 years. Estimates indicate that the aquifer contains enough water to fill Lake Huron, but unfortunately, under the semiarid climatic conditions that presently exist in the region, rates of addition to the aquifer are minimal, amounting to about half a centimeter a year.

The first wells were drilled into the Ogallala during the drought years of the early 1930s. The ensuing rapid expansion of irrigation agriculture, especially from the 1950s onward, transformed the economy of the region. More than 100,000 wells now tap the Ogallala. Modern irrigation devices, each capable of spraying 4.5 million liters of water a day, have produced a landscape dominated by geometric patterns of circular green islands of crops. Ogallala water has enabled the High Plains region to supply significant amounts of the cotton, sorghum, wheat, and corn grown in the United States. In addition, 40 percent of American grain-fed beef cattle are fattened here.

This unprecedented development of a finite groundwater resource with an almost negligible natural recharge rate—that is, virtually no natural water source to replenish the water supply—has caused water tables in the region to fall drastically. In the 1930s, wells encountered plentiful water at a depth of about 15 meters; currently, they must be dug to depths of 45 to 60 meters or more. In places, the water table is declining at a rate of a meter a year, necessitating the periodic deepening of wells and the use of ever-more-powerful pumps. It is estimated that at current withdrawal rates, much of the aquifer will run dry within 40 years. The situation is most critical in Texas, where the climate is driest, the greatest amount of water is being pumped, and the aquifer contains the least water. It is projected that the remaining Ogallala water will, by the year 2030, support only 35 to 40 percent of the irrigated acreage in Texas that it supported in 1980.

The reaction of farmers to the inevitable depletion of the Ogallala varies. Many have been attempting to conserve water by irrigating less frequently or by switching to crops that require less water. Others, however, have adopted the philosophy that it is best to use the water while it is still economically profitable to do so and to concentrate on high-value crops such as cotton. The incentive of the farmers who wish to conserve water is reduced by their knowledge that many of their neighbors are profiting by using great amounts of water, and in the process are drawing down the entire region's water supplies.

In the face of the upcoming water supply crisis, a number of grandiose schemes have been developed to transport vast quantities of water by canal or pipeline from

temperatures.

the Mississippi, the Missouri, or the Arkansas rivers. Unfortunately, the cost of water obtained through any of these schemes would increase pumping costs at least tenfold, making the cost of irrigated agricultural products from the region uncompetitive on the national and international markets. Somewhat more promising have been recent experiments for releasing capillary water (water in the soil) above the water table by injecting compressed air into the ground. Even if this process proves successful, however, it would almost triple water costs. Genetic engineering also may provide a partial solution, as new strains of drought-resistant crops continue to be developed. Whatever the final answer to the water crisis may be, it is evident that within the High Plains, irrigation water will never again be the abundant, inexpensive resource it was during the agricultural boom years of the mid-twentieth century.

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Directions: Mark your answer by filling in the oval next to your choice.

1.	According to paragraph 1, which of the following statements about the High
	Plains is true?
\bigcirc	Until farmers and ranchers settled there in the 1880s, the High Plains had never
	been inhabited.
\bigcirc	The climate of the High Plains is characterized by higher-than-average

\bigcirc	The large aquifer that lies underneath the High Plains was discovered by the
	Ogallala Sioux Indians.

\bigcirc	Before the early 1900s there was only a small amount of farming and ranching in
	he High Plains.

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PARAGRAPH 2

The Ogallala aquifer is a sandstone formation that underlies some 583,000 square kilometers of land extending from northwestern Texas to southern South Dakota. Water from rains and melting snows has been accumulating in the Ogallala for the past 30,000 years. Estimates indicate that the aquifer contains enough water to fill Lake Huron, but unfortunately, under the semiarid climatic conditions that presently exist in the region, rates of addition to the aquifer are minimal, amounting to about half a centimeter a year.

2.	According to paragraph 2, all of the following statements about the Ogallala aquifer are true EXCEPT:
0000	The aquifer stretches from South Dakota to Texas. The aquifer's water comes from underground springs. Water has been gathering in the aquifer for 30,000 years. The aquifer's water is stored in a layer of sandstone.
3.	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.
0	Despite the current impressive size of the Ogallala aquifer, the region's climate keeps the rates of water addition very small.
\bigcirc	Although the aquifer has been adding water at the rate of only half a centimeter a year, it will eventually accumulate enough water to fill Lake Huron.
0	Because of the region's present climatic conditions, water is being added each year to the aquifer.
0	Even when the region experiences unfortunate climatic conditions, the rates of addition of water continue to increase.

The first wells were drilled into the Ogallala during the drought years of the early 1930s. The ensuing rapid expansion of irrigation agriculture, especially from the 1950s onward, transformed the economy of the region. More than 100,000 wells now tap the Ogallala. Modern irrigation devices, each capable of spraying 4.5 million liters of water a day, have produced a landscape dominated by geometric patterns of circular green islands of crops. Ogallala water has enabled the High Plains region to supply significant amounts of the cotton, sorghum, wheat, and corn grown in the United States. In addition, 40 percent of American grain-fed beef cattle are fattened here.

4.	The word "ensuing" in the passage is closest in meaning to
\bigcirc	continuing
\bigcirc	surprising
\bigcirc	initial
\bigcirc	subsequent
5.	In paragraph 3, why does the author provide the information that 40 percent of American cattle are fattened in the High Plains?
0	To suggest that crop cultivation is not the most important part of the economy of the High Plains
0	To indicate that not all economic activity in the High Plains is dependent on irrigation
0	To provide another example of how water from the Ogallala has transformed the economy of the High Plains
0	To contrast cattle-fattening practices in the High Plains with those used in other regions of the United States

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This unprecedented development of a finite groundwater resource with an almost negligible natural recharge rate—that is, virtually no natural water source to replenish the water supply—has caused water tables in the region to fall drastically. In the 1930s, wells encountered plentiful water at a depth of about 15 meters; currently, they must be dug to depths of 45 to 60 meters or more. In places, the water table is declining at a rate of a meter a year, necessitating the periodic deepening of wells and the use of ever-more-powerful pumps. It is estimated that at current withdrawal rates, much of the aquifer will run dry within 40 years. The situation is most critical in Texas, where the climate is driest, the greatest amount of water is being pumped, and the aquifer contains the least water. It is projected that the remaining Ogallala water will, by the year 2030, support only 35 to 40 percent of the irrigated acreage in Texas that it supported in 1980.

6. The word "unprecedented" in the passage is closest in meaning to

0	difficult to control without any restriction unlike anything in the past rapidly expanding
7.	The word "virtually" in the passage is closest in meaning to
0000	clearly perhaps frequently almost
8.	According to paragraph 4, all of the following are consequences of the heavy use of the Ogallala aquifer for irrigation EXCEPT:
	The recharge rate of the aquifer is decreasing. Water tables in the region are becoming increasingly lower. Wells now have to be dug to much greater depths than before. Increasingly powerful pumps are needed to draw water from the aquifer.
9.	According to paragraph 4, compared with all other states that use Ogallala water for irrigation, Texas
0000	has the greatest amount of farmland being irrigated with Ogallala water contains the largest amount of Ogallala water underneath the soil is expected to face the worst water supply crisis as the Ogallala runs dry uses the least amount of Ogallala water for its irrigation needs

The reaction of farmers to the inevitable depletion of the Ogallala varies. Many have been attempting to conserve water by irrigating less frequently or by switching to crops that require less water. Others, however, have adopted the philosophy that it is best to use the water while it is still economically profitable to do so and to concentrate on high-value crops such as cotton. The incentive of the farmers who wish to conserve water is reduced by their knowledge that many of their neighbors are profiting by using great amounts of water, and in the process are drawing down the entire region's water supplies.

10.	The word "inevitable" in the passage is closest in meaning to
\bigcirc	unfortunate
\bigcirc	predictable
\bigcirc	unavoidable
\bigcirc	final
11.	Paragraph 5 mentions which of the following as a source of difficulty for some farmers who try to conserve water?
\bigcirc	Crops that do not need much water are difficult to grow in the High Plains.
\bigcirc	Farmers who grow crops that need a lot of water make higher profits.
\bigcirc	Irrigating less frequently often leads to crop failure.
\bigcirc	Few farmers are convinced that the aquifer will eventually run dry.

PARAGRAPH 6

In the face of the upcoming water supply crisis, a number of grandiose schemes have been developed to transport vast quantities of water by canal or pipeline from the Mississippi, the Missouri, or the Arkansas rivers. Unfortunately, the cost of water obtained through any of these schemes would increase pumping costs at least tenfold, making the cost of irrigated agricultural products from the region uncompetitive on the national and international markets. Somewhat more promising have been recent experiments for releasing capillary water (water in the soil) above the water table by injecting compressed air into the ground. Even if this process proves successful, however, it would almost triple water costs. Genetic engineering also may provide a partial solution, as new strains of drought-resistant crops continue to be developed. Whatever the final answer to the water crisis may be, it is evident that within the High Plains, irrigation water will never again be the abundant, inexpensive resource it was during the agricultural boom years of the mid-twentieth century.

12.	According to paragraph 6, what is the main disadvantage of the proposed plans to transport river water to the High Plains?
\bigcirc	The rivers cannot supply sufficient water for the farmers' needs.
\bigcirc	Increased irrigation costs would make the products too expensive.
\bigcirc	The costs of using capillary water for irrigation will increase.
\bigcirc	Farmers will be forced to switch to genetically engineered crops.

GO ON TO THE NEXT PAGE

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

But even if uncooperative farmers were to join in the conservation efforts, this would only delay the depletion of the aquifer.

Where would the sentence best fit?

The reaction of farmers to the inevitable depletion of the Ogallala varies. Many have been attempting to conserve water by irrigating less frequently or by switching to crops that require less water. But even if uncooperative farmers were to join in the conservation efforts, this would only delay the depletion of the aquifer. Others, however, have adopted the philosophy that it is best to use the water while it is still economically profitable to do so and to concentrate on high-value crops such as cotton. ■ The incentive of the farmers who wish to conserve water is reduced by their knowledge that many of their neighbors are profiting by using great amounts of water, and in the process are drawing down the entire region's water supplies. ■

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In the face of the upcoming water supply crisis, a number of grandiose schemes have been developed to transport vast quantities of water by canal or pipeline from the Mississippi, the Missouri, or the Arkansas rivers. **But even if uncooperative farmers were to join in the conservation efforts, this would only delay the depletion of the aquifer**. Unfortunately, the cost of water obtained through any of these schemes would increase pumping costs at least tenfold, making the cost of irrigated agricultural products from the region uncompetitive on the national and international markets.

GO ON TO THE NEXT PAGE

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 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**.

The Ogallala aquifer is a large underground source of water in the High Plains region of the United States.

Answer Choices

- The use of the Ogallala for irrigation has allowed the High Plains to become one of the most productive agricultural regions in the United States.
- The periodic deepening of wells and the use of more-powerful pumps would help increase the natural recharge rate of the Ogallala.
- Given the aquifer's low recharge rate, its use for irrigation is causing water tables to drop and will eventually lead to its depletion.

- In Texas, a great deal of attention is being paid to genetic engineering because it is there that the most critical situation exists.
- Releasing capillary water and introducing drought-resistant crops are less promising solutions to the water supply crisis than bringing in river water.
- Several solutions to the upcoming water supply crisis have been proposed, but none of them promises to keep the costs of irrigation low.

STOP. This is the end of the Reading section of TOEFL iBT Practice Test 3.

2 Listening Section

Read this chapter to learn

- The 8 types of TOEFL iBT Listening questions
- How to recognize each Listening question type
- Tips for answering each Listening question type
- Strategies for preparing for the Listening section

n the TOEFL iBT Listening section you will listen to four to six lectures and two to three conversations. There will be six questions per lecture and five questions per conversation. You will have a total of 60 to 90 minutes to answer all of the Listening questions.

Listening Materials

There are two types of Listening materials on the TOEFL iBT test, conversations and lectures. Both are based on the actual speech that is used in North American colleges and universities.

Each lecture or conversation is 3–6 minutes long and, as far as possible, represents authentic academic language. For example, a professor giving a lecture may digress somewhat from the main topic, interactions between students and the professor can be extensive, and explanations of content can be elaborate. Features of oral language such as false starts, misspeaks with self-corrections, and repetitions are included. The speakers who record the texts are encouraged to use their own speech patterns (for example, with pauses and hesitations), as long as they preserve the content of the text. You should take notes during the lectures and conversations. This material is not meant to test your memory.

Conversations

There are two types of conversations in the Listening section:

- office hours
- service encounters

These conversations are typical of those that occur on North American university campuses. Office hours conversations are interactions that take place in a professor's office. The content may be academic or related to course requirements. For example, in an office conversation a student could request an extension on a due date (nonacademic content), or a student could ask for clarification about

the content of a lecture (academic content). Service encounters are interactions that take place on a university campus and have nonacademic content. Examples include inquiring about a payment for housing and registering for class. Each conversation is followed by five questions.

Lectures

Lectures in the Listening section represent the kind of language used when professors teach in a classroom. The lecture excerpt may include just a professor speaking, a student asking the professor a question, or the professor asking the students a question and calling on one student for a response. Each lecture is approximately 5 minutes in length and is followed by six questions.

The content of the lectures reflects the content that is presented in introductory-level academic settings. Lecture topics cover a broad range of subjects. You will not be expected to have any prior knowledge of the subject matter. All the information you need to answer the questions will be contained in the lecture. The lists below are provided to give you an idea of the topics that typically appear in the Listening section. In general these topics are divided into four major categories:

- Arts
- Life Science
- Physical Science
- Social Science

Arts lectures may be on topics such as:

- Architecture
- Industrial design/art
- City planning
- Crafts (weaving, knitting, fabrics, furniture, carving, mosaics, ceramics, folk and tribal art)
- Cave/rock art
- Music and music history
- Photography
- Literature and authors
- Books, newspapers, magazines, journals

Life Science lectures may be on topics such as:

- Extinction of or conservation efforts for animals and plants
- Fish and other aquatic organisms
- Bacteria and other one-celled organisms
- Viruses
- Medical techniques
- Public health
- Physiology of sensory organs
- Biochemistry
- Animal behavior (migration, food foraging, defenses)

- Habitats and the adaptation of animals and plants to them
- Nutrition and its impact on the body
- Animal communication

Physical Science lectures may be on topics such as:

- Weather and atmosphere
- Oceanography
- Glaciers, glacial landforms, ice ages
- Deserts and other extreme environments
- Pollution, alternative energy, environmental policy
- Other planets' atmospheres
- Astronomy and cosmology
- Properties of light, optics
- Properties of sound
- Electromagnetic radiation
- Particle physics
- Technology of TV, radio, radar
- Chemistry of inorganic things
- Computer science
- Seismology (plate structure, earthquakes, tectonics, continental drift, structure of volcanoes)

Social Science lectures may be on topics such as:

- Anthropology of nonindustrialized civilizations
- Early writing systems
- Historical linguistics
- Business, management, marketing, accounting
- TV/radio as mass communication
- Social behavior of groups, community dynamics, communal behavior
- Child development
- Education
- Modern history (including the history of urbanization and industrialization and their economic and social effects)

Listening Questions

Most of the Listening questions that follow the lectures and conversations are traditional multiple-choice questions with four answer choices and a single correct answer. There are, however, some other types of questions:

- multiple-choice questions with more than one correct answer (for example, two answers out of four choices or three answers out of five choices)
- questions that require you to put in order events or steps in a process
- questions that require you to match objects or text to categories in a table

Some questions replay a part of the lecture or conversation. You will then be asked a multiple-choice question about what you have just heard.

There are eight types of questions in the Listening section. These types are divided into three categories as follows:

TOEFL Listening Question Types

Basic Comprehension questions

- 1. Gist-content
- 2. Gist-purpose
- 3. Detail

Pragmatic Understanding questions

- 4. Understanding the Function of What Is Said
- 5. Understanding the Speaker's Attitude

Connecting Information questions

- 6. Understanding Organization
- 7. Connecting Content
- 8. Making Inferences

The following sections will explain each of these question types. You will find out how to recognize each type and see examples of each type with explanations. You will also find tips that can help you answer each Listening question type.

Basic Comprehension Questions

Basic comprehension of the lecture or conversation is tested in three ways: with Gist-content, Gist-purpose, and Detail questions.

Type 1: Gist-content Questions

Understanding the *gist* of a lecture or conversation means understanding the general topic or main idea. The gist of the lecture or conversation may be expressed explicitly or implicitly. Questions that test understanding the gist of a lecture or converation may require you to generalize or synthesize information from what you hear.

How to Recognize Gist-content Questions

Gist-content questions are typically phrased as follows:

- What problem does the man have?
- What are the speakers mainly discussing?
- What is the main topic of the lecture?
- What is the lecture mainly about?
- What aspect of X does the professor mainly discuss?

Tips for Gist-content Questions

- Gist-content questions ask about the *overall* content of the lecture or converation. Eliminate choices that refer to only small portions of what you just listened to.
- Use your notes. Decide what overall theme ties the details in your notes together. Choose the answer that comes closest to describing this overall theme.

Example

Excerpt from a lecture:

Professor

... So the Earth's surface is made up of these huge segments, these tectonic plates. And these plates move, right? But how can, uh, motion of plates, do you think, influence climate on the Earth? Again, all of you probably read this section in the book, I hope, but, uh, uh, how—how can just motion of the plates impact the climate?

. . . when a plate moves, if there's landmass on the plate, then the landmass moves too, okay? That's why continents shift their positions, because the plates they're on move. So as a landmass moves away from the equator, its climate would get colder. So, right now we have a continent—the landmass Antarctica—that's on a pole.

So that's dramatically influencing the climate in Antarctica. Um, there was a time when most of the landmasses were closer to a pole; they weren't so close to the equator. Uh, maybe 200 million years ago Antarctica was attached to the South American continent; oh, and Africa was attached too, and the three of them began moving away from the equator together.

... in the Himalayas. That was where two continental plates collided. Two continents on separate plates. Um, when this, uh, Indian, uh, uh, plate collided with the Asian plate, it wasn't until then that we created the Himalayas. When we did that, then we started creating the type of cold climate that we see there now. Wasn't there until this area was uplifted.

So again, that's something else that plate tectonics plays a critical role in. Now, these processes are relatively slow; the, uh, Himalayas are still rising, but on the order of millimeters per year. So they're not dramatically influencing climate on your—the time scale of your lifetime. But over the last few thousands of—tens of thousands of years, uh—hundreds of thousands of years—yes, they've dramatically influenced it.

Uh, another important thing—number three—on how plate tectonics have influenced climate is how they've influenced—we talked about how changing landmasses can affect atmospheric circulation patterns, but if you alter where the landmasses are connected, it can impact oceanic, uh, uh, circulation patterns.

. . . Um, so, uh, these other processes, if, if we were to disconnect North and South America right through the middle—say, through Panama—that would dramatically influence climate in North and South America—probably the whole globe. So suddenly now as the two continents gradually move apart, you can have different circulation patterns in the ocean between the two. So, uh, that might cause a dramatic

change in climate if that were to happen, just as we've had happen here in Antarctica to separate, uh, from South America.

What is the main topic of the lecture?

	The	differences	in	climate	that	occur i	n	different	countries	2
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- How movement of the Earth's plates can affect climate
- Why the ocean has less effect on climate than previously thought
- The history of the climate of the region where the university is located

Explanation

Choice 2 is the answer that best represents the main topic of the lecture. The professor uses Antarctica and the Himalayas as examples to make the general point that climate is affected by plate tectonics, the movement of Earth's plates.

Note that for Gist-content questions the correct answer and the incorrect choices can sometimes be worded more abstractly.

The following Gist-content question refers to the same lecture:

What is the main topic of the lecture?

- A climate experiment and its results
- A geologic process and its effect
- How a theory was disproved
- How land movement is measured

Explanation

Once again, the correct answer is choice 2. Even though the wording is very different, it basically says the same thing as choice 2 in the previous example: a geologic process (movement of Earth's plates) has an effect (changes in climate).

Type 2: Gist-purpose Questions

Some gist questions focus on the purpose of the conversation or lecture rather than on the content. This type of question will more likely occur with conversations, but Gist-purpose questions may also occasionally be asked about lectures.

How to Recognize Gist-purpose Questions

Gist-purpose questions are typically phrased as follows:

- Why does the student visit the professor?
- Why does the student visit the registrar's office?
- Why did the professor ask to see the student?
- Why does the professor explain X?

Tips for Gist-purpose Questions

- Students visit professors during office hours for various reasons, including cases in which a professor invites a student in to discuss the student's performance on an assignment. To answer a Gist-purpose question, look in your notes for information that identifies the reason that the student visited the professor in the first place.
- The purpose of a conversation is not always related to the conversation's main topic. For example, a student might visit her professor for the purpose of asking a question about the professor's grading policy. After answering her question, the professor might spontaneously ask how the student is progressing on a research project, and the rest of the conversation is about that project.
- In service encounter conversations, the student is often trying to solve a problem. Understanding what the student's problem is and how it will be solved will help you answer the Gist-purpose question.

Example

Narrator

Listen to a conversation between a professor and a student.

Student

I was hoping you could look over my note cards for my presentation . . . just to see what you think of it.

Professor

Okay, so refresh my memory: what's your presentation about?

Student

Two models of decision making . . .

Professor

Oh, yes—the classical and the administrative model.

Student

Yeah, that's it.

Professor

And what's the point of your talk?

Student

I'm gonna talk about the advantages and disadvantages of both models.

Professor

But what's the point of your talk? Are you going to say that one's better than the other?

Student

Well, I think the administrative model's definitely more realistic. But I don't think it's complete. It's kind of a tool . . . a tool to see what can go wrong.

Professor

Okay, so what's the point of your talk? What are you trying to convince me to believe?

Student

Well, uh, the classical model—you shouldn't use it by itself. A lot of companies just try to follow the classical model, but they should really use both models together.

Professor

Okay, good. So let me take a look at your notes here . . . Oh, typed notes, . . . Wow you've got a lot packed in here. Are you sure you're going to be able to follow this during your talk?

Student

Oh, sure; that's why I typed them, because otherwise . . . well, my handwriting's not very clear.

Why does the student visit the professor?

- To get some note cards for his presentation
- To show her some examples of common errors in research
- To review the notes for his presentation with her
- To ask for help in finding a topic for his presentation

Explanation

While much of the conversation is concerned with the content of the man's presentation, the correct answer to the question "Why does the man visit the professor?" is choice 3: "To review the notes for his presentation with her."

Type 3: Detail Questions

Detail questions require you to understand and remember explicit details or facts from a lecture or conversation. These details are typically related, directly or indirectly, to the gist of the conversation or lecture, by providing elaboration, examples, or other support. In some cases where there is a long digression that is not clearly related to the main idea, you may be asked about some details of the digression.

How to Recognize Detail Questions

Detail questions are typically phrased as follows:

- According to the professor, what is one way that X can affect Y?
- What is X?
- What resulted from the invention of the X?
- According to the professor, what is the main problem with the X theory?

Tips for Detail Questions

- Refer to your notes as you answer. You will not be asked about minor points. Your notes should contain the major details from the conversation or lecture.
- Do not choose an answer only because it contains some of the words that were used in the conversation or lecture. Incorrect responses will often contain words and phrases from the lecture or conversation.
- If you are unsure of the correct response, decide which one of the choices is most consistent with the main idea of the conversation or lecture.

Examples

Professor

Uh, other things that glaciers can do is, uh, as they retreat, instead of depositing some till, uh, scraped-up soil, in the area, they might leave a big ice block, and it breaks off, and as the ice block melts, it leaves a depression, which can become a lake. These are called kettle lakes. These are very critical ecosystems in this region, um, because, uh, uh, they support some unique biological diversity, these kettle lakes do.

The Great Lakes are like this; they were left over from the Pleist—from the Pleistocene glaciers. Uh, the Great Lakes used to be a lot bigger as the glaciers were retreating; some of the lakes were as much as a hundred feet higher in elevation. The beach of a former higher stage of Lake Erie was about 50 miles away from where the beach—the current beach of Lake Erie—is right now. So I just wanted to tell you a little bit more about glaciers and some *positive* things, uh, that we get from climate change, like the ecosystems that develop in these kettle lakes, and how we can look at them in an environmental perspective . . .

Wh	at are kettle lakes?
\bigcirc	Lakes that form in the center of a volcano
\bigcirc	Lakes that have been damaged by the greenhouse effect
\bigcirc	Lakes formed by unusually large amounts of precipitation
\bigcirc	Lakes formed when pieces of glaciers melt
Нο	w did the glaciers affect the Great Lakes?
\bigcirc	They made the Great Lakes smaller.
\bigcirc	They made the Great Lakes deeper.
\bigcirc	They reduced the biodiversity of the Great Lakes.
\bigcirc	They widened the beaches around the Great Lakes.

Explanation

The answer to the first question is found in the beginning of the lecture when the professor explains what a kettle lake is. Remember that new terminology is often tested in Detail questions. The answer to the second question is found later in the lecture where the professor says, "the Great Lakes used to be a lot bigger as the glaciers were retreating."

Pragmatic Understanding Questions

Pragmatic Understanding questions test understanding of certain features of spoken English that go beyond basic comprehension. In general, these types of questions test how well you understand the *function* of an utterance or the *stance*, or attitude, that the speaker expresses. In most instances, Pragmatic Understanding questions will test parts of the conversation or lecture where a speaker's purpose or attitude is not expressed directly. In these cases, what is directly stated—the surface expression—will not be an exact match of the statement's function or purpose.

What people say is often intended to be understood on a level that lies beyond or beneath the surface expression. To use an often-cited example, the sentence "It sure is cold in here" can be understood literally as a statement of fact about the temperature of a room. But suppose the speaker is, say, a guest in your home, who is also shivering and glancing at an open window. In that case, what your guest may really mean is that he wants you to close the open window. In this example, the *function* of the speaker's statement—getting you to close the window—lies beneath the surface expression. Functions that often lie beneath the surface expression include directing, recommending, complaining, accepting, agreeing, narrating, questioning, and others.

Understanding meaning within the context of an entire lecture or conversation is critical in instances where the speaker's *stance* is involved. Is a given statement intended to be taken as fact or opinion? How certain is the speaker of the information she is reporting? Is the speaker conveying certain feelings or attitudes about some person or thing or event? As above, these feelings or attitudes may lie beneath the surface expression. Thus they can easily go unrecognized or be misunderstood by nonnative speakers.

Some Pragmatic Understanding questions involve a replay of part of the lecture or conversation in order to focus your attention on the relevant portion. There are two types of Pragmatic Understanding questions: Understanding the Function of What Is Said questions and Understanding the Speaker's Attitude questions.

Type 4: Understanding the Function of What Is Said Questions

The first type of Pragmatic Understanding question tests whether you can understand the *function* of what is said. This question type often involves listening again to a portion of the lecture or conversation.

How to Recognize Understanding the Function of What Is Said Questions

Understanding the Function of What Is Said questions are typically phrased as follows:

- What does the professor imply when he says this? (replay)
- Why does the student say this? (replay)
- What does the professor mean when she says this? (replay)

Tip for Understanding the Function of What Is Said Questions

 Remember that the function of what is said may not match what the speaker directly states. In the following example, an administrative assistant asks a student if he knows where the housing office is. She is not, however, doing this to get information about the housing office's location.

Example

Excerpt from a conversation between a male student and a female administrative assistant. They are discussing his dorm fees.

Narrator

Listen again to a part of the conversation. Then answer the question.

Student

Okay. I'll just pay with a credit card. [pause] And where do I do that at?

Administrative Assistant

At, um, the housing office.

Student

Housing office, all right.

Administrative Assistant

Do you know where they are?

Narrator

What is the woman trying to find out from the man?

- Where the housing office is
- Approximately how far away the housing office is
- Whether she needs to tell him where the housing office is
- Whether he has been to the housing office already

Explanation

The pragmatic function of the woman's question is to ask the man whether or not he needs to be told the location of the housing office. The best answer for this question is choice 3.

Type 5: Understanding the Speaker's Attitude Questions

The second type of Pragmatic Understanding question tests whether you understand a speaker's attitude or opinion. You may be asked a question about the speaker's feelings, likes and dislikes, or reason for anxiety or amusement. Also included in this category are questions about a speaker's degree of certainty: Is the speaker referencing a source or giving a personal opinion? Are the facts presented generally accepted or are they disputed? Occasionally, a question will test your ability to detect and understand irony. A speaker is being ironic when the

intended meaning is the opposite of what he or she is actually saying. For example, the utterance "That's just great" can be delivered with an intonation that gives the utterance the meaning "That's not good at all." Speakers use irony for a variety of purposes, including emphasizing a point being made, bringing humor to a situation in order to win audience sympathy, or expressing disapproval in an indirect way. Listeners must infer the ironic statement's real meaning both from clues provided in the context and from the speaker's intonation.

How to Recognize Understanding the Speaker's Attitude Questions

Understanding the Speaker's Attitude questions are typically phrased as follows:

- What can be inferred about the student?
- What is the professor's attitude toward X?
- What is the professor's opinion of X?
- What can be inferred about the student when she says this? *(replay)*
- What does the woman mean when she says this? (replay)

Tip for Understanding the Speaker's Attitude Questions

• Learn to pay attention to the speaker's tone of voice. Does the speaker sound apologetic? Confused? Enthusiastic? The speaker's tone can help you answer this kind of question.

Example

Excerpt from a conversation between a male student and his female advisor. In this part of a longer conversation, they are discussing the student's job.

Advisor

Well, good. So, bookstore isn't working out?

Student

Oh, bookstore's working out fine. I just, I—this pays almost double what the bookstore does.

Advisor

Oh, wow!

Student

Yeah. Plus credit.

Advisor

Plus credit.

Student

And it's more hours, which . . . The bookstore's—I mean it's a decent job 'n' all. Everybody I work with . . . that part's great; it's just . . . I mean I'm shelving books and kind of hanging out and not doing much else . . . if it weren't for the people, it'd be totally boring.

Narrator

Wh	at is the student's attitude toward the people he currently works with?
\bigcirc	He finds them boring.
\bigcirc	He likes them.
\bigcirc	He is annoyed by them.
\bigcirc	He does not have much in common with them.

Explanation

In this example it may be easy to confuse the student's attitude toward his job with his attitude toward the people he works with. The correct answer is choice 2. The student is bored with the job, not the people he works with.

Connecting Information Questions

Connecting Information questions require you to make connections between or among pieces of information in the lecture or conversation. Your ability to integrate information from different parts of the lecture or conversation, to make inferences, to draw conclusions, to form generalizations, and to make predictions is tested. To choose the right answer, you will need to be able to identify and explain relationships among ideas and details in a lecture or conversation. These relationships may be explicit or implicit.

There are three types of Connecting Information questions.

Type 6: Understanding Organization Questions

In Understanding Organization questions you may be asked about the overall organization of the lecture, or you may be asked about the relationship between two portions of what you heard. Here are two examples:

1.	How does the professor organize the information that she presents to the class?
	 In the order in which the events occurred
2.	How does the professor clarify the points he makes about Mexico?
	By comparing Mexico to a neighboring country

The first of these questions asks about the overall organization of information, testing understanding of connections throughout the whole lecture. The second asks about a portion of the lecture, testing understanding of the relationship between two different ideas.

Some Understanding Organization questions may ask you to identify or recognize how one statement functions with respect to surrounding statements. Functions may include indicating or signaling a topic shift, connecting a main topic to a subtopic, providing an introduction or a conclusion, giving an example, starting a digression, or even making a joke.

Example

Narrator

Listen again to a statement made by the professor. Then answer the question.

Professor

There's this committee I'm on . . . Th-the name of the thing, and it's probably, well, you don't have to take notes about this, um, the name of the thing is academic standards."

Narrator

Why does the professor tell the students that they do not have to take notes?

- The information is in their books.
- The information may not be accurate.
- She is going to tell a personal story.
- They already know what she is going to talk about.

The statement preceding the replayed statement is about how bureaucracies work. What follows the replayed statement is a personal story about bureaucracies. The key lies in recognizing that the portion of the lecture following the replayed statement is a personal story. The correct answer is choice 3. With the replayed statement the professor indicates to the class that what she is about to say does not have the same status as what she was talking about previously.

How to Recognize Understanding Organization Questions

Understanding Organization questions are typically phrased as follows:

- How does the professor organize the information about X?
- How is the discussion organized?
- Why does the professor discuss X?
- Why does the professor mention X?

Tips for Understanding Organization Questions

- Questions that ask about overall organization are more likely to be found after lectures than after conversations. Refer to your notes to answer these questions. It may not have been apparent from the start that the professor organized the information (for example) chronologically, or from least to most complex, or in some other way.
- Pay attention to comparisons made by the professor. In the following example the professor is discussing the structure of plants. He uses steel and the steel girders in a new building to make a point. When the professor mentions something that is seemingly off-topic, you should ask yourself what point the professor is making.

Examples

Professor

So we have reproductive parts—the seeds, the fruit walls—we have leaf parts, but the great majority of plant fibers come from vasculature within the stem . . . fibers that occur in stem material. And what we do is consider these fibers [false start]—basically they're what are called bast fibers. Bast fibers. Now, basically bast fibers are parts of the plant that the plant uses to maintain vertical structure.

Think about it this way: what's the first thing you see when you see a building being built . . . uh, what's the first thing they put up? Besides the foundation, of course? The metalwork, right? They put all those steel girders up there, the framework. OK, well, think of [false start]—bast fibers basically constitute the structural framework to support the stem of the plant. OK? So as the plant grows, it basically builds a girder system within that plant, like steel, so to speak.

So suppose you cut across the stem of one of these plants . . . take a look at how the bast fibers are arranged, so you're looking at a cross section . . . you'll see that the fibers run vertically side by side. Up and down next to each other, forming a kind of tube, which is significant . . . 'cause, which is physically stronger: a solid rod or a tube? The tube—physics tells you that. What's essentially happening—well, the plant is forming a structural ring of these bast fibers all around the stem, and that shape allows for structural rigidity, but also allows for bending and motion.

Why does the professor talk about steel?
To identify the substance that has replaced fiber products.
To explain a method for separating fibers from a plant.
To compare the chemical structure of fibers to metals.
To illustrate the function of fibers in a plant's stem.
Why does the professor mention a tube?
To explain how some fibers are arranged in a plant.
To show how plants carry water to growing fibers.
To describe an experiment involving plant fibers.

To explain why some plant stems cannot bend.

Explanation

The lecture is about plants and plant fibers, not steel girders. The professor mentions steel girders only to compare them to the structural framework of fibers in a plant. The correct answer to the first question is choice 4. Likewise, the second question also concerns the professor's attempts to help the students visualize a plant's structure. The correct answer to the second question is choice 1.

Type 7: Connecting Content Questions

Connecting Content questions measure your understanding of the relationships among ideas in a lecture. These relationships may be explicitly stated, or you may have to infer them from the words you hear.

The questions may ask you to organize information in a different way from the way it was presented in the lecture. You might be asked to identify comparisons, cause and effect, or contradiction and agreement. You may also be asked to classify items in categories, identify a sequence of events or steps in a process, or specify relationships among objects along some dimension.

Example

Narrator

What type of symmetry do these animals have? Place a check mark in the correct box.

	Asymmetry	Radial Symmetry	Bilateral Symmetry
Earthworm			✓
Human			✓
Sponge	✓		
Sea Anemone	✓	✓	

In this question you are asked to present information in a different format from that in which it was presented in a lecture.

Other Connecting Content questions will require you to make inferences about the relationships among things mentioned in the lecture. You may have to predict an outcome, draw a logical conclusion, extrapolate some additional information, infer a cause-and-effect relationship, or specify some particular sequence of events.

How to Recognize Connecting Content Questions

Connecting Content questions are typically phrased as follows:

- What is the likely outcome of doing procedure X before procedure Y?
- What can be inferred about X?
- What does the professor imply about X?

Tip for Connecting Content Questions

• Questions that require you to fill in a chart or table or put events in order fall into this category. As you listen to the lectures accompanying this study guide, pay attention to the way you format your notes. Clearly identifying terms and their definitions as well as steps in a process will help you answer questions of this type.

Example

Professor

OK, Neptune and its moons. Neptune has several moons, but there's only . . . we'll probably only worry about two of them, the two fairly interesting ones. The first one's Triton. So you have this little struggle with the word *Titan*, which is the big moon of Saturn, and the name *Triton*, which is the big moon of *Neptune*. Triton: it's, it's the only *large moon* in the solar system to go backwards, to go around its—what we call

its parent planet—in this case Neptune, the wrong way. OK? Every other large moon orbits the *parent planet* in the same counterclockwise direction . . . same as most of the other bodies in the solar system. But this moon . . . the reverse direction, which is perfectly OK as far as the laws of gravity are concerned. But it indicates some sort of peculiar event in the early solar system that gave this moon a motion in contrast to the general spin of the raw material that it was formed from.

The other moon orbiting Neptune that I want to talk about is Nereid [NEER-ee-ihd]. Nereid is, Nereid has the most eccentric orbit, the most lopsided, elliptical-type orbit for a large moon in the solar system. The others tend more like circular orbits.

... Does it mean that Pluto and Neptune might have been related somehow in the past and then drifted slowly into their present orbits? If Pluto ... did Pluto ever belong to the Neptune system? Do Neptune's moons represent Pluto-type bodies that have been captured by Neptune? Was some sort of . . . was Pluto the object that disrupted the Neptune system at some point in the past?

It's really hard to prove any of those things. But now we're starting to appreciate that there's quite a few junior Plutos out there: not big enough to really call a planet, but large enough that they're significant in history of the early solar system. So we'll come back to those when we talk about comets and other small bodies in the fringes of the outer solar system.

Wh	nat does the professor imply about the orbits of Triton and Nereid?
\bigcirc	They used to be closer together.
\bigcirc	They might provide evidence of an undiscovered planet.
\bigcirc	They might reverse directions in the future.
\bigcirc	They might have been changed by some unusual event.

Explanation

In Connecting Content questions you will have to use information from more than one place in the lecture. In this example, the professor describes the orbits of Triton and Nereid. In both cases he refers to events in the early solar system that might have changed or disrupted their orbits. The correct answer for this question is choice 4, "They might have been changed by some unusual event."

Type 8: Making Inferences Questions

The final type of Connecting Information question is Making Inferences questions. In this kind of question you usually have to reach a conclusion based on facts presented in the lecture or conversation.

How to Recognize Making Inferences Questions

Making Inferences questions are typically phrased as follows:

- What does the professor imply about X?
- What will the student probably do next?
- What can be inferred about X?
- What does the professor imply when he says this? (*replay*)

Tip for Making Inferences Questions

• In some cases, answering this kind of question correctly means adding up details from the lecture or conversation to reach a conclusion. In other cases, the professor may imply something without directly stating it. In most cases the answer you choose will use vocabulary not found in the lecture or conversation.

Example

Professor

Dada is often considered under the broader category of Fantasy. It's one of the early directions in the Fantasy style. The term "Dada" itself is a nonsense word—it has no meaning . . . and where the word originated isn't known. The "philosophy" behind the "Dada" movement was to create works that conveyed the concept of absurdity—the artwork was meant to shock the public by presenting the ridiculous, absurd concepts. Dada artists rejected reason—or rational thought. They did not believe that rational thought would help solve social problems . . .

... When he turned to Dada, he quit painting and devoted himself to making a type of sculpture he referred to as a "ready-made" ... probably because they were constructed of readily available objects ... At the time, many people reacted to Dadaism by saying that the works were not art at all ... and in fact, that's exactly how Duchamp and others conceived of it—as a form of "non-art" ... or anti-art.

Duchamp also took a reproduction of da Vinci's famous painting the *Mona Lisa*, and he drew a mustache and goatee on the subject's face. Treating this masterpiece with such disrespect was another way Duchamp was challenging the established cultural standards of his day.

What does the professor imply about the philosophy of the Dada movement?

- It was not taken seriously by most artists.
- It varied from one country to another.
- It challenged people's concept of what art is.
- It was based on a realistic style of art.

Explanation

Note the highlighted portions of the lecture. You can see that Dadaism was meant to challenge the public's conception of what art was meant to be. The correct answer to the question is choice 3.

Strategies for Preparing for the Listening Section

- Take notes while you listen. Only the major points will be tested, so do not try to write down every detail. After testing, notes are collected and shredded before you leave the test center.
- When listening to a lecture, pay attention to the new words or concepts introduced by the professor. These words may be written on a chalkboard and will often be tested.
- When listening to a lecture, pay attention to the way the lecture is organized and the way the ideas in the lecture are connected.
- Choose the best answer. The computer will ask you to confirm your choice. After clicking on **OK**, you automatically go on to the next question.
- Listening questions must be answered in order. Once you click on **OK**, you cannot go back to a previous question.

How to Sharpen Your Listening Skills

Listening is one of the most important skills necessary for success on the TOEFL test and in academics in general. The ability to listen and understand is tested in three out of four sections of the TOEFL iBT test.

The best way to improve your listening skills is to listen frequently to many different types of material in various subject areas (sciences, social sciences, arts, business, and others). Of course, watching movies and TV and listening to the radio are excellent ways to practice listening. Audiotapes and CDs of talks are available in libraries and bookstores; those with transcripts of the listening material are particularly helpful. The Internet is also a great resource for listening material.

Here are some ways you can strengthen skills for the three listening purposes tested on the TOEFL iBT test.

1. Listening for basic comprehension

- Increase your vocabulary knowledge, perhaps by using flash cards.
- Focus on the content and flow of material. Do not be distracted by the speaker's style and delivery.
- Anticipate what the speaker is going to say as a way to stay focused, and adjust your predictions when you receive additional information.
- Stay active by asking yourself questions (for example, What main idea is the professor communicating?).
- Copy the words "main idea," "major points," and "important details" on different lines of paper. Listen carefully and write these things down while

- listening. Listen again until all important points and details are written down.
- Listen to a portion of a lecture or talk and write a brief summary of important points. Gradually increase the amount you listen to and summarize. Note: summarizing skills are not tested in the Listening section, but they are useful for the integrated tasks in the Writing and Speaking sections.

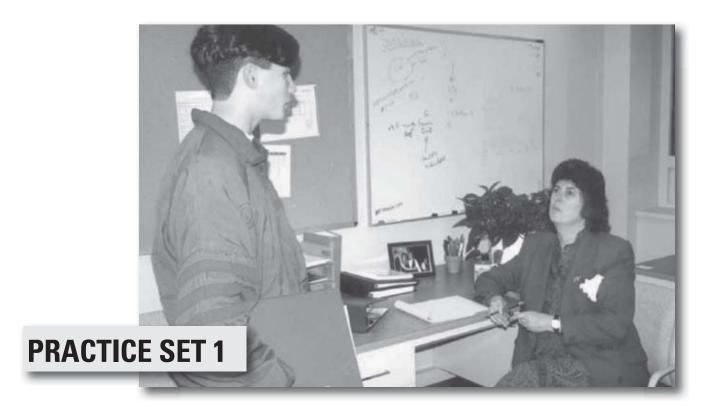
2. Listening for pragmatic understanding

- Think about what each speaker hopes to accomplish; that is, what is the purpose of the speech or conversation? Is the speaker apologizing, complaining, making suggestions?
- Notice the way each speaker talks. Is the language formal or casual? How certain does each speaker sound? Is the speaker's voice calm or emotional? What does the speaker's tone of voice tell you?
- Notice the degree of certainty of the speaker. How sure is the speaker about the information? Does the speaker's tone of voice indicate something about his or her degree of certainty?
- Listen for changes in topic or side comments in which the speaker briefly moves away from the main topic and then returns (digressions).
- Watch television or movie comedies and pay attention to stress and intonation patterns used to convey meaning.

3. Listening to connect ideas

- Think about how the lecture is organized. Listen for the signal words that indicate the introduction, major steps or ideas, examples, and the conclusion or summary.
- Identify the relationships between ideas in the information being discussed. Possible relationships include cause/effect, compare/contrast, and steps in a process.
- Listen for words that show connections and relationships between ideas.
- When you listen to recorded material, stop the recording at various points and try to predict what information or idea will be expressed next.
- Create an outline of the information discussed while listening or after listening.

Listening Practice Sets



Now listen to Track 1.



Questions

Directions: Mark your answer by filling in the oval next to your choice.

- 1. Why does the man go to see his professor?
- O To borrow some charts and graphs from her
- To ask her to explain some statistical procedures
- To talk about a report he is writing
- To discuss a grade he got on a paper



2. Listen again to part of the conversation by playing Track 2. Then answer the question.

Why does the professor say this?

- To question the length of the paper
- To offer encouragement
- To dispute the data sources
- To explain a theory

3. What information will the man include in his report?

For each phrase below, place a check mark in the "Include" column or the "Not Include" column.

Include in Report

	include in nepoli	Mot include in heport
Climate charts Interviews with meteorologists Journal notes Statistical tests		
 4. Why does the professor tell the man about 10 demonstrate a way of remembering To explain why she needs to leave soon To illustrate a point that appears in his To emphasize the importance of good in the contract of t	things n report	at the doctor's office?
 5. What does the professor offer to do for Help him collect more data in other are Submit his research findings for publication Give him the doctor's telephone number Review the first version of his report 	as of the state ation	

PRACTICE SET 1 SCRIPT AND ANSWERS

Track 1 Listening Script

Narrator

Listen to a conversation between a student and a professor.

Student

Uh, excuse me, Professor Thompson. I know your office hours are tomorrow, but I was wondering if you had a few minutes free now to discuss something.

Professor

Sure, John. What did you wanna talk about?

Student

Well, I have some quick questions about how to write up the research project I did this semester—about climate variations.

Professor

Oh, yes. You were looking at variations in climate in the Grant City area, right? How far along have you gotten?

Student

I've got all my data, so I'm starting to summarize it now, preparing graphs and stuff. But I'm just . . . I'm looking at it and I'm afraid that it's not enough, but I'm not sure what else to put in the report.

Professor

I hear the same thing from every student. You know, you have to remember now that you're the expert on what you've done. So think about what you'd need to include if you were going to explain your research project to someone with general or casual knowledge about the subject, like . . . like your parents. That's usually my rule of thumb: would my parents understand this?

Student

OK. I get it.

Professor

I hope you can recognize by my saying that how much you do know about the subject.

Student

Right. I understand. I was wondering if I should also include the notes from the research journal you suggested I keep?

Professor

Yes, definitely. You should use them to indicate what your evolution in thought was through time. So just set up, you know, what was the purpose of what you were doing—to try to understand the climate variability of this area—and what you did, and what your approach was.

Student

OK. So, for example, I studied meteorological records; I looked at climate charts; I used different methods for analyzing the data, like certain statistical tests; and then I discuss the results. Is that what you mean?

Professor

Yes, that's right. You should include all of that. The statistical tests are especially important. And also be sure you include a good reference section where all your published and unpublished data came from, 'cause you have a lot of unpublished climate data.

Student

Hmm . . . something just came into my mind and went out the other side.

Professor

That happens to me a lot, so I've come up with a pretty good memory management tool. I carry a little pad with me all the time and jot down questions or ideas that I don't wanna forget. For example, I went to the doctor with my daughter and her baby son last week, and we knew we wouldn't remember everything we wanted to ask the doctor, so we actually made a list of five things we wanted answers to.

Student

A notepad is a good idea. Since I'm so busy now at the end of the semester, I'm getting pretty forgetful these days. OK. I just remembered what I was trying to say before.

Professor

Good. I was hoping you'd come up with it.

Student

Yes. It ends up that I have data on more than just the immediate Grant City area, so I also included some regional data in the report. With everything else it should be a pretty good indicator of the climate in this part of the state.

Professor

Sounds good. I'd be happy to look over a draft version before you hand in the final copy, if you wish.

Student

Great. I'll plan to get you a draft of the paper by next Friday. Thanks very much. Well, see ya.

Professor

OK.

Answers and Explanations

- 1. 3 This is a Gist-purpose question. The man says, "I have some quick questions about how to write up the research project I did this semester." He is going to write a report about his project and is unsure of what to include. Choice 3 is the correct answer.
- 2. 2 This is an Understanding the Function of What Is Said question. The question asks you to listen again to this part of the conversation:

Professor

You know, you have to remember now that you're the expert on what you've done. So think about what you'd need to include if you were going to explain your research project to someone with general or casual knowledge about the subject, like . . . like your parents. That's usually my rule of thumb: would my parents understand this?

Student

OK. I get it.

Professor

I hope you can recognize by my saying that how much you do know about the subject.

Then you are asked specifically about this sentence:

Narrator

Why does the professor say this:

Professor

I hope you can recognize by my saying that how much you do know about the subject.

The student is unsure of how to present the information in his report. The professor is trying to give the student confidence in his own judgment. Therefore the correct answer is choice 2, "To offer encouragement."

3. This question is easy to recognize as a Connecting Content question. The student and the professor discuss several sources of information that the student used to investigate climate variation. They do not discuss interviewing meteorologists, even though they mention other kinds of conversations, like the professor's discussion with her child's doctor. The chart correctly filled out looks like this:

For each phrase below, place a check mark in the "Include" column or the "Not Include" column.

Climate charts Interviews with meteorologists		Include in Report	Not Include in Report
	Climate charts	✓	
lournal notes	Interviews with meteorologists		✓
Journal Hotes	Journal notes	✓	
Statistical tests	Statistical tests	✓	

- 4. This is an Understanding the Function of What Is Said question. The correct answer is choice 1. The professor's purpose in mentioning the doctor's office is to show the man how writing down questions as they occur can be useful. The man has forgotten a question he wanted to ask the professor. The professor, when she spoke to the doctor, wrote down her questions beforehand, so she would not forget. She mentions the doctor's office in order to demonstrate a strategy for remembering.
- 5. **4** This is a Detail question. The discussion ends with the professor offering to "look over a draft version" of the man's paper.

PRACTICE SET 2



Now listen to Track 3.

Questions

Directions: Mark your answer by filling in the oval next to your choice.

- 1. What is the main purpose of the lecture?
- To illustrate the importance of extrinsic values
- To explain Aristotle's views about the importance of teaching
- To explain why people change what they value
- To discuss Aristotle's views about human happiness
- 2. The professor gives examples of things that have value for her. Indicate for each example what type of value it has for her.

Place a check mark in the correct box. This question is worth 2 points.

	Only Extrinsic Value	Only Intrinsic Value	Both Extrinsic and Intrinsic Value
Teaching			
Exercise			
Health			
Playing a musical instrument			

- 3. Why is happiness central to Aristotle's theory?
- O Because it is so difficult for people to attain
- O Because it is valued for its own sake by all people
- Because it is a means to a productive life
- O Because most people agree about what happiness is

4.	true happiness?
\bigcirc	Fame cannot be obtained without help from other people.
\bigcirc	Fame cannot be obtained by all people.
\bigcirc	Fame does not last forever.
0	People cannot share their fame with other people.
5.	Listen again to part of the lecture by playing Track 4.
	Then answer the question.
Wh	at does the professor mean when she says this?
\bigcirc	Teaching is not a highly valued profession in society.
\bigcirc	She may change professions in order to earn more money.
\bigcirc	The reason she is a teacher has little to do with her salary.
\bigcirc	More people would become teachers if the salary were higher.

PRACTICE SET 2 SCRIPT AND ANSWERS

Track 3 Listening Script

Narrator

Listen to part of a lecture in a philosophy class.

Professor

OK. Another ancient Greek philosopher we need to discuss is Aristotle—Aristotle's ethical theory. What Aristotle's ethical theory is all about is this: he's trying to show you how to be happy—what true happiness is.

Now, why is he interested in human happiness? It's not just because it's something that all people want or aim for. It's more than that. But to get there, we need to first make a very important distinction. Let me introduce a couple of technical terms: extrinsic value and intrinsic value.

To understand Aristotle's interest in happiness, you need to understand this distinction.

Some things we aim for and value, not for themselves, but for what they bring about in addition to themselves. If I value something as a means to something else, then it has what we will call "extrinsic value." Other things we desire and hold to be valuable for themselves alone. If we value something not as a means to something else, but for its own sake, let us say that it has "intrinsic value."

Exercise. There may be some people who value exercise for itself, but I don't. I value exercise because if I exercise, I tend to stay healthier than I would if I didn't. So I desire to engage in exercise, and I value exercise extrinsically . . . not for its own sake, but as a means to something beyond it. It brings me good health.

Health. Why do I value good health? Well, here it gets a little more complicated for me. Um, health is important for me because I can't . . . do other things I wanna do—play music, teach philosophy—if I'm ill. So health is important to me—has value to

me—as a means to a productive life. But health is also important to me because I just kind of like to be healthy—it feels good. It's pleasant to be healthy, unpleasant not to be. So to some degree I value health both for itself and as a means to something else: productivity. It's got extrinsic and intrinsic value for me.

Then there's some things that are just valued for themselves. I'm a musician, not a professional musician; I just play a musical instrument for fun. Why do I value playing music? Well, like most amateur musicians, I only play because, well, I just enjoy it. It's something that's an end in itself.

Now, something else I value is teaching. Why? Well, it brings in a modest income, but I could make more money doing other things. I'd do it even if they didn't pay me. I just enjoy teaching. In that sense it's an end to itself.

But teaching's not something that has intrinsic value for all people—and that's true generally. Most things that are enjoyed in and of themselves vary from person to person. Some people value teaching intrinsically, but others don't.

So how does all this relate to human happiness? Well, Aristotle asks: is there something that all human beings value . . . and value only intrinsically, for its own sake and only for its own sake? If you could find such a thing, that would be the universal final good, or truly the ultimate purpose or goal for all human beings. Aristotle thought the answer was yes. What is it? Happiness. Everyone will agree, he argues, that happiness is the ultimate end to be valued for itself and really only for itself. For what other purpose is there in being happy? What does it yield? The attainment of happiness becomes the ultimate or highest good for Aristotle.

The next question that Aristotle raises is: what is happiness? We all want it; we all desire it; we all seek it. It's the goal we have in life. But what is it? How do we find it? Here he notes, with some frustration, people disagree.

But he does give us a couple of criteria, or features, to keep in mind as we look for what true human happiness is. True human happiness should be, as he puts it, complete. Complete in that it's all we require. Well, true human happiness . . . if you had that, what else do you need? Nothing.

And, second, true happiness should be something that I can obtain on my own. I shouldn't have to rely on other people for it. Many people value fame and seek fame. Fame for them becomes the goal. But, according to Aristotle, this won't work either, because fame depends altogether too much on other people. I can't get it on my own, without help from other people.

In the end, Aristotle says that true happiness is the exercise of reason—a life of intellectual contemplation . . . of thinking. So let's see how he comes to that.

Answers and Explanations

- 1. 4 This is a Gist-purpose question. The professor discusses the difference between extrinsic and intrinsic value, but what is her purpose in doing this? "To understand Aristotle's interest in happiness, you need to understand this distinction [extrinsic and intrinsic]." The professor's purpose is choice 4: "To discuss Aristotle's views about human happiness."
- 2. This question is easy to recognize as a Connecting Content question. The professor gives examples of some activities and discusses whether they have intrinsic value, extrinsic value, or both. Her explanations of why she values exercise, health, and playing a musical instrument are fairly clear and explicit. For teaching, it is clear that for her it has intrinsic value, but she admits this may be different for others. The question is about "what type of value it has for her." The chart correctly filled out looks like this:

	Only Extrinsic Value	Only Intrinsic Value	Both Extrinsic and Intrinsic Value
Teaching		✓	
Exercise	✓		
Health			✓
Playing a musical instrument		✓	

- 3. 2 This is a Detail question. The question is answered by the professor when she says, "Everyone will agree, he [Aristotle] argues, that happiness is the ultimate end to be valued for itself and really only for itself." The correct answer for this question is choice 2. Note that this Detail question is directly related to the main idea or gist of the passage.
- 4. This is another Detail question. It is not as closely related to the gist as the previous question. At the end of the passage the professor compares happiness and fame. She says, "according to Aristotle, this won't work either, because fame depends altogether too much on other people. I can't get it on my own." The correct answer is choice 1.
- 5. 3 This is an Understanding the Function of What Is Said question. The professor discusses teaching to stress its intrinsic value for her. Therefore the correct answer is choice 3. The reason she is a teacher has little to do with money. Salary would be an extrinsic value, but she does not value teaching because of the salary.

PRACTICE SET 3



Now listen to Track 5.



Questions

Directions: Mark your answer by filling in the oval next to your choice.

- 1. What is the professor mainly discussing?
- The development of motor skills in children
- How psychologists measure muscle activity in the throat
- A theory about the relationship between muscle activity and thinking
- A study on deaf people's problem-solving techniques



2. Listen again to part of the lecture by playing Track 6. Then answer the question.

Why does the professor say this?

- To give an example of a laryngeal habit
- To explain the meaning of a term
- To explain why he is discussing laryngeal habits
- To remind students of a point he had discussed previously
- 3. What does the professor say about people who use sign language?
- It is not possible to study their thinking habits.
- They exhibit laryngeal habits.
- The muscles in their hands move when they solve problems.
- They do not exhibit ideomotor action.

4.	What point does the professor make when he refers to the university library?
0	A study on problem solving took place there. Students should go there to read more about behaviorism.
0	
0	He learned about William James's concept of thinking there.
5.	The professor describes a magic trick to the class. What does the magic trick demonstrate?
\bigcirc	An action people make that they are not aware of
\bigcirc	That behaviorists are not really scientists
\bigcirc	How psychologists study children
\bigcirc	A method for remembering locations
6.	What is the professor's opinion of the motor theory of thinking?
\bigcirc	Most of the evidence he has collected contradicts it.
\bigcirc	It explains adult behavior better than it explains child behavior.
\bigcirc	It is the most valid theory of thinking at the present time.
\bigcirc	It cannot be completely proved or disproved.

PRACTICE SET 3 SCRIPT AND ANSWERS

Track 5 Listening Script

Narrator

Listen to part of a psychology lecture. The professor is discussing behaviorism.

Professor

Now, many people consider John Watson to be the founder of behaviorism. And like other behaviorists, he believed that psychologists should study only the behaviors they can observe and measure. They're not interested in mental processes. While a person could describe his thoughts, no one else can see or hear them to verify the accuracy of his report. But one thing you can observe is muscular habits. What Watson did was to observe muscular habits because he viewed them as a manifestation of thinking. One kind of habit that he studied are laryngeal habits.

Watson thought laryngeal habits—you know, from *larynx*; in other words, related to the voice box—he thought those habits were an expression of thinking. He argued that for very young children, thinking is really talking out loud to oneself because they talk out loud even if they're not trying to communicate with someone in particular. As the individual matures, that overt talking to oneself becomes covert talking to oneself, but thinking still shows up as a laryngeal habit. One of the bits of evidence that supports this is that when people are trying to solve a problem, they, um, typically have increased muscular activity in the throat region. That is, if you put electrodes on the throat and measure muscle potential—muscle activity—you discover that when people are thinking, like if they're diligently trying to solve a problem, that there is muscular activity in the throat region.

So Watson made the argument that problem solving, or thinking, can be defined as a set of behaviors—a set of responses—and in this case the response he observed was the throat activity. That's what he means when he calls it a laryngeal habit. Now, as I am thinking about what I am going to be saying, my muscles in my throat are responding. So thinking can be measured as muscle activity. Now, the motor theory ... yes?

Student

Professor Blake, um, did he happen to look at people who sign? I mean deaf people?

Professor

Uh, he did indeed, um, and to jump ahead, what one finds in deaf individuals who use sign language when they're given problems of various kinds, they have muscular changes in their hands when they are trying to solve a problem . . . muscle changes in the hand, just like the muscular changes going on in the throat region for speaking individuals.

So, for Watson, thinking is identical with the activity of muscles. A related concept of thinking was developed by William James. It's called ideomotor action.

Ideomotor action is an activity that occurs without our noticing it, without our being aware of it. I'll give you one simple example. If you think of locations, there tends to be eye movement that occurs with your thinking about that location. In particular, from where we're sitting, imagine that you're asked to think of our university library. Well, if you close your eyes and think of the library, and if you're sitting directly facing me, then according to this notion, your eyeballs will move slightly to the left, to your left, 'cause the library's in that general direction.

James and others said that this is an idea leading to a motor action, and that's why it's called "ideomotor action"—an idea leads to motor activity. If you wish to impress your friends and relatives, you can change this simple process into a magic trick. Ask people to do something such as I've just described: think of something on their left; think of something on their right. You get them to think about two things on either side with their eyes closed, and you watch their eyes very carefully. And if you do that, you'll discover that you can see rather clearly the eye movement—that is, you can see the movement of the eyeballs. Now, then you say, "Think of either one and I'll tell which you're thinking of."

OK. Well, Watson makes the assumption that muscular activity is equivalent to thinking. But given everything we've been talking about here, one has to ask: are there alternatives to this motor theory—this claim that muscular activities are equivalent to thinking? Is there anything else that might account for this change in muscular activity, other than saying that it is thinking? And the answer is clearly yes. Is there any way to answer the question definitively? I think the answer is no.

Answers and Explanations

- 1. 3 This is a Gist-content question. The professor discusses two types of muscular activities: laryngeal habits and ideomotor activity, and how they are related to thinking. The correct answer is choice 3, "A theory about the relationship between muscle activity and thinking." The other choices are mentioned by the professor, but they are not the main topic of the discussion.
- 2. **2** This is an Understanding the Function of What Is Said question. The professor introduces an unusual term, "laryngeal habits." He then says, "you know, from *larynx*; in other words, related to the voice box." His brief explanation is meant to help the students understand the term "laryngeal habits." Choice 2 is the correct answer to this question.
- 3. 3 This is a Detail question. The professor responds to a student who asks a question about people who use sign language. He says that "they have muscular changes in their hands . . . just like the muscular changes going on in the throat region for speaking individuals." The correct answer is choice 3. This Detail question is related to the main idea of the passage, as both are concerned with the relationship between muscular changes and thinking.
- 4. 3 This is an Understanding Organization question. The professor talks about muscular activity in the eyes that will occur if the students think about the location of the library. The question asks for the conclusion of that example. The correct answer is choice 3, "Students' eyes will turn toward it if they think about it."
- 5. 1 This is a Connecting Content question. Answering the question correctly requires you to understand that the magic trick the professor is describing is an "ideomotor activity" and that this type of activity "occurs without our noticing it, without our being aware of it." The correct answer to this question is choice 1.
- 6. **4** Questions like this one that ask for the professor's opinion are Understanding the Speaker's Attitude questions. The professor's opinion can be found at the end of the lecture. He says that there may be alternative theories, but there is no way to answer the question definitively. The correct answer to this question is choice 4, "It cannot be completely proved or disproved."

PRACTICE SET 4



Now listen to Track 7.



Questions

Directions: Mark your answer by filling in the oval or square next to your choice.

- 1. What is Bode's Law?
- A law of gravitation
- An estimate of the distance between Mars and Jupiter
- A prediction of how many asteroids there are
- A pattern in the spacing of planets
- 2. Why does the professor explain Bode's Law to the class?
- To describe the size of the asteroids
- To explain how the asteroid belt was discovered
- To explain how gravitational forces influence the planets
- To describe the impact of telescopes on astronomy

3.	How does the professor introduce Bode's Law?
\bigcirc	By demonstrating how it is derived mathematically
\bigcirc	By describing the discovery of Uranus
\bigcirc	By drawing attention to the inaccuracy of a certain pattern
\bigcirc	By telling the names of several of the asteroids
4.	Listen again to part of the lecture by playing Track 8. Then answer the question.
Wh	y does the professor say this?
\bigcirc	To introduce an alternative application of Bode's Law To give an example of what Bode's Law cannot explain To describe the limitations of gravitational theory To contrast Bode's Law with a real scientific law
5.	According to the professor, what two factors contributed to the discovery of the asteroid Ceres? Choose 2 answers.
	Improved telescopes Advances in mathematics The discovery of a new star The position of Uranus in a pattern
6.	What does the professor imply about the asteroid belt?
\circ	It is farther from the Sun than Uranus.
\bigcirc	Bode believed it was made up of small stars.
\bigcirc	It is located where people expected to find a planet.
	· · · ·
\bigcirc	Ceres is the only one of the asteroids that can be seen without a telescope.

PRACTICE SET 4 SCRIPT AND ANSWERS

Track 7 Listening Script

Narrator

Listen to part of a lecture in an astronomy class. You will not need to remember the numbers the professor mentions.

Professor

OK. Let's get going. Today I'm going to talk about how the asteroid belt was discovered. And \dots I'm going to start by writing some numbers on the board. Here they are: we'll start with zero, then 3, \dots 6, \dots 12. Uh, tell me what I'm doing.

Female Student

Multiplying by 2?

Professor

Right. I'm doubling the numbers, so 2 times 12 is 24, and the next one I'm going to write after 24 would be . . .

Female Student

48.

Professor

48. Then 96. We'll stop there for now. Uh, now I'll write another row of numbers under that. Tell me what I'm doing: 4, 7, 10 . . . How am I getting this second row?

Male Student

Adding 4 to the numbers in the first row.

Professor

I'm adding 4 to each number in the first row to give you a second row. So the last two will be 52, 100, and now tell me what I'm doing.

Female Student

Putting in a decimal?

Professor

Yes, I divided all those numbers by 10 by putting in a decimal point. Now I'm going to write the names of the planets under the numbers. Mercury . . . Venus . . . Earth . . . Mars.

So, what do the numbers mean? Do you remember from the reading?

Male Student

Is it the distance of the planets from the Sun?

Professor

Right. In astronomical units—not perfect, but tantalizingly close. The value for Mars is off by . . . 6 or 7 percent or so. It's . . . but it's within 10 percent of the average distance to Mars from the Sun. But I kind of have to skip the one after Mars for now. Then Jupiter's right there at 5-point something, and then Saturn is about 10 astronomical units from the Sun. Um, well, this pattern is known as Bode's Law.

Um, it isn't really a scientific law, not in the sense of predicting gravitation mathematically or something, but it's attempting a pattern in the spacing of the planets, and it was noticed by Bode hundreds of years ago. Well, you can imagine that there was some interest in why the 2.8 spot in the pattern was skipped, and um . . . but there wasn't anything obvious there, in the early telescopes. Then what happened in the late 1700s? The discovery of . . . ?

Female Student

Another planet?

Professor

The next planet out, Uranus—after Saturn.

And look, Uranus fits in the next spot in the pattern pretty nicely, um, not perfectly, but close. And so then people got really excited about the validity of this thing and finding the missing object between Mars and Jupiter. And telescopes, remember,

were getting better. So people went to work on finding objects that would be at that missing distance from the Sun, and then in 1801, the object Ceres was discovered.

And Ceres was in the right place—the missing spot. Uh, but it was way too faint to be a planet. It looked like a little star. Uh, and because of its starlike appearance, um, it was called an "asteroid." OK? *Aster* is Greek for "star," as in *astronomy*. Um, and so, Ceres was the first and is the largest of what became many objects discovered at that same distance. Not just one thing, but all the objects found at that distance form the asteroid belt. So the asteroid belt is the most famous success of this Bode's Law. That's how the asteroid belt was discovered.

Answers and Explanations

- 1. 4 This is a Detail question. Although the entire passage is concerned with answering "What is Bode's Law?" the professor specifically answers the question when he says, "it's attempting a pattern in the spacing of the planets." The correct answer to this question is choice 4.
- 2. 2 This is a Gist-purpose question. Gist questions are not usually answered very explicitly in the passage, but in this case the professor addresses the purpose of the discussion twice. At one point he says, "Today I'm going to talk about how the asteroid belt was discovered," and later he states, "That's how the asteroid belt was discovered." The correct answer to this question is choice 2.
- 3. 1 This is an Understanding Organization question. The professor first demonstrates the pattern of numbers before explaining Bode's Law and what the pattern means. The correct answer to this question is choice 1.
- 4. **4** This is an Understanding the Function of What Is Said replay question. The pattern the professor describes is called Bode's Law. The professor is pointing out how Bode's Law differs from other scientific laws. The correct answer to this question is choice 4.
- 5. This is a Detail question. Note that for this question there are two correct answers. The professor explains that "Uranus fits in the next spot in the pattern pretty nicely" and telescopes "were getting better . . . and then in 1801, the object Ceres was discovered." Choices 1 and 4 are the correct answers. Advances in mathematics and the discovery of a new star are not mentioned by the professor.
- 6. **3** This is a Making Inferences question. Starting at the point in the passage where the professor says, "there was some interest in why the 2.8 spot in the pattern was skipped . . . there wasn't anything obvious there," it's clear that what the astronomers were looking for was a planet. He later says, "Ceres was in the right place . . . but it was way too faint to be a planet." The clear implication is that astronomers were expecting to find a planet. The correct answer to the question is choice 3.

PRACTICE SET 5



Now listen to Track 9.



Questions

Directions: Mark your answer by filling in the oval or square next to your choice.

- 1. What aspect of Manila hemp fibers does the professor mainly describe in the lecture?
- Similarities between cotton fibers and Manila hemp fibers
- O Various types of Manila hemp fibers
- The economic importance of Manila hemp fibers
- A use of Manila hemp fibers



2. Listen again to part of the lecture by playing Track 10. Audio Then answer the question.

Why does the professor mention going away for the weekend?

- To tell the class a joke
- To apologize for not completing some work
- To introduce the topic of the lecture
- To encourage students to ask about her trip

3.	What does the professor imply about the name "Manila hemp"?
0	It is a commercial brand name. Part of the name is inappropriate. The name has recently changed. The name was first used in the 1940s.
4.	Why does the professor mention the Golden Gate Bridge?
0	To demonstrate a disadvantage of steel cables To give an example of the creative use of color To show that steel cables are able to resist salt water To give an example of a use of Manila hemp
5.	According to the professor, what was the main reason that many ships used Manila hemp ropes instead of steel cables?
\bigcirc	Manila hemp was cheaper. Manila hemp was easier to produce. Manila hemp is more resistant to salt water. Manila hemp is lighter in weight.
6.	According to the lecture, what are two ways to increase the strength of rope made from Manila hemp fibers? Choose 2 answers.
	Coat the fibers with zinc-based paint Combine the fibers into bundles Soak bundles of fibers in salt water Twist bundles of fibers

PRACTICE SET 5 SCRIPT AND ANSWERS

Track 9 Listening Script

Narrator

Listen to part of a lecture from a botany class.

Professor

Hi, everyone. Good to see you all today. Actually, I expected the population to be a lot lower today. It typically runs between 50 and 60 percent on the day the research paper is due. Um, I was hoping to have your exams back today, but, uh, the situation was that I went away for the weekend, and I was supposed to get in yesterday at five, and I expected to fully complete all the exams by midnight or so, which is the time that I usually go to bed, but my flight was delayed, and I ended up not getting in until one o'clock in the morning. Anyway, I'll do my best to have them finished by the next time we meet.

OK. In the last class, we started talking about useful plant fibers. In particular, we talked about cotton fibers, which we said were very useful, not only in the textile industry, but also in the chemical industry, and in the production of many products, such as plastics, paper, explosives, and so on. Today we'll continue talking about useful fibers, and we'll begin with a fiber that's commonly known as "Manila hemp."

Now, for some strange reason, many people believe that Manila hemp is a hemp plant. But Manila hemp is not really hemp. It's actually a member of the banana family—it even bears little banana-shaped fruits. The "Manila" part of the name makes sense, because Manila hemp is produced chiefly in the Philippine Islands, and, of course, the capital city of the Philippines is Manila.

Now, as fibers go, Manila hemp fibers are very long. They can easily be several feet in length and they're also very strong, very flexible. They have one more characteristic that's very important, and that is that they are exceptionally resistant to salt water. And this combination of characteristics—long, strong, flexible, resistant to salt water—makes Manila hemp a great material for ropes, especially for ropes that are gonna be used on oceangoing ships. In fact, by the early 1940s, even though steel cables were available, most ships in the United States Navy were not moored with steel cables; they were moored with Manila hemp ropes.

Now, why was that? Well, the main reason was that steel cables degrade very, very quickly in contact with salt water. If you've ever been to San Francisco, you know that the Golden Gate Bridge is red. And it's red because of the zinc paint that goes on those stainless steel cables. That, if they start at one end of the bridge and they work to the other end, by the time they finish, it's already time to go back and start painting the beginning of the bridge again, because the bridge was built with steel cables, and steel cables can't take the salt air unless they're treated repeatedly with a zinc-based paint.

On the other hand, plant products like Manila hemp, you can drag through the ocean for weeks on end. If you wanna tie your anchor to it and drop it right into the ocean, that's no problem, because plant fibers can stand up for months, even years, in direct contact with salt water. OK. So how do you take plant fibers that individually you could break with your hands and turn them into a rope that's strong enough to moor a ship that weighs thousands of tons? Well, what you do is extract these long fibers from the Manila hemp plant, and then you take several of these fibers, and you group them into a bundle, because by grouping the fibers, you greatly increase their breaking strength—that bundle of fibers is much stronger than any of the individual fibers that compose it. And then you take that bundle of fibers and you twist it a little bit, because by twisting it, you increase its breaking strength even more. And then you take several of these little bundles, and you group and twist them into bigger bundles, which you then group and twist into even bigger bundles, and so on, until eventually, you end up with a very, very strong rope.

Answers and Explanations

- 1. 4 Questions like this one that ask about what the professor mainly discusses are Gist-content questions. This question asks what aspect of Manila hemp fibers are mainly discussed, so it has a narrower focus than other Gist-content questions. The professor mainly discusses characteristics of Manila hemp and how these characteristics make Manila hemp useful to the shipping industry. The correct answer to this question is choice 4.
- 2. 2 This is an Understanding the Function of What Is Said replay question. The professor mentions that she went away for the weekend and because a flight was delayed, she was late returning. She tells this story in order to apologize for not completing marking exams. The correct answer to this question is choice 2.
- 3. **2** This is a Making Inferences question. The professor explains that Manila hemp is produced chiefly in the area near Manila, so the word *Manila* in the name is appropriate. However, Manila hemp is not a type of hemp plant, so the word *hemp* in the name is not appropriate. The correct answer to this question is choice 2.
- 4. **1** This is an Understanding Organization question. The professor mentions the Golden Gate Bridge in order to make a comparison between the steel cables of the bridge and Manila hemp ropes. The fact that the steel cables must be constantly repainted is a disadvantage. The correct answer to the question is choice 1.
- 5. 3 This is a Detail question. It is related to the professor's main point about Manila hemp. The professor says that Manila hemp is "exceptionally resistant to salt water." Much of the lecture deals with the professor's reinforcing and exemplifying this point. The correct answer to this question is choice 3.
- 6. **2 4** Near the end of the lecture, the professor describes how Manila hemp ropes are made. The answer to this Detail question can be found there. The professor talks about grouping fibers into bundles and then twisting the bundles to make them stronger. Note that this question requires two answers. The correct answers to this question are choices 2 and 4.

LISTENING

Directions: This section measures your ability to understand conversations and lectures in English.

You should listen to each conversation and lecture only once.

After each conversation or lecture, you will answer some questions about it. The questions typically ask about the main idea and supporting details. Some questions ask about the purpose of a speaker's statement or a speaker's attitude. Answer the questions based on what is stated or implied by the speakers.

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 that you will hear, but not see, part of the question.

Most questions are worth 1 point. If a question is worth more than 1 point, it will have special directions that indicate how many points you can receive.

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Turn the page to begin the Listening section.



Listen to Track 11.



Questions

Directions: Mark your answer by filling in the oval or square next to your choice.

- 1. Why does the student go to see the professor?
- To prepare for her graduate school interview
- To get advice about her graduate school application
- To give the professor her graduate school application
- To find out if she was accepted into graduate school
- 2. According to the professor, what information should the student include in her statement of purpose?

Choose 2 answers.

- Her academic motivation
- Her background in medicine
- Some personal information
- The ways her teachers have influenced her
- 3. What does the professor consider unusual about the student's background?
- Her work experience
- Her creative writing experience
- Her athletic achievements
- Her music training

4.	Why does the professor tell a story about his friend who went to medical school?
\bigcirc	To warn the student about how difficult graduate school can be
\bigcirc	To illustrate a point he is making
\bigcirc	To help the student relax
\bigcirc	To change the subject
5.	What does the professor imply about the people who admit students to graduate school?
\bigcirc	They often lack expertise in the fields of the applicants.
\bigcirc	They do not usually read the statement of purpose.
\bigcirc	They are influenced by the appearance of an application.

GO ON TO THE NEXT PAGE 🔊



Listen to Track 12.



Questions

- 6. What are the students mainly discussing?
- O Drugs that are harmful to the human body
- Bacteria that produce antibiotics
- DNA that is related to athletic performance
- Genes that protect bacteria from antibiotics



7. Listen to Track 13 to answer the question. Audio

Why does the woman say this?

- To find out if the man has done his assignment
- To ask the man to find out if the library is open
- To let the man know that she cannot study much longer
- To ask if the man has ever met her roommate
- 8. According to the conversation, why are transposons sometimes called "jumping genes"?
- They are able to move from one bacteria cell to another.
- They are found in people with exceptional jumping ability.
- They occur in every other generation of bacteria.
- Their movements are rapid and unpredictable.

9	. According to the conversation, what are two ways in which bacteria cells get resistance genes? Choose 2 answers.
	The resistance genes are carried from nearby cells.
	The resistance genes are carried by white blood cells.
	The resistance genes are inherited from the parent cell.
	The resistance genes are carried by antibiotics.
1	What can be inferred about the resistance genes discussed in the conversation?
	○ They are found in all bacteria cells.
\subset	They are not able to resist antibiotics.
	They make the treatment of bacterial diseases more difficult.
\subset	They are essential to the body's defenses against bacteria.

GO ON TO THE NEXT PAGE 🔊



Listen to Track 14.



Questions

11.	What is the talk mainly about?
\bigcirc	A common method of managing water supplies
\bigcirc	The formation of underground water systems
\bigcirc	Natural processes that renew water supplies
\bigcirc	Maintaining the purity of underground water systems
12.	What is the professor's point of view concerning the method of "safe yield"?
\bigcirc	It has helped to preserve the environment.
\bigcirc	It should be researched in states other than Arizona.
\bigcirc	It is not an effective resource policy.
\bigcirc	It ignores the different ways people use water.
13.	According to the professor, what are two problems associated with removing
	water from an underground system?
	Choose 2 answers.
	Pollutants can enter the water more quickly.
	The surface area can dry and crack.

☐ The amount of water stored in the system can drop.

Dependent streams and springs can dry up.



14. Listen to Track 15 to answer the question. Audio Why does the professor say this? ○ To find out whether the students are familiar with the issue To introduce a new problem for discussion To respond to a student's question To encourage the students to care about the topic 15. What is a key feature of a sustainable water system? It is able to satisfy short-term and long-term needs. It is not affected by changing environmental conditions. It usually originates in lakes, springs, or streams. It is not used to supply human needs. 16. What does the professor imply about water systems managed by the "safe-yield" method? They recharge at a rapid rate. They are not sustainable.

○ They must have large storage areas. They provide a poor quality of water.

GO ON TO THE NEXT PAGE



Listen to Track 16.



Questions

- 17. Why does the professor talk about Plato's description of society?
- To explain why societies face certain problems
- To point out problems with Plato's ethical theory
- To introduce students to the political structure of ancient Greece
- To help explain Plato's view about the nature of the human soul



18. Listen again to part of the lecture by playing Track 17. Audio Then answer the question.

What does the professor imply about Plato's ethical theory?

- It may be familiar to some of the students.
- It will be discussed in more detail in a later class.
- It is not an interesting theory.
- It is not a very complicated theory.



19. Listen again to part of the lecture by playing Track 18. Audio Then answer the question.

Why does the professor ask this?

- To find out if students have understood what she just said
- To suggest an answer to a question that she just asked
- To express disagreement with a point made by Plato
- To explain why harmony is difficult for a society to achieve

20. What are two points that reflect Plato's views about education Choose 2 answers.	n?	
All people can be trained to become leaders.		
All people should learn to use their intellect.		
Leaders should be responsible for the education of workers a	and soldie	ers.
$\hfill \square$ All people should learn about the nature of the human soul.		
21. Based on information in the lecture, indicate whether the star human emotion reflect beliefs held by Plato. For each sentence, put a check mark in the YES or NO column.	tements b	elow about
•		
	VFS	NO
Emotion is usually controlled by the faculty of desire.	YES	NO
Emotion is usually controlled by the faculty of desire. Emotion ought to be controlled by the faculty of intellect.	YES	NO
	YES	NO
Emotion ought to be controlled by the faculty of intellect.	YES	NO
Emotion ought to be controlled by the faculty of intellect.		
Emotion ought to be controlled by the faculty of intellect. Emotion is what motivates soldiers.		
Emotion ought to be controlled by the faculty of intellect. Emotion is what motivates soldiers. 22. According to Plato, what is the main characteristic of a good		
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Emotion ought to be controlled by the faculty of intellect. Emotion is what motivates soldiers. 22. According to Plato, what is the main characteristic of a good The parts of the person's soul exist in harmony. The person does not try to control other people.	or just pe	

GO ON TO THE NEXT PAGE 🔊



Listen to Track 19.



Questions

- 23. What is the main topic of the lecture?
- The size of root systems
- Various types of root systems
- The nutrients required by rye plants
- Improving two types of plant species
- 24. According to the professor, why did one scientist grow a rye plant in water?
- To expose the roots to sunlight
- To be able to fertilize it with gas
- To be able to see its entire root system
- To see how minerals penetrate its roots



25. Listen again to part of the lecture by playing Track 20. Audio Then answer the question. Why did the professor say this? She wanted to correct the wording of a previous statement. She wishes she did not have to bubble gas through it. She realized the odor of gas could be unpleasant. She forgot to tell the students about a step in the experiment. 26. The professor mentions houseplants that receive too much water. Why does she mention them? To show that many different types of plants can grow in water To explain why plants grown in water should have a gas bubbled through them To remind the students of the importance of their next experiment To make a point about the length of houseplants' roots 27. Listen again to part of the lecture by playing Track 21. Audio Then answer the question. What does the professor intend to explain? Why a mistake made in textbooks was never corrected Why she does not believe that the roots of rye plants extend to 1,000 kilometers How the roots of rye plants develop to such a great length O How plants grown in water make use of fertilizer 28. According to the professor, what similarity is there between crabgrass and rye plants? Both start growing in the month of May. O Both have root systems that require a lot of water. Both have more shoot surface than root surface. Both produce many shoots from a single seed.

GO ON TO THE NEXT PAGE



Listen to Track 22.



Questions

- 29. What is the lecture mainly about?
- Technological innovations in the automobile industry
- The organizational structure of companies
- Ways to improve efficiency in an engineering department
- Methods of resolving conflicts in organizations
- 30. Why does the professor talk about a construction company that has work in different cities?
- To give an example of functional organization
- To give an example of organization around projects
- To illustrate problems with functional organization
- To illustrate the types of conflict that can arise in companies
- 31. Listen again to part of the lecture by playing Track 23. Audio Then answer the question.

Why does the professor say this?

- He does not understand why the student is talking about engineers.
- He wants to know how the engineers will communicate with their coworkers.
- The student has not provided a complete answer to his question.
- He wants the student to do more research on the topic.

32. What is an example	e of a violation of the "unity of command" principle?
More than one pers	son supervises the same employee.
 A company decides 	not to standardize its products.
 Several project man 	nagers are responsible for designing a new product.
○ An employee does	not follow a supervisor's instructions.
	ofessor, where might there be a conflict in an organizational both projects and function?
 Between architects 	and finance experts
O Between the need t	o specialize and the need to standardize
 Between two engine 	eers who work on the same project
Between the needs	of projects in different cities
	nch sentence below describes functional organization or n. Place a check mark in the correct box.

	Functional Organization	Project Organization
It encourages people with similar expertise to work closely together.		
It helps the company to adapt quickly and meet changing needs.		
It helps to achieve uniformity in projects.		

STOP. This is the end of the Listening section of TOEFL iBT Practice Test 1.

LISTENING

Directions: This section measures your ability to understand conversations and lectures in English.

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Listen to Track 43.



Questions

Directions: Mark your answer by filling in the oval or square next to your choice.

- 1. Why does the student go to see the professor?
- For suggestions on how to write interview questions
- For assistance in finding a person to interview
- To ask for advice on starting a business
- To schedule an interview with him
- 2. Why does the student mention her high school newspaper?
- To inform the professor that she plans to print the interview there
- To explain why the assignment is difficult for her
- To show that she enjoys writing for school newspapers
- To indicate that she has experience with conducting interviews
- 3. How does the professor help the student?
- He gives her a list of local business owners.
- He allows her to interview business owners in her hometown.
- He suggests that she read the business section of the newspaper.
- He gives her more time to complete the assignment.

	4.	What does the professor want the students to learn from the assignment?
	\bigcirc	That starting a business is risky
	\bigcirc	Why writing articles on local businesses is important
	\bigcirc	How to develop a detailed business plan
	\bigcirc	What personality traits are typical of business owners
	5.	Listen again to part of the conversation by playing Track 44. Then answer the question.
What does the student imply?		
	\bigcirc	She is surprised by the professor's reaction.
	\bigcirc	The professor has not quite identified her concern.
	\bigcirc	The professor has guessed correctly what her problem is.
	\bigcirc	She does not want to finish the assignment.

GO ON TO THE NEXT PAGE 🔊



Listen to Track 45.



- 6. What does the professor mainly discuss?
- Various errors in early calendars
- Why people came to believe that Earth moves around the Sun
- Examples of various types of calendars used in different cultures
- The belief that the position of planets and stars can predict future events
- 7. The professor discusses various theories on how Stonehenge was used. What can be inferred about the professor's opinion?
- She is sure Stonehenge was used as a calendar.
- She believes the main use for Stonehenge was probably as a temple or a tomb.
- She thinks that the stones were mainly used as a record of historical events.
- She admits that the purpose for which Stonehenge was constructed may never be known.
- 8. According to the professor, how was the Mayan calendar mainly used?
- To keep track of long historical cycles
- To keep track of the lunar months
- To predict the outcome of royal decisions
- To allow priests to compare the orbits of Earth and Venus

9.	astrological cycle?
\bigcirc	The cycle of night and day
\bigcirc	The orbit of the Moon
\bigcirc	The cycle of the seasons
\bigcirc	The orbit of the planet Jupiter
10	How did the Pemana augusted in making their calendar more precise?
	How did the Romans succeed in making their calendar more precise?
\bigcirc	By changing the number of weeks in a year
\bigcirc	By adding an extra day every four years
\bigcirc	By carefully observing the motion of the planet Jupiter
0	By adopting elements of the Chinese calendar
11.	How does the professor organize the lecture?
0	By mentioning the problem of creating a calendar, then describing various attempts to deal with it
\bigcirc	By speaking of the modern calendar first, then comparing it with earlier ones
0	By discussing how a prehistoric calendar was adapted by several different cultures
0	By emphasizing the advantages and disadvantages of using various time cycles



Listen to Track 46.



- 12. What is the lecture mainly about?
 - How dolphins produce the sounds they make
 - How dolphins teach their young to identify signature whistles
 - The professor's experience with dolphins on a research boat
 - Various ways dolphins communicate with one another
 - 13. According to a theory the professor mentions, why do dolphins travel side by side?
 - To view each other's bubble streams
 - To hear each other's signature whistles
 - To avoid interfering with other dolphins' sonar clicks
 - To keep mothers close to their young
 - 14. What does the professor imply about bubble streams?
 - They help protect dolphins from predators.
 - Their function is similar to that of signature whistles.
 - They do not appear to serve a communicative function.
 - O Dolphins use them to sense the movement of the water.

15. Why does the professor mention the time she spent on a boat doing research?
 To encourage students to do fieldwork
 To inform students about a paper she wrote
 To show how scientists collect data on marine life
 To illustrate that dolphins are difficult to locate
16. Listen again to part of the lecture by playing Track 47. Then answer the question.
What does this example illustrate?
 The differences between land and marine mammals
 The importance of burst pulses as a way dolphins communicate
One reason dolphins travel in large groups
One way dolphins use signature whistles

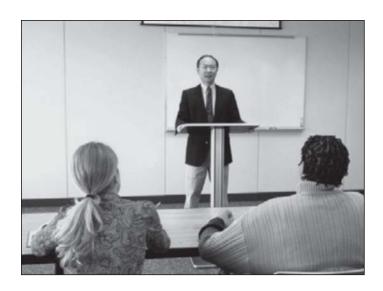


Listen to Track 48.



- 17. Why does the student go to Professor Kirk's office?
- To find out if he needs to take a certain class to graduate
- To respond to Professor Kirk's invitation
- To ask Professor Kirk to be his advisor
- To ask Professor Kirk to sign a form
- 18. Why is the woman surprised at the man's request?
- He has not tried to sign up for Introduction to Biology at the registrar's office.
- He has waited until his senior year to take Introduction to Biology.
- A journalism student should not need a biology class.
- Professor Kirk no longer teaches Introduction to Biology.
- 19. What does the man say about his advisor?
- She encouraged the man to take a science class.
- She encouraged the man to major in journalism.
- She is not aware of the man's problem.
- She thinks very highly of Professor Kirk.

20. How will the man probably try to communicate his problem to Professor Kirk?				
By calling her				
By sending an email to her				
 By leaving her a note 				
 By visiting her during office hours 				
21. Listen to Track 49 to answer the question.				
Why does the man say this to the woman?				
To thank the woman for solving his problem				
 To politely refuse the woman's suggestion 				
 To explain why he needs the woman's help 				
 To show that he understands that the woman is busy 				



Listen to Track 50.

they are today.



Questions

22. What is the lecture mainly about?
Various theories explaining why Mars cannot sustain life
Various causes of geological changes on Mars
The development of views about the nature of Mars
Why it has been difficult to obtain information about Mars
23. According to the professor, what was concluded about Mars after the first spacecraft flew by it in 1965?
It had few geological features of interest.
It was similar to Earth but colder.
It had at one time supported life.
It had water under its surface.
24. What does the professor imply about conditions on Mars billions of years ago? Choose 2 answers.
Mars was probably even drier than it is today.

The atmospheric pressure and the temperature may have been higher than

Mars was inhabited by organisms that have since become fossilized.

Large floods were shaping the planet's surface.

- 25. What is the possible significance of the gullies found on Mars in recent years?
- They may indicate current volcanic activity on Mars.
- They may indicate that the surface of Mars is becoming increasingly drier.
- They may indicate the current existence of water on Mars.
- They may hold fossils of organisms that once existed on Mars.

26. Listen to Track 51 to answer the question.



Why does the professor say this?

- To stress that Mars is no longer interesting to explore
- To describe items that the spacecraft brought back from Mars
- To share his interest in the study of fossils
- To show how much the view of Mars changed based on new evidence
- 27. Listen again to part of the lecture by playing Track 52. Audio Then answer the question.



Why does the student say this?

- To ask for clarification of a previous statement
- To convey his opinion
- To rephrase an earlier question
- To express his approval





Listen to Track 53.



- 28. What does the professor mainly discuss?
- The design and creation of the Statue of Liberty
- The creators of two colossal statues in the United States
- The purpose and symbolism of colossal statues
- The cost of colossal statues in ancient versus modern times
- 29. What evidence does the professor give that supports the idea that modern-day colossal statues are valued social and political symbols?
- They are very costly to build.
- They are studied in classrooms around the world.
- They are designed to last for thousands of years.
- They are inspired by great poetry.
- 30. According to the professor, what was one result of the Great Depression of the 1930s?
- International alliances eroded.
- Immigration to the United States increased.
- The public experienced a loss of confidence.
- The government could no longer provide funds for the arts.

31. According to the professor, why did the state of South Dakota originally want to create a colossal monument?
To generate income from tourism
 To symbolize the unity of society
To commemorate the Great Depression
 To honor United States Presidents
32. Why does the professor discuss the poem by Emma Lazarus?
To emphasize the close relationship between literature and sculpture
To illustrate how the meaning associated with a monument can change
\bigcirc To stress the importance of the friendship between France and the United States
 To point out a difference between Mount Rushmore and the Statue of Liberty
33. Listen again to part of the lecture by playing Track 54. Then answer the question.
What does the professor imply about the poem by Emma Lazarus?
 It is one of his favorite poems.
Few people have read the entire poem.
He does not need to recite the full text of the poem.
Lazarus was not able to complete the poem.

STOP. This is the end of the Listening section of TOEFL iBT Practice Test 2.

LISTENING

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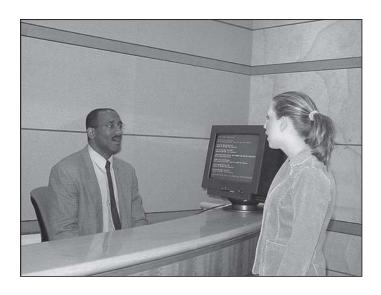
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Turn the page to begin the Listening section.



Listen to Track 74.



Questions

Directions: Mark your answer by filling in the oval or square next to your choice.

- 1. Why does the woman come to the office?
- To notify the university of her change of address
- To find out where her physics class is being held
- To get directions to the science building
- To complain about her physics class's being canceled
- 2. What happened to the letter the university sent to the woman?
- She threw it away by mistake.
- Her roommate forgot to give it to her.
- It was sent to her old mailing address.
- It was sent to another student by mistake.
- 3. Why was the woman's physics class canceled?
- Not enough students signed up to take the class.
- No professors were available to teach the class.
- The university changed its requirements for physics students.
- There were no classrooms available in the science building at that hour.

4.	What does the man suggest the woman do before the beginning of next semester?		
\bigcirc	Consult with her advisor about her class schedule		
\bigcirc	Check with the registrar's office about the location of the class		
\bigcirc	Register for her classes early		
\bigcirc	Call the physics department		
5.	Listen again to part of the conversation by playing Track 75. Then answer the question.		
What does the man imply when he says this?			
\bigcirc	He knows the physics class has been canceled.		
\bigcirc	He is not sure where the science building is.		
\bigcirc	Many of the room assignments have been changed.		
\bigcirc	The woman can check for herself where her class is.		



Listen to Track 76.

- 6. What does the professor mainly discuss?
- Major changes in the migratory patterns of hummingbirds
- The adaptation of hummingbirds to urban environments
- Concern about the reduction of hummingbird habitat
- The impact of ecotourism on hummingbird populations
- 7. What does the professor imply might cause a decrease in the hummingbird population?
- An increase in the ecotourism industry
- An increase in the use of land to raise crops and cattle
- A decrease in banding studies
- A decrease in the distance traveled during migration
- 8. What does the professor say people have done to help hummingbirds survive?
- They have built a series of hummingbird feeding stations.
- They have supported new laws that punish polluters of wildlife habitats.
- They have replanted native flowers in once polluted areas.
- They have learned to identify various hummingbird species.

9.	What way of collecting information about migrating hummingbirds does the professor mention?
\bigcirc	Receiving radio signals from electronic tracking devices
\bigcirc	Being contacted by people who recapture banded birds
\bigcirc	Counting the birds that return to the same region every year
\bigcirc	Comparing old and young birds' migration routes
10.	What does the professor imply researchers have learned while studying hummingbird migration?
0	Hummingbirds have totally disappeared from some countries due to recent habitat destruction.
\bigcirc	Programs to replant flowers native to hummingbird habitats are not succeeding.
\bigcirc	Some groups of hummingbirds have changed their migration patterns.
\bigcirc	Some plant species pollinated by hummingbirds have become extinct.
11.	Listen again to part of the lecture by playing Track 77. Then answer the question.
Wh	at does the professor imply when she says this?
\bigcirc	There is disagreement about the idea she has presented.
\bigcirc	She does not plan to discuss all the details.
\bigcirc	Her next point may seem to contradict what she has just said.
\bigcirc	The point she will make next should be obvious to the students.

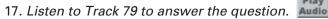


Listen to Track 78.



- 12. What is the main purpose of the lecture?
- To discuss the style of an early filmmaker
- To describe different types of filmmaking in the 1930s
- To discuss the emergence of the documentary film
- To describe Painlevé's influence on today's science-fiction films
- 13. Why are Painlevé's films typical of the films of the 1920s and 1930s?
- They do not have sound.
- They are filmed underwater.
- They are easy to understand.
- They are difficult to categorize.
- 14. According to the professor, how did Painlevé's films confuse the audience?
- They show animals out of their natural habitat.
- They depict animals as having both human and animal characteristics.
- The narration is scientific and difficult to understand.
- The audiences of the 1920s and 1930s were not used to films shot underwater.

- 15. Why does the professor mention sea horses?
- To explain that they were difficult to film in the 1930s
- To point out that Cousteau made documentaries about them
- To illustrate Painlevé's fascination with unusual animals
- To explain why Painlevé's underwater films were not successful
- 16. Why does the professor compare the film styles of Jacques Cousteau and Jean Painlevé?
- To explain how Painlevé influenced Cousteau
- To emphasize the uniqueness of Painlevé's filming style
- To emphasize the artistic value of Cousteau's documentary films
- To demonstrate the superiority of Painlevé's filmmaking equipment





What does the student imply when he says this?

- He does not like Jean Painlevé's films.
- He thinks that the professor should spend more time discussing Jacques Cousteau's films.
- He believes that high-quality filmmakers are usually well known.
- O He believes that Jean Painlevé's films have been unfairly overlooked.





Listen to Track 80.



- 18. Why does the student go to see the professor?
- To ask about a class assignment
- To find out about a mid-semester project
- To get information about summer jobs
- To discuss ways to improve his grade
- 19. What was originally located on the site of the lecture hall?
- A farmhouse
- A pottery factory
- A clothing store
- A bottle-manufacturing plant
- 20. What is mentioned as an advantage of working on this project?
- Off-campus travel is paid for.
- Students can leave class early.
- The location is convenient.
- It fulfills a graduation requirement.

21.	What is the professor considering doing to get more volunteers?
\bigcirc	Offering extra class credit
\bigcirc	Paying the students for their time
\bigcirc	Asking for student volunteers from outside her class
\bigcirc	Providing flexible work schedules
22.	What information does the student still need to get from the professor?
\bigcirc	The name of the senior researcher
\bigcirc	What book he needs to read before the next lecture
\bigcirc	When the training session will be scheduled
\bigcirc	Where the project is located



Listen to Track 81.



- 23. What does the professor mainly discuss?
- The oldest known cave art
- How ancient cave art is dated
- The homes of Paleolithic humans
- How Paleolithic humans thought about animals
- 24. Why does the professor mention his daughter?
- To describe her reaction to seeing the paintings
- To explain the universal appeal of the Chauvet paintings
- To demonstrate the size of most Paleolithic cave art
- To emphasize his point about the age of the Chauvet paintings
- 25. What is the professor's opinion about the art at the Chauvet cave?
- It is extremely well done.
- It probably reflected the artists' religious beliefs.
- It is less sophisticated than the art at Lascaux and Altamira.
- It is probably not much older than the art at Lascaux and Altamira.

26.	walls of the Chauvet cave?
\bigcirc	They suggest that Paleolithic people cooked their food in the cave.
\bigcirc	They prove that people came to the cave long after the paintings were made.
\bigcirc	They show how much light the Paleolithic artists needed for their work.
0	They were used in recent times to date the paintings.
27.	Compared with other Paleolithic art, what is unusual about the animals painted a Chauvet?
\bigcirc	Most of them are horses.
\bigcirc	Many of them are dangerous.
\bigcirc	Many of them are shown alongside humans.
0	All of them are species that are still found in France.
28.	What are two questions about the Chauvet cave artists that the professor raises but cannot answer? Choose 2 answers.
	How they lighted their work area
	How they obtained pigments for their paints
	Why they chose to paint certain animals and not others
	Why they placed their art in dark, uninhabited places



Listen to Track 82.



- 29. What is the lecture mainly about?
- O Different ways of magnifying the spectrum of a star
- O How a chemical element was first discovered on the Sun
- O How astronomers identify the chemical elements in a star
- Why the spectra of different stars are composed of different colors
- 30. What does the professor explain to one of the students about the term "radiation"?
- O It is defined incorrectly in the textbook.
- It was first used in the nineteenth century.
- It is rarely used by astronomers.
- It does not refer only to harmful energy.
- 31. What can be inferred about two stars if their spectra have similar spectral line patterns?
- The stars are approximately the same distance from the Earth.
- The stars probably have some chemical elements in common.
- The stars have nearly the same brightness.
- The stars are probably of the same size.

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32. According to the professor, what is the purpose of heating an element i spectroscopic flame test?			
○ To cause an element to emit light			
 To study an element in combination with other elements 			
○ To remove impurities from the element			
○ To measure an element's resistance to heat			
33. Listen to Track 83 to answer the question.			
Why does the professor say this?			
 He is about to provide some background information. 			
 He is about to repeat what he just said. 			
 He intends to focus on the history of astronomy. 			
 He intends to explain two different points of view. 			
34. Listen to Track 84 to answer the question.			
Why does the professor ask this?			
○ To check the students' understanding of their reading assignment			
○ To give the students a hint to the answer to his previous question			
○ To emphasize how important it is for astronomers to study Greek			
○ To remind the students about the historical background of astronomy			



STOP. This is the end of the Listening section of TOEFL iBT Practice Test 3.

Writing Based on Reading and Listening

Directions: For this task, you will read a passage about an academic topic and you will listen to a lecture about the same topic. You may take notes while you read and listen.

Then you will write a response to a question that asks you about the relationship between the lecture you heard and the reading passage. Try to answer the question as completely as possible using information from the reading passage and the lecture. The question does not ask you to express your personal opinion. You may refer to the reading passage again when you write. You may use your notes to help you answer the question.

Typically, an effective response will be 150 to 225 words. Your response will be judged on the quality of your writing and on the completeness and accuracy of the content.

You should allow **3 minutes** to read the passage. Then listen to the lecture. Then allow **20 minutes** to plan and write your response.

Write your response in the space provided.

Altruism is a type of behavior in which an animal sacrifices its own interest for that of another animal or group of animals. Altruism is the opposite of selfishness; individuals performing altruistic acts gain nothing for themselves.

Examples of altruism abound, both among humans and among other mammals. Unselfish acts among humans range from the sharing of food with strangers to the donation of body organs to family members, and even to strangers. Such acts are altruistic in that they benefit another, yet provide little reward to the one performing the act.

In fact, many species of animals appear willing to sacrifice food, or even their life, to assist other members of their group. The meerkat, which is a mammal that dwells in burrows in grassland areas of Africa, is often cited as an example. In groups of meerkats, an individual acts as a sentinel, standing guard and looking out for predators while the others hunt for food or eat food they have obtained. If the sentinel meerkat sees a predator such as a hawk approaching the group, it gives an alarm cry alerting the other meerkats to run and seek shelter. By standing guard, the sentinel meerkat gains nothing—it goes without food while the others eat, and it places itself in grave danger. After it issues an alarm, it has to flee alone, which might make it more at risk to a predator, since animals in groups are often able to work together to fend off a predator. So the altruistic sentinel behavior helps ensure the survival of other members of the meerkat's group.

Now play Track 30.





Question

Vau must finish		20 minutas		
You must finish y	our answer in	20 minutes.		

Writing Based on Reading and Listening

Directions: For this task, you will read a passage about an academic topic and you will listen to a lecture about the same topic. You may take notes while you read and listen.

Then you will write a response to a question that asks you about the relationship between the lecture you heard and the reading passage. Try to answer the question as completely as possible using information from the reading passage and the lecture. The question does not ask you to express your personal opinion. You may refer to the reading passage again when you write. You may use your notes to help you answer the question.

Typically, an effective response will be 150 to 225 words. Your response will be judged on the quality of your writing and on the completeness and accuracy of the content.

You should allow **3 minutes** to read the passage. Then listen to the lecture. Then allow **20 minutes** to plan and write your response.

Write your response in the space provided.

Professors are normally found in university classrooms, offices, and libraries doing research and lecturing to their students. More and more, however, they also appear as guests on television news programs, giving expert commentary on the latest events in the world. These television appearances are of great benefit to the professors themselves as well as to their universities and the general public.

Professors benefit from appearing on television because by doing so they acquire reputations as authorities in their academic fields among a much wider audience than they have on campus. If a professor publishes views in an academic journal, only other scholars will learn about and appreciate those views. But when a professor appears on TV, thousands of people outside the narrow academic community become aware of the professor's ideas. So when professors share their ideas with a television audience, the professors' importance as scholars is enhanced.

Universities also benefit from such appearances. The universities receive positive publicity when their professors appear on TV. When people see a knowledgeable faculty member of a university on television, they think more highly of that university. That then leads to an improved reputation for the university. And that improved reputation in turn leads to more donations for the university and more applications from potential students.

Finally, the public gains from professors' appearing on television. Most television viewers normally have no contact with university professors. When professors appear on television, viewers have a chance to learn from experts and to be exposed to views they might otherwise never hear about. Television is generally a medium for commentary that tends to be superficial, not deep or thoughtful. From professors on television, by contrast, viewers get a taste of real expertise and insight.

Now play Track 61.





Question

Summarize the points made in the lecture, being sure to explain how they oppose specific points made in the reading passage.

You must finish your answer in 20 minutes.				

Writing Based on Reading and Listening

Directions: For this task, you will read a passage about an academic topic and you will listen to a lecture about the same topic. You may take notes while you read and listen.

Then you will write a response to a question that asks you about the relationship between the lecture you heard and the reading passage. Try to answer the question as completely as possible using information from the reading passage and the lecture. The question does not ask you to express your personal opinion. You may refer to the reading passage when you write. You may use your notes to help you answer the question.

Typically, an effective response will be 150 to 225 words. Your response will be judged on the quality of your writing and on the completeness and accuracy of the content.

You should allow **3 minutes** to read the passage. Then listen to the lecture. Then allow **20 minutes** to plan and write your response.

Write your response in the space provided.

Rembrandt is the most famous of the seventeenth-century Dutch painters. However, there are doubts whether some paintings attributed to Rembrandt were actually painted by him. One such painting is known as *Portrait of an Elderly Woman in a White Bonnet*. The painting was attributed to Rembrandt because of its style, and indeed the representation of the woman's face is very much like that of portraits known to be by Rembrandt. But there are problems with the painting that suggest it could not be a work by Rembrandt.

First, there is something inconsistent about the way the woman in the portrait is dressed. She is wearing a white linen cap of a kind that only servants would wear—yet the coat she is wearing has a luxurious fur collar that no servant could afford. Rembrandt, who was known for his attention to the details of his subjects' clothing, would not have been guilty of such an inconsistency.

Second, Rembrandt was a master of painting light and shadow, but in this painting these elements do not fit together. The face appears to be illuminated by light reflected onto it from below. But below the face is the dark fur collar, which would absorb light rather than reflect it. So the face should appear partially in shadow—which is not how it appears. Rembrandt would never have made such an error.

Finally, examination of the back of the painting reveals that it was painted on a panel made of several pieces of wood glued together. Although Rembrandt often painted on wood panels, no painting known to be by Rembrandt uses a panel glued together in this way from several pieces of wood.

For these reasons the painting was removed from the official catalog of Rembrandt's paintings in the 1930s.

Now play Track 91.





Question

Summarize the points made in the lecture, being sure to explain how they answer the specific problems presented in the reading passage.

You must finish your answer in 20 minutes.				
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Writer's Handbook for English Language Learners

Use this *Writer's Handbook* as a guide to help you write better essays in English. It covers the following topics:

- **Grammar:** explains key grammar rules and gives examples.
- **Usage:** explains important usage rules and gives examples.
- Mechanics: describes the basic mechanics rules and gives examples.
 Mechanics includes spelling and punctuation.
- **Style:** discusses key aspects of effective style.
- Organization and Development: gives advice about the writing process and the development of all parts of an essay.
- **Advice to Writers:** discusses different types of essays.
- **Revising, Editing, and Proofreading:** explains what to do in each stage of improving your essay.
- **Glossary:** presents definitions for terms.

Grammar

This section provides information on the following grammatical errors:

- Sentence Errors
- Word Errors
- Other Errors

Sentence Errors

Fragments

A fragment is an incomplete sentence. It does not express a complete thought, even though it starts with a capital letter and ends with a punctuation mark. It is missing either a subject or a verb or both.

Here are three examples of fragments:

Fragment: Where there were mice and cockroaches.

Fragment: A movie that inspires deep emotions.

Fragment: Analyzing the characters' motives.

These three groups of words cannot stand alone as complete sentences. They can be corrected in two ways. One way is to attach the fragment to a complete sentence.

Corrected sentence: <u>Peter left the apartment</u> where there were mice and cockroaches.

Corrected sentence: <u>I went to see "The Silver Star,"</u> a movie that inspires deep emotions.

Corrected sentence: Analyzing the characters' motives is central to understanding a novel.

Another way to correct fragments is to add a complete subject, a complete verb, or other words that express a complete thought.

Corrected sentence: This is where there were mice and cockroaches.

Corrected sentence: A movie that inspires deep emotions is rare.

Corrected sentence: Analyzing the characters' motives is important.

Summary: Sentence fragments are incomplete sentences. Sometimes readers can figure out the meaning of a fragment by rereading the sentences that come before and after it. However, turning fragments into complete sentences will improve the connections between ideas.

Run-on Sentences

Run-on sentences happen when we join sentences together without a conjunction or the correct punctuation. Run-on sentences can be very confusing to read. Here is an example: *My sister loves to dance she is very good at it.*

There are several ways to correct run-on sentences:

1. Divide the run-on sentence into two separate sentences.

Run-on sentence: My sister loves to dance she is very good at it.

Corrected sentence: My sister loves to dance. She is very good at it.

Run-on sentence: Jim showed us his ticket someone gave it to him.

Corrected sentence: Jim showed us his ticket. Someone gave it to him.

2. Connect the parts of the run-on sentence with a coordinating conjunction and a comma. These are the most common coordinating conjunctions: *and*, *but*, *for*, *nor*, *or*, *so*, *yet*.

Run-on sentence: My sister loves to dance she is very good at it.

Corrected sentence: My sister loves to dance, and she is very good at it.

Run-on sentence: She agreed to chair the meeting she didn't come.

Corrected sentence: She agreed to chair the meeting, but she didn't come.

3. Connect the parts of the run-on sentence with a subordinating conjunction. These are the most common subordinating conjunctions: *after, although, as, because, before, if, since, unless, until, when, whereas, while.*

Run-on sentence: My sister loves to dance she is very good at it.

Corrected sentence: My sister loves to dance because she is very good at it.

Run-on sentence: Maria and John like skiing Karen does not.

Corrected sentence: Although Maria and John like skiing, Karen does not.

4. Connect the parts of the run-on sentence with a semicolon.

Run-on sentence: Gordon laughed at Sandy's joke it was funny.

Corrected sentence: Gordon laughed at Sandy's joke; it was funny.

Run-on sentence: I thought he was here I was wrong.

Corrected sentence: I thought he was here; I was wrong.

Summary: Run-on sentences are two or more sentences that have been joined together without a conjunction or the correct punctuation. You can usually correct them by using punctuation or conjunctions.

Word Errors

Noun Forms

A noun is usually defined as a person, place, or thing.

Person: man, woman, waiter, John, book

Place: home, office, town, station, Hong Kong

Thing: table, car, apple, money, music, love, dog, monkey

Learning a few basic rules will help you to use nouns effectively:

1. In English, some nouns are countable. That is, they are things that we can count. For example: *house*. We can count *houses*. We can have one, two, three, or more *houses*. Here are more examples of countable nouns:

dog, cat, animal, man, person, bottle, box, pound, coin, dollar, bowl, plate, fork, table, chair, suitcase, bag

Countable nouns can be singular or plural.

Singular: I have <u>a friend</u>.

Plural: I have two friends.

- 2. Usually, to make nouns plural, add -s, as in the preceding examples (*friend*, *friends*). However, there are special cases where you do not add -s.
 - When a word ends in -*ch*, -*s*, -*sh*, -*ss*, or -*x*, the plural is formed by adding -*es*. (*benches*, *gases*, *dishes*, *dresses*, *taxes*)
 - When a word ends in -y preceded by a consonant, the plural form is -ies. (parties, bodies, policies)
 - When a word ends in -y preceded by a vowel, the plural is formed by adding -s. (trays, joys, keys)
 - When a word ends in -o, the more common plural ending is -oes. (tomatoes, potatoes, heroes)
 - When the final -*o* is preceded by a vowel, the plural ending is -*os*. (*videos*, *studios*)
 - When a word ends in -f, the plural is formed in one of two ways:
 - either by adding -s (beliefs, puffs)
 - or by changing the -f to -v and adding -es (wife, wives; leaf, leaves; loaf, loaves).
 - When a word ends in -ex or -ix, the plural ending is usually -es. (appendixes, indexes)
 - In certain cases, the plural form of a word is the same as the singular. (*deer, sheep, fish, series*)
- 3. Some nouns are uncountable. They represent things that cannot be counted. For example, we cannot count *coffee*. We can count "cups of *coffee*" or "pounds of *coffee*," but we cannot count *coffee* itself. Here are more examples of uncountable nouns:

music, art, love, happiness, advice, information, news, furniture, luggage, rice, sugar, butter, water, electricity, gas, money

We usually treat uncountable nouns as singular.

Incorrect: These furnitures are beautiful.

Correct: This furniture is beautiful.

4. Some uncountable nouns refer to abstract ideas or emotions. Abstract ideas may refer to qualities that we cannot physically touch. For example: *health*, *justice*.

We cannot count abstract nouns, so they are always singular.

Incorrect: Healths are more important than wealths.

Correct: Health is more important than wealth.

Incorrect: *Have* <u>funs</u> at the reunion.
Correct: *Have* fun at the reunion.

5. Some nouns can be countable *and* uncountable. For example: *paper, room, hair, noise, time*. With these nouns, the singular and plural forms often have different meanings.

Countable: The Christmas lights make the mall very pretty.

Uncountable: This room does not get enough light.

Countable: Othello is one of Shakespeare's most famous works.

Uncountable: I have a lot of work to do tonight.

6. Singular nouns that are countable usually come after an article or other determiner (*a, an, the, this, my, such*).

Incorrect: His mother is doctor.

Incorrect: Boy standing over there is brother.

Incorrect: We saw child in playground.

Correct: His mother is a doctor.

Correct: The boy standing over there is my brother.

Correct: We saw a child in the playground.

Summary: Nouns are important words in a sentence because they form the subjects or objects. Some nouns can be counted and some cannot. Learning a few rules will help you to use nouns effectively.

Verb Forms

Verbs are parts of speech that express action (*jump, show*) or a state of being (*are, was*). Here are a few tips that may help you to use verbs effectively:

1. Helping verbs (also called *auxiliary verbs*) precede the main verb. All of the following verbs may be helping verbs:

be, am, is, are, was, were, being, been, has, have, had, do, does, did, can, will, shall, should, could, would, may, might, must

Here are examples of sentences with helping verbs:

Many people don't know what they <u>are</u> going to do after college.

I am going to give you step-by-step instructions.

2. Words such as *might, must, can, would,* and *should* are also called modals. They express a wide range of meanings (ability, permission, possibility, necessity, etc.).

The following examples show one use of modals:

Tom might have gone to the party if he had been invited.

If I had a million dollars, I would buy a house for my parents.

This use of modals is called the conditional use. One event relies on another or it cannot take place. In the first example, Tom cannot go to the party without being invited. In the second example, I could buy a house for my parents only if I had a million dollars.

3. The infinitive form of the verb is formed by using the word *to* plus the simple form of the verb.

He is too tired to go to the barbecue.

The manager wants to hire a new secretary.

The infinitive can also be used as the subject or object of a sentence.

To invest now seems risky.

The teacher told him to leave.

In the first example, *To invest* is the subject of the sentence, while, in the second example, *to leave* is the object.

We can use the infinitive to show an action that is occurring at the same time as, or later than, the action of the main verb.

We like to play video games.

My best friend wants to shop at that mall.

In the first example, the *liking* is happening at the same time as the *playing*. In the second example, the *shopping* is going to happen at a later time than the *wanting*.

4. Do not use *of* after a helping verb. In some verb phrases, there are two or more verbs being used (*should have happened, might be eaten, could have decided*). Here are examples in which the word *of* is used incorrectly:

Incorrect: They would of stayed one more month if possible.

Incorrect: In that time, he could of finished the project.

Correct: They would have stayed one more month if possible.

Correct: In that time, he could have finished the project.

Of is a preposition, not a verb, and in each of these sentences, of should be replaced with the helping verb have.

Summary: Verbs are very important parts of a sentence. There are a few rules that you can learn to make your use of verbs more effective.

Subject-verb Agreement

In English, the subject and verb must always agree in number. Here are a few rules that will help you:

1. A singular subject takes a singular verb.

The teacher was happy with my answer.

My cell phone is not working.

In the first example, the singular subject *teacher* agrees with the singular verb *was*. In the second example, the singular subject *cell phone* agrees with the singular verb *is*.

2. A plural subject takes a plural verb.

My parents were happy with my grades.

Many television stations have reported that story.

In the first example, the plural subject *parents* matches the plural verb *were*, and in the second example, the plural subject *television stations* matches the plural verb *have*.

You should never have a plural subject with a singular verb.

Incorrect: Many students thinks tomorrow is a holiday.

This sentence can be edited to make the subject and verb agree.

Correct: Many students think tomorrow is a holiday.

Similarly, you should never have a singular subject with a plural verb.

Incorrect: The student think tomorrow is a holiday.

This sentence can be edited to make the subject and verb agree.

Correct: The student thinks tomorrow is a holiday.

3. Sometimes subjects and verbs are separated by a word or a phrase. When that happens, students sometimes forget to make them agree in number.

Incorrect: Your suggestions about the show was excellent.

Incorrect: The use of cell phones during concerts are not allowed.

Correct: Your suggestions about the show were excellent.

Correct: The use of cell phones during concerts is not allowed.

In the first example, since the subject of the sentence is *suggestions*, which is plural, the plural verb *were* is used. In the second example, the singular subject *use* needs the singular verb *is*.

4. A compound subject needs a plural verb.

When you proofread your work, correctly identify the subject in your sentences. For example, the following sentences have more than one subject:

The camcorder and the tripod were returned yesterday.

Both Chantel and Rochelle are nice names.

In the first example, the complete subject is compound (*camcorder* and *tripod*), and so the verb must be plural (*were*). In the second example, the compound subject is *Chantel and Rochelle* and needs the plural verb *are*.

5. A collective noun must have a verb that agrees with it. Collective nouns are nouns that name a group (*committee, herd, board of directors*). In American English, collective nouns are usually singular.

Correct: The committee is made up of twelve people.

Correct: The jury has not arrived at a verdict.

When you use a collective noun to refer to a group acting as an individual unit, you should make the verb singular. In the first example, the subject (*committee*) is singular, so it takes the singular verb *is*. In the second example, the singular subject (*jury*) takes the singular verb *has*.

However, sometimes you might want to emphasize that the group acted as individuals, each for himself or herself. Then you could write the following:

Awkward: The committee were divided in their opinions.

Awkward: The jury have been listening to the tapes for two days.

In these examples, the individuals in the groups are emphasized, so the plural verbs are used. However, while correct, these sentences sound awkward. You might want to change the word *committee* to *committee members* in the first example, and the word *jury* to *jury members* in the second example.

Summary: A verb should always agree with its subject. A singular subject takes a singular verb, and a plural subject takes a plural verb. Sometimes a phrase separates the subject and the verb, making it hard to find the real subject.

Pronouns

A pronoun is a word that takes the place of one or more nouns. Pronouns are words such as he, his, she, her, hers, it, they, their, them, these, that, this, those, who, whom, which, what, and whose.

If we did not have pronouns, we would have to repeat a lot of nouns. We would have to say things like:

Do you like the new manager? I don't like the new manager. The new manager is too unfriendly.

With pronouns, we can say the following:

Do you like the new manager? I don't like him. He is too unfriendly.

Learning a few rules will help you to use pronouns correctly and effectively:

1. Pronouns must agree with the nouns they refer to. If your pronoun refers to a girl or woman, you use a feminine pronoun (*she*, *her*, *hers*). If your pronoun refers to a boy or man, you use a masculine pronoun (*he*, *his*, *him*).

Any pronoun you use must also agree in number with the noun it refers to. If you are using a pronoun to refer to a singular noun, you must use a singular pronoun; if you are using a pronoun to replace a plural noun, you use a plural pronoun.

Julia reminded us that she would not stay late.

Bob bought two computers and had them delivered to his office.

In the first example, the singular pronoun *she* is used to stand for *Julia*, a female person. In the second example, the plural pronoun *them* is used to refer to the plural noun *computers*.

2. Some indefinite pronouns are always singular. Indefinite pronouns such as *each*, *one*, *every*, *everyone*, *everybody*, *anyone*, *anybody*, *anything*, *someone*, *somebody*, *either*, *neither*, *nothing*, *nobody*, *none*, and *no one* are always singular, so other pronouns that refer to them must also be singular, as in these examples:

Neither of the boys sent in his report.

Everyone must buy her own ticket.

Note the construction of the second sentence, in which the writer decided to use the pronoun *her*. Some people would prefer the pronoun to be *his or her* to indicate explicitly that each person, regardless of gender, is purchasing a ticket. Some instructors consider *his or her* constructions awkward and allow *everyone* to be treated as plural (*Everyone must buy their own ticket*.). Other instructors consider the plural construction not acceptable in good writing.

3. Some indefinite pronouns are always plural. These include *both* and *many*. Other pronouns that refer to *them* must also be plural.

Both of them are here tonight.

Many of the managers have moved into their new offices.

In the first example, *both* is plural, and so the plural pronoun *them* is used. In the second example, the plural pronoun *their* is used because *many* is plural.

4. Some indefinite pronouns can be singular or plural. Indefinite pronouns such as *all*, *any*, *more*, *most*, *none*, and *some* can be singular or plural, depending on their meaning in a context.

Most of my time is spent reviewing for the test.

Most of the students have turned in their reports.

In the first example, *most* refers to *time*, a singular noun. It thus takes the singular verb *is*. In the second example, *most* refers to the plural noun *students*. This is why it takes the plural verb *have* and is referred to by the plural pronoun *their*.

5. Overusing pronouns can cause confusion.

Confusing: The President informed the Vice President that all of <u>his</u> supporters should be meeting with him.

Whose supporters, the President's or the Vice President's? Whom are they meeting with? This sentence needs to be revised to fix the confusion caused by the use of *him* and *his*. This can be accomplished by replacing the pronouns with the appropriate nouns.

Clear: The President informed the Vice President that all of the President's supporters should be meeting with the President.

Excessive use of *it* weakens writing, especially when *it* is used to introduce a sentence, as in this example:

Confusing: We were visiting the museum. I saw <u>it</u>. <u>It</u> was interesting and unusual. I was amazed by it.

You can improve *it* by explaining what the first *it* refers to.

Clear: We were visiting the museum. I saw the space exhibit. It was interesting and unusual. I was amazed by it.

In this example, can you figure out what *it* stands for?

Although the car hit the tree, it was not damaged.

Does *it* refer to the car or the tree? You can make the sentence clear by rewriting it.

The car was not damaged, although it hit the tree.

6. When you have nouns joined by a conjunction (*and, or,* or *nor*), do not forget to make a pronoun that refers to them agree in number, as in these examples:

If <u>Bob and Rick</u> want to go, <u>they</u> will need to take the bus, because I don't have room in my car.

Whether I buy a dishwasher or dryer, it will have to go in the kitchen.

In the first example, there is a compound noun, as *Bob* and *Rick* are joined by the conjunction *and*. So the plural pronoun *they* must be used. In the second example, the noun is singular (*dishwasher* or *dryer*). Thus the singular pronoun *it* is used.

7. You should know when to use *who*, *whom*, *which*, or *that*. *Who* and *whom* refer to people. *Which* refers to things, and *that* can refer to either people or things.

The committee interviewed all the candidates who applied.

Do you still have the magazine that I lent you last week?

Which courses should I take in the fall?

In the first example, *who* refers to a group of people (*candidates*). In the second example, *that* refers to a thing (*magazine*). In the third example, *which* refers to things (*courses*).

Summary: A pronoun is a word used to take the place of one or more nouns. Singular pronouns must be used to refer to singular nouns, and plural pronouns must be used to refer to plural nouns. Some indefinite pronouns can be singular or plural, according to their meaning in the sentence.

Possessive Pronouns

Possessive pronouns are used to show possession or ownership. Here are a few rules that will help you to use possessive pronouns effectively:

1. When you are using possessive pronouns such as *his*, *hers*, *mine*, *theirs*, *yours*, or *ours*, make sure that the possessive pronoun agrees in number with the noun to which it refers.

Incorrect: I have my car, and my husband has theirs.

Incorrect: This is the children's room. All those toys are hers.

Correct: I have my car, and my husband has his.

Correct: This is the children's room. All those toys are theirs.

In the first sentence, the singular pronoun *his* should be used to show that the car belongs to the singular noun *husband*. In the second sentence, *theirs* should be used to show that the toys belong to the plural noun *children*.

2. Possessive pronouns do not take an apostrophe. *His, hers, its, ours, yours, theirs,* and *whose* are pronouns that already convey possession, so do not add an apostrophe to them.

Incorrect: Each art room has it's own sink.

Incorrect: His' office is on the third floor.

Correct: Each art room has its own sink.

Correct: His office is on the third floor.

In the first sentence, a possessive pronoun is needed (*its*) not *it's*, which means "it is." In the second sentence, the possessive pronoun *his* is needed; *his'* is never used.

Other Ways to Show Possession

Besides possessive pronouns, there are other ways to show possession, such as using an apostrophe and an -s (-'s).

My neighbor's house is bigger than mine.

Henry's cat likes to play with our baby.

Below are some rules for indicating possession:

1. When a noun ends in -s and the addition of -'s makes the word sound odd, some writers add only an apostrophe, as in these examples:

I like James' company.

This is Harris' wife, Anna.

2. Make sure you put the apostrophe in the right place. Put the apostrophe *before* the -s if the word is singular.

The teacher's desk is right in front. (one teacher)

My sister's haircut cost \$70. (one sister)

You will put the apostrophe *after* the -s only if it is a plural word.

We borrowed our parents' car. (more than one parent)

I went to a party at my friends' house. (more than one friend)

3. When two or more people share ownership, you use an apostrophe and -s on the last noun. When each person has separate ownership, you need to indicate that, as in these examples:

John and Jack's room is very messy. (John and Jack share one room.)

lan's and George's dreams are very different, even though the two boys come from the same family. (Ian and George have different dreams.)

4. Do not use an apostrophe when you want to make a noun plural. An apostrophe shows possession, not the plural of a noun. These sentences are wrong: they should not have apostrophes:

The new student's look confused.

There are too many car's on our street's.

Summary: Possessive pronouns are used to show possession, or ownership. There are a few rules that can help you to use them correctly.

Prepositions

A preposition is a word that is used before a noun (or noun phrase) to give more information in a sentence. Prepositions are usually used to show where something is located or when something happened. Examples of prepositions include in, among, between, across, at, with, beside, behind, in, into, from, during, before, and after.

Prepositions are used to show place, time, and action or movement.

• Place:

The main office is in New York.

I'm meeting my colleagues at the coffee shop.

• Time:

Let's try to get there by 3:30.

Please do not talk during the show.

• Action or movement:

He jumped into the river.

We flew from Los Angeles to Toronto.

Some verbs and adjectives are usually followed by certain prepositions.

They always argue about money.

I borrowed a book from the library.

Here are more examples of words and prepositions that usually go together:

familiar with, afraid of, far from, close to, believe in, borrow from, lend to, absent from, nice to, argue with, made of, take off, turn on, happy with, sad about, famous for

The following sentences contain *incorrect* use of prepositions:

Incorrect: I am afraid at losing my textbooks.

Incorrect: The student argued at the teacher.

Correct: I am afraid of losing my textbooks.

Correct: The student argued with the teacher.

The first sentence can be corrected by changing *at* to *of*. In the second sentence, the preposition that should go with *argued* is *with*.

Summary: Prepositions are used to show relationships between a noun and other parts of a sentence. There are a few rules that can help you to use prepositions correctly.

Other Errors

Wrong or Missing Word

When writing or typing quickly, people often use the wrong word or misspell words. When you begin to revise, edit, and proofread, read carefully for wrong words or words that you have left out.

One of the most frequent problems is the use of *the* instead of *they*.

Incorrect: The went to the store each Monday.

The writer most likely intended the following:

Correct: They went to the store each Monday.

Another common error is a missing noun after the word *the*.

Incorrect: The go to the store each Monday.

Correct: The brothers go to the store each Monday.

Summary: Wrong or missing words commonly occur but are easy to correct. Proof-read your sentences carefully.

Keyboard Errors or Typos

Sometimes while writing the first drafts of an essay, you might leave out words or make keyboard errors. They might be grammatical, usage, or mechanics errors, or they could be omitted words or typos. Proofread carefully to correct these errors when you edit and revise your writing.

Usage

This section provides information on the following usage errors:

- Article Errors
- Confused Words
- Wrong Form of Word
- Faulty Comparison

Article Errors/Determiner Errors

This section features rules and explanations for using articles and examples of how articles are used correctly when you are writing in English.

What Are Articles?

A, an, and *the* are called *articles*. These are words that come before a noun or its modifier. (A *modifier* is a word that makes a noun clearer or more specific. Modifiers tell how many or which one.)

a thinker an apple the housea car an old house the newspapers

There are two types of articles in English. *A* and *an* are called indefinite articles. *The* is called a definite article.

When to Use a or an

A or an is used before a *singular* noun when the noun refers to any member of a group.

James must write an essay for his writing class today.

A newspaper is a good source of information on current events.

If the noun or the modifier that follows the article begins with a consonant sound, you should use the article *a*.

a basketball a new automobile

On the other hand, if the noun or its modifier begins with a vowel sound—a, e, i, o, u—you should use the article *an*.

an elephant an old truck

A/an is used before a noun if the noun can be counted. For example:

I received a letter from my sister.

Sending an email is a fast way to communicate with classmates.

Sometimes a noun or a modifier can begin with a vowel *letter* but not a vowel *sound*. For example, here the vowel *o* in the word *one* sounds like the consonant *w* in *won*:

This will be a one-time charge to your account.

When to Use the

The is used before singular and plural nouns when the noun is a particular or specific noun. Use the article *the* if you can answer the question "Which one?" or "What?"

The art class that I want to take is taught by a famous painter.

The students in Mrs. Jones's class do not want to participate in the debate.

In addition, *the* is used in the following ways:

- To refer to things known to everyone (the sky, the stars)
- To refer to things that are unique (*the* White House)
- To refer to time (*the* past, *the* present, *the* future)

When Not to Use an Article

A/an is not used before a noun if the noun cannot be counted.

I like to drink milk. (Milk is not counted.)

If a quantity of milk is specified, then the article would be used.

I like to drink a glass of milk before I go to bed.

Sometimes nouns used to represent abstract general concepts (such as anger, beauty, love, or employment) do not take *a* or *an* before them.

Love is a difficult emotion to describe in words.

Money alone cannot buy happiness.

The is not used when a plural noun is used in a general sense.

Computers are helpful tools for student writers. (*Computers* refers to the general concept of computers, not to specific computers.)

The computers in that classroom are used for writing class. (*The computers* refers to a specific set of computers.)

Other Determiner Errors

The adjectives *this, that, these,* and *those* modify nouns that follow them by telling "which one." These adjectives must agree in number with the nouns they modify. *This* and *that* are used to describe a singular noun. *These* and *those* are used to describe plural nouns.

Incorrect: I would buy these house for those reason.

Incorrect: This kinds of technologies will affect people's behavior.

Correct: I would buy this house for that reason.

Correct: These kinds of technologies will affect people's behavior.

Homonyms

Certain words are known as *homonyms*. These are words that sound the same but differ in meaning, spelling, or usage. Homonyms can be of two types: words that are spelled alike and words that sound alike. Words that are spelled alike but differ in meaning are called *homographs*. An example of a homograph is the word *bear*, which can mean a type of animal or the verb *bear*, which means "to carry." Words that sound alike but differ in meaning and spelling are called *homophones*. The words *whole* and *hole* are homophones. *Whole* is an adjective meaning "complete," and *hole* is a noun meaning "an empty place." What follows are examples of some common homonyms. Always check your writing to make sure you are using the appropriate words.

here adverb meaning "in this place"

We have been waiting here for an hour.

hear verb meaning "to listen"

Do you **hear** the birds singing?

hole noun meaning "an empty place"

The children dug a big hole in their sandbox.

whole adjective meaning "with no part removed or left out; complete"

Our whole project will involve cooperation from everyone.

its pronoun possessive form of it

The kitten hurt its paw.

it's contraction of it is

It's not fair to leave her behind.

know verb meaning "to feel certain, or to recognize"

Do you know how to get to the subway?

no adverb used as a denial or refusal

The employee said no to the job offer.

knew verb past tense of the verb to know

The boy knew how to count to ten.

new adjective meaning "not old"

At the start of the school year, the students bought new books.

desert noun meaning "a dry and sandy place"

It rarely rains in the desert.

desert verb meaning "to abandon"

The officer commanded the troops to not desert their posts.

dessert noun meaning "the final course of a meal"

After a big meal, I enjoy a simple dessert of vanilla ice cream.

to preposition meaning "toward"

The man pointed to the sky.

two adjective or pronoun meaning "the number 2"

Five is two more than three.

too adverb meaning "also"

Tom and Eleanor wanted to go with them too.

they're contraction meaning "they are"

They're both coming to the party.

their possessive pronoun meaning "belonging to them"

That is their blue house on the corner.

there adverb meaning "at that place"

Did you see anyone you knew there?

through adverb meaning "completed, or finished"

When she was **through** eating, she put her plate in the sink.

threw past tense of the verb throw, meaning "tossed"

The boy threw the ball to his sister.

Other Confused Words

Besides homonyms, other words are confused in English because they are similar in spelling, sound, or meaning. Examples of some commonly confused words include <code>accept/except</code>, <code>advice/advise</code>, <code>affect/effect</code>, and <code>loose/lose</code>. Computer spell-checkers will not catch these words if you have misused them. When you review your work, proofread to see whether you have used the correct word. Even native speakers of English often make mistakes with confused words when they are writing, especially when they are in a hurry. Review the meanings of some commonly confused words.

accept verb meaning "to receive; to agree, or to take what is offered"

I accept your kind invitation.

except preposition meaning "other than, or leaving out; excluding" Everyone **except** Phil can attend the conference.

advice noun meaning "an opinion given about what to do or how to behave"

He has always given me valuable advice regarding my future plans.

advise verb meaning "to recommend or counsel"

I advise you to stay in school and study hard.

affect verb meaning "to influence, or to produce an effect on"

The weather can affect a person's mood.

effect noun meaning "result"

When students study for tests, they see a positive effect on their test results.

effect verb meaning "to bring about"

The governor can effect change in state education policies.

loose adjective meaning "detached, not rigidly fixed; not tight"

She lost her bracelet because it was too loose on her wrist.

lose verb meaning "to be deprived, or to no longer have; to not win"

If you don't pay attention to the signs, you might lose your way.

quiet adjective meaning "not loud or noisy"

Please be quiet when other people are speaking.

quit verb meaning "to give up or abandon; to stop"

The boys will quit their jobs the week before school starts.

quite adverb meaning "to some extent"

Moving to a new city will be quite a change for my family.

sense *noun* meaning "consciousness, awareness, or rationality; the faculty of perceiving by means of sense organs"

My brother had the good sense to keep out of trouble.

The doctor explained that my sense of smell is not functioning well.

since *adverb* meaning "from a definite past time until now"; *conjunction* meaning "later than"

Ginny has lived in the same house ever since she moved to town.

Karl has worked as an accountant since graduating from college.

than conjunction used when comparing two elements

Her puppy is smaller than mine.

then adverb meaning "at that time, or next"

First I will stop at the store, and then I will go home.

These are just a few examples of words that are often confused in English. When you are unsure of the proper usage of a word, consult an English dictionary.

Wrong Form of Word

When you write quickly, sometimes you use a word form that is different from the one that you intended to use. One reason why this error occurs is that a word can be used in different ways in a sentence depending on its purpose.

When you revise, read your writing very carefully to find these errors. You can also get someone else to read your work and to help you see where you are not clear. Here are examples of wrong word forms that can occur:

Incorrect: But certain types of businesses will continue to grow to <u>an extend,</u> he thinks.

Extend is a verb, and this writer meant to use the noun *extent*.

Correct: But certain types of businesses will continue to grow to <u>an extent,</u> he thinks.

Here is another example of a wrong word form in a sentence:

Incorrect: I want to work with disable children.

This writer should revise *disable* to *disabled*.

Correct: I want to work with disabled children.

Learning the parts of speech can teach you how each functions in a sentence. Proofreading your own work can help you correct these errors as well.

Faulty Comparison

A faulty comparison error occurs when the word *more* is used within a comparison with a word that ends in *-er*, or when the word *most* is used within a comparison with a word that ends in *-est*.

Incorrect: The boy with the red hair is more taller than the girl with the black hair.

Incorrect: James thinks that Mary is the most prettiest girl in school.

To avoid making these kinds of errors in your writing, you should review the following rules:

When comparing one thing with another, add the ending *-er* to short words (usually of one syllable).

Correct: The boy with the red hair is taller than the girl with the black hair.

Correct: Today it is hot, but yesterday it was even hotter.

When comparing three or more things, add the ending *-est* to short words (usually of one syllable).

Correct: The girl in the back of the room is the tallest girl in her entire class.

Correct: Yesterday was the <u>hottest</u> day ever recorded by the National Weather Service.

In many cases, with words of two or more syllables, you do not add *-er* or *-est* to the word; instead, use the word *more* before the word when comparing two things, and use the word *most* when comparing three or more things.

Correct: The judges must decide which of the two remaining singers is more talented.

Correct: Of the three new students, John is the most intelligent.

Comparisons that are negative use *less* for comparisons of two things and *least* for comparisons of three or more things.

Correct: The third-floor apartment is less costly than the first-floor apartment.

Correct: Of the three colleges that I've visited, this one is the least expensive.

Nonstandard Verb or Word Form

The words you use in everyday conversation are often different from the words you use in standard written English. While a reader might understand these informal words—*gotta*, *gonna*, *wanna*, *kinda*—you should not write them in an essay. Here are two examples of nonwords used in sentences:

Nonstandard: I told her I gotta go to school now. Correct: I told her I have got to go to school now.

Nonstandard: *Do you wanna go to college?*Correct: *Do you want to go to college?*

Even though you can understand what the writer means, the words *gotta* and *wanna* do not exist in standard written English.

Mechanics

This section provides information on the following types of mechanics errors:

- Capitalization
- Spelling
- Punctuation
- Other Errors

Capitalization

To *capitalize* means to use capital letters. Below are some guidelines for capitalization:

1. Capitalize the first word of every sentence.

He is the most famous director in Hollywood right now. No doubt about it. Give it to me. It looks like mine.

2. Capitalize all proper nouns; for example, names of individuals, objects, titles, and places.

<u>Francis Lloyd Mantel lives on Moore Street.</u>

The class is reading Adventures of Huckleberry Finn.

In the first example, "Francis Lloyd Mantel" is the name of an individual, so it is capitalized. "Moore Street" is the name of a place, so it is also a proper noun. The second example contains the title of a book, so it is capitalized.

All names are proper nouns and must be capitalized. Other examples:

Names of institutions, places, and geographical areas

She is a new faculty member at Stanford University.

Their main office is in New Delhi, India.

Names of historical events, days, months, and holidays

<u>Martin Luther King Day is a school holiday.</u>
Classes don't meet until October.

Names of languages and proper adjectives

He speaks Spanish and Italian fluently.

They teach Korean dances at the academy.

3. The first-person pronoun *I* is always capitalized, even when it is in the middle of a sentence.

It is I who sent you that letter.

They told me that I should call for an appointment.

4. Capitalize words such as *father*, *mother*, *aunt*, and *uncle* when used with proper names or when addressing a particular person.

Aunt Bessie and Uncle Jesse just bought a country house.

Yes, Mom, I'm going after dinner.

However, when these words are used with possessive pronouns, they are not proper names and therefore are not capitalized.

My father is not at home.

Their mother is my aunt.

In the above examples, *father*, *mother*, and *aunt* are not capitalized because they are used with the possessives *my* and *their*.

Summary: In English, the first letter of the first word in a sentence is always capitalized. You must also capitalize all proper nouns. Proper nouns include all names and titles. The first-person pronoun *I* is always capitalized too.

Spelling

English spelling rules are complex. Here are a few rules that may help you:

- 1. Write *i* before *e* (*fiery*, *friend*, *dried*), except
 - after *c* (receive)
 - with syllables sounding like *a* as in *neighbor* (*weigh*, *heir*, *foreign*)

Note these examples:

All applicants will receive a response within three weeks.

The breakfast special is fried eggs and sausage.

Adding Endings to Words

2. If a word ends with a silent *-e*, drop the *-e* when adding a suffix that begins with a vowel (for example, the *-ing* suffix). However, do *not* drop the *-e* when the suffix begins with a consonant (for example, the *-ful* suffix).

I like to skate. I enjoy skating.

I could use a dictionary. A dictionary is very useful.

In the first example (*skate–skating*), the *-e* is dropped because the *-ing* suffix begins with the vowel *i*. In the second example, the *-e* is not dropped, because the *-ful* suffix begins with the consonant *f*.

3. When -*y* is the last letter in a word and the letter before -*y* is a consonant, drop -*y* and add -*i* before adding a suffix.

The beaches in Thailand are extremely beautiful.

They hurried to the gate because they were so late.

In both examples, the -y is replaced with -i (beauty–beautiful; hurry–hurried).

4. When forming the plural of a word that ends with a -*y* preceded by a vowel, just add -*s*. But if the letter before -*y* is a consonant, drop -*y* and add -*i* before adding the suffix.

FAO Schwartz is a famous <u>toy</u> store. It sells all kinds of toy<u>s</u>. Ladies and gentlemen, please be seated.

In the first example, the letter o (a vowel) comes before -y. So you need to add only -s to form the plural noun. But in the second example, in the word lady, the letter d (a consonant) comes before -y. You have to drop -y and add -i to make the word plural.

5. When a word ends in a consonant preceded by one vowel, double the final consonant before adding a suffix that begins with a vowel.

The children swim at the community pool. They love swimming.

You should begin at the beginning. Start by writing the title.

In the first example, the word swim ends with the letter m. In the second example, the word begin ends with the letter n. Both m and n are consonants. When adding -ing, a suffix starting with a vowel, you just need to double the final consonant.

Remember: when the ending begins with a vowel and the word ends in an -e, do not double the consonant. Instead, drop the -e and add the ending.

Incorrect: The children go skatting in the winter.

Correct: The children go skating in the winter.

The following examples contain *incorrect* spelling:

Incorrect: We visited the monkey house at the zoo. There were monkies from all over the world.

Incorrect: My neice is a student in your class.

In the first sentence, the plural form of *monkey* is *monkeys*. This is because when forming the plural of a word that ends with a -y preceded by a vowel, you should just add -s. In the second sentence, *niece* is the correct spelling. Remember, "i before e except after c" is a very useful rule!

Correct: We visited the monkey house at the zoo. There were <u>monkeys</u> from all over the world.

Correct: My niece is a student in your class.

These are all useful rules for learning English spelling. However, there are also some exceptions that are not covered by these rules, so it is a good idea to learn a few strategies for spelling as well.

For example, there are times when we make mistakes because we type too fast. It is easy to make the following errors on the computer:

Incorrect: A letter frrom her former neighbor came in the mail today.

Incorrect: Becuase I lost my homework, I had to do it again.

Both sentences contain typos, or mistakes we make when we type. One strategy for dealing with typos is to use the spell-check function on the computer.

However, there are mistakes that will not be caught by the spell-checker. For example:

Incorrect: Would you know weather he is at work today?

Incorrect: Are their any good Indian restaurants in this area?

In these examples, though the underlined word is spelled correctly, the use of the word in the sentence is incorrect. The spell-checker will not be able to find such errors, so after spell-checking, you should check for these errors as you read each sentence for meaning.

Another strategy is to keep a list of words that you often misspell. Memorize as many as you can. Check your writing specifically for these words.

You could also use a dictionary while you write to check the spelling of words that you are unsure of.

Summary: English spelling is complex and may sometimes seem strange. There are rules that can be memorized and learned, and there are strategies that can help

you to spell better. For example, use a dictionary and the spell-check function on your computer.

Punctuation

Punctuation refers to the use of punctuation marks. Some punctuation marks, such as the *apostrophe*, are used with individual words. Some, such as *commas*, are used either to separate parts of sentences or to separate digits in numbers. Others, such as *periods*, *question marks*, and *exclamation points*, are used to separate sentences. They help us to make the meaning of our sentences clear.

Apostrophe

Use an apostrophe when you write a contraction. A contraction is the joining of two words by eliminating some letters and adding an apostrophe. It is a kind of short form. For example, *can't* is the contraction of *cannot*, *shouldn't* is the contraction of *should not*, and *let's* is the contraction of *let us*. Other contractions are *won't*, *it's*, *wouldn't*, and *couldn't*.

They won't be able to enter without their tickets.

We could hear them, but we couldn't see them.

In the first example, *won't* is the contraction of *will not*, and in the second sentence, *couldn't* is the contraction of *could not*.

Some people write contractions without the apostrophe. They are incorrect. The following sentence shows an incorrect use of a contraction:

Incorrect: Lets go to the park tomorrow.

Correct: Let's go to the park tomorrow.

Let's is the contraction of *let us*. Without the apostrophe, the word means "allow," as in this sentence:

Correct: She lets us use the computer when she's not using it.

In order to be used correctly, the apostrophe must be in the proper position. Below are examples of misplaced apostrophes:

Incorrect: We could'nt understand the lecture.

Incorrect: Students were'nt in school in the summer.

Correct: We couldn't understand the lecture.

Correct: Students weren't in school in the summer.

Note that the apostrophe should replace the vowel that is being deleted.

Summary: The apostrophe is used to show contraction and possession. For other uses of the apostrophe, refer bck to the section "Possessive Pronouns."

Comma

The comma is the most common form of punctuation within a sentence. It is a signal for the reader to pause. In fact, if you read the examples below carefully, you will notice a natural pause where the commas are situated.

Learning a few basic rules will help you to use the comma effectively:

1. Use a comma and conjunction (such as *and* or *but*) to join two clauses in a compound sentence.

The causes of the civil war were many, <u>and</u> the effects of the war were numerous.

The experiment was incomplete, but the lessons learned were important.

In the above examples, because the two clauses are independent clauses (or complete sentences) joined together by a conjunction, they need a comma between them.

2. Use a comma to connect words to the beginning or end of your sentence. We often add information to our sentences by attaching one or more words to the beginning or end. When you do that, you can use a comma to help your reader find your main message.

Last night, my friend and I celebrated his 58th birthday.

Many years ago, I studied French and German.

Each of these sentences begins with a phrase that indicates time. This information is separated from the main sentence by a comma.

3. Use a comma between each item of a list when you are listing three or more items in a sentence.

The flag was red, white, and blue.

I bought milk, bread, cheese, and butter.

The commas in the above examples clearly mark where one item on the list ends and the next one begins.

4. Use a comma between adjectives. If you have two adjectives together before the noun they describe, they must be separated by a comma.

The cold, wintry wind chilled me to my bones.

The complex, diverse cultures in the city add to its excitement.

In the above examples, the adjectives describing *wind* and *cultures* are placed before the noun, separated by commas.

5. Use commas to set off additional information in the middle of a sentence. Some information, often telling details about the subject of the sentence, needs to be distinguished from the main part of the sentence (the verb and object). We place commas before and after these groups of words.

Ms. Johnson, the company president, will announce the winner.

My brother, who loves to read, uses the library every day.

In the above examples, if you take away the parts that are set off by commas, you still have a complete sentence.

6. Use commas to separate quoted matter from the rest of the sentence.

"Take a break," said the instructor.

Nancy announces, "I'm getting married tomorrow."

In each example, the quotation is set apart from the rest of the sentence by a comma.

7. Use commas to set off the name of a state or country when it follows a city, county, or equivalent.

The newspaper is based in Chicago, Illinois.

Her flight to Beijing, China, took twelve hours.

In the above examples, the comma is used to set off the name of a state or country from a city within it.

8. In written American English, use commas to set off numbers in groups of four or more digits and between the words for the day, month, and year of a date.

He won \$1,000,000 in the lottery.

The date is March 15, 2003.

In the first example, commas are used because of the numbers (of four or more digits). In the second example, it is used in a date.

The following sentences are missing commas:

Incorrect: Conrad Redding the father of the bride cried at the wedding.

Incorrect: In conclusion I believe that technology will be the main factor affecting life in the 21st century.

In the first sentence, "the father of the bride" should be set off by a pair of commas. In the second sentence, there should be a comma after "In conclusion."

Correct: Conrad Redding, the father of the bride, cried at the wedding. Correct: In conclusion, I believe that technology will be the main factor affecting life in the 21st century.

Summary: Commas are used to separate parts of sentences and make meaning clearer. There are rules that can help you to use commas more effectively.

Hyphen

The hyphen is the punctuation mark used to join two words together to form a compound word. The most common uses of hyphens are as part of an adjective phrase, in numbers that are spelled out, and as prefixes.

1. Hyphens with compound adjectives. Use a hyphen to join two or more words serving as a single adjective *before* a noun. For example:

His uncle is a well-known author.

However, when compound adjectives come *after* a noun, they are not hyphenated. For example:

The author is well known for his mystery stories.

2. Hyphens with compound numbers. A hyphen should be used in fractions and in the numbers twenty-one and above.

The cup is three-quarters full.

Our teacher is sixty-three years old.

In the above examples, the compound numbers are joined with hyphens.

3. Hyphens with prefixes. A *prefix* is a syllable or word added to the beginning of another word to change its meaning. The prefixes *self-*, *ex-*, and *great-* always require a hyphen when they are added to words.

The instructions are self-explanatory.

The children are with their great-grandparents.

However, for prefixes such as *dis-, pre-, re-,* and *un-,* a hyphen is normally not used.

My aunt dislikes loud music.

The answer to that question is unknown.

Summary: We use hyphens to link some compound words, but not all compound words are hyphenated. In fact, American English is tending toward using fewer and fewer hyphens. Always check a recent dictionary to be sure you are hyphenating correctly.

Final Punctuation

There are a few punctuation marks that help us to end our sentences. These are the question mark, the period, and the exclamation point.

Question Mark

Use a question mark at the end of a direct question.

When did World War II begin?

What were the key stages in the Romantic Art movement?

Period

Periods are used to mark the end of a sentence that is a not a question. A period is also used at the end of an indirect question.

I just completed the project.

Cindy asked me who would be taking notes at the meeting.

Exclamation Point

Use an exclamation point after a sentence that expresses strong feeling or requires emphasis. An exclamation point also serves to make a sentence stand out.

Correct: That was utter nonsense!

Correct: What absolutely gorgeous flowers! Thank you!

The following examples contain *incorrect* use of final punctuation:

Incorrect: Have you called Mrs. Han yet. Incorrect: Oh, that's an amazing story?

The first example is a question and needs a question mark. The second example should have either an exclamation point or a period, not a question mark.

Correct: Have you called Mrs. Han yet? Correct: Oh, that's an amazing story!

Summary: Question marks, periods, and exclamation points are used to end sentences. Use question marks to end direct questions, periods to end other sentences, and exclamation points when you want to express strong emotions or emphasis. Do not use too many exclamation points in your writing, or you may sound as if you are shouting!

Other Errors

Compound Words

A compound word is a word that has two or more parts. For example, the word everywhere is made up of two distinct words: every and where. But as a compound word, everywhere has a new meaning that is different from the meanings of every and where. Although there are times when experts cannot agree if a word should be a compound, in most cases there are clear rules. In the following sentences, you can see where student writers make mistakes when using compound words:

Incorrect: I work to support my self and my family.

Incorrect: You can learn from every thing happening today.

In each of these sentences, compound words have been written incorrectly as two separate words. The underlined words in each sentence should be written as one compound word.

Correct: I work to support myself and my family.

Correct: You can learn from everything happening today.

Summary: In English, words, especially adjectives and nouns, are sometimes combined into compound words in a variety of ways. Compound words have a meaning that is different from the meanings of the two words that form them. Not all words can be joined this way. When you are not sure whether a word is a compound, check your dictionary.

Fused Words

Sometimes writers fuse two words together to form an incorrect compound word. The sentences below show examples of fused words:

Incorrect: Some people say that highschool is the best time of your life.

Incorrect: I like to play soccer alot.

Each of the underlined fused words should be two separate words.

Correct: Some people say that high school is the best time of your life.

Correct: I like to play soccer a lot.

Summary: When you join words together incorrectly, you get fused words. When you are not sure whether two words should be compounded, check your dictionary.

Duplicate Words

When writing a first draft, you might make errors simply because you are thinking faster than you can write or type. As a result, you might write the same word twice. Sometimes you might write two words in a row that, though different, function in the same way. It is very common for writers to type two verbs, pronouns, or articles in a row in early drafts.

Incorrect: Sally's older sister can may help her pay for college.

Incorrect: He was as silly as a the clown.

In each sentence, one of the underlined words should be deleted.

Correct: Sally's older sister can help her pay for college. (meaning that the

sister is able to help Sally)

Correct: Sally's older sister may help her pay for college. (meaning that the

sister might decide to help Sally)

Correct: He was as silly as a clown. (meaning that he generally acts clownish)

Correct: He was as silly as the clown. (meaning that he acts like a specific

clown)

Summary: You "duplicate" when you write the same word twice or when you use two different words that serve the same function. A real duplicate is easy to correct, as the spell-checker will usually identify it. But if you have typed two words that serve the same function and are not sure which to keep, check a dictionary to help you choose the word with the most appropriate meaning.

Style

This section provides information on how you can address the following kinds of problems in writing:

- Word Repetition
- Inappropriate Words or Phrases
- Too Many Passive Sentences
- Too Many Long Sentences
- Too Many Short Sentences
- Sentences Beginning with Coordinating Conjunctions

Word Repetition

Repeating some words to emphasize your key points is a good writing technique. However, repeating the same words or sets of words too often gives your writing an immature style. It can also make your essay seem boring.

To write more effectively, try using a variety of vocabulary. Here are a few ideas that can help you:

1. Use synonyms (words that have similar meanings) to replace repeated words. For example, instead of repeating a common verb such as *make*, where appropriate, use synonyms like these:

create, produce, perform, do, execute, bring about, cause, form, manufacture, construct, build, put up, set up, put together, compose

You can find synonyms in a thesaurus.

In the following paragraph, the noun *student* is repeated too many times:

Think about this situation. A <u>student</u> interviewed many <u>students</u> about what it is like to be an only child. If the teachers in charge of the school paper did not edit names of <u>students</u> from the paper or facts that would give that particular <u>student</u> away to other <u>students</u>, then serious problems could be caused for the students who gave their information.

We can improve this paragraph by using a variety of other words to refer to *student*. For example:

Think about this situation. A <u>reporter</u> interviewed many <u>students</u> about what it is like to be an only child. If the teachers in charge of the school paper did not edit the <u>individuals'</u> names from the paper or facts that would give <u>each person</u> away to the <u>readers</u>, then serious problems could be caused for the students who gave their information.

2. Use phrases such as *the former*, *the latter*, *the first one*, and *the other* to avoid repeating the same nouns. In the following paragraph, the same names are repeated several times:

Of the two sisters, <u>Grace</u> is confident and at ease with everyone. <u>Lily</u> is shy and cautious. <u>Grace</u> always gets what she wants. <u>Lily</u> waits patiently for whatever comes her way. <u>Grace</u> never misses a chance to show off her many talents. <u>Lily</u> never says boo unless someone asks her a question.

This paragraph can be improved by using a variety of phrases:

Of the two sisters, <u>Grace</u> is confident and at ease with everyone. <u>Lily</u> is shy and cautious. <u>The former</u> always gets what she wants. <u>The latter</u> waits patiently for whatever comes her way. <u>Grace</u> never misses a chance to show off her many talents. <u>Her sister</u> never says boo unless someone asks her a question.

Summary: When you look over your writing, think about how you can replace over-used words and phrases. You can use a thesaurus to help you add variety to your writing.

Inappropriate Words or Phrases

Language that is too informal, such as slang, is not appropriate for academic writing. It is not always easy to tell when an expression is too informal. Some expressions are used so often in spoken English that we may think it is all right to use them in academic writing too.

Too informal: No way would I ever vote.

Much better: There is no way I would vote.

Too informal: People just need to get it all together and participate in democracy.

Much better: People need to consider their beliefs and opinions and participate in democracy.

Summary: Written language is usually more formal than spoken language. Try to avoid expressions that are too informal when writing academic essays.

Too Many Passive Sentences

A sentence is active when the subject is the *doer* of the action. It is passive when the subject is the *receiver* of the action.

Active sentence: Two hundred million people saw the movie.

Passive sentence: The movie was seen by 200 million people.

In the above examples, the action is *seeing*. In the active sentence, the subject (*two hundred million people*) is the doer of the action. In the passive sentence, the subject (*the movie*) is the receiver of the action.

Because passive sentences are usually longer and harder to read, using too many passive sentences can make your writing slow and uninteresting. Many experts think that passive sentences should make up only about 5 percent of your writing.

Active sentences, on the other hand, generally are clearer, are more direct, and seem stronger. However, this does not mean that you should stop using passive sentences. Appropriate use of passive sentences can make your writing more powerful.

Here are a few suggestions about when to use passive sentences:

1. When the *action* is more important than the doer

The theater was opened last month.

New students are invited to meet the dean in Room 226.

In these sentences, the theater being opened and the new students being invited are more important than the "doers" (the people who opened the theater or invited the new students). In fact, the "doers" are not important enough to mention.

2. When the *receiver* of the action is more important than the doer

Everyone was given a key to the gym.

The letters were faxed this morning.

In the first sentence, we care more about the people who were given a key than the people who were doing the giving. In the second sentence, the letters that were faxed are more important than the person who did the faxing.

3. When the *result* of the action is more important than the doer

Our advice was followed by our clients.

The new computers were installed by the systems staff.

In the first sentence, the advice being followed is more important than the people giving the advice. In the second sentence, the installation of the computers is more important than the people who installed them. 4. When you do not know who did an action, do not care, or do not want your reader to know

Passive: A mistake was made, and all the scholarship application files were lost

Passive: This report was written at the last minute.

The active forms of these examples would be as follows:

Active: I made a mistake and lost all the scholarship application files.

Active: I wrote this report at the last minute.

If you were the person who made the mistake in the first sentence, or the person who wrote the report in the second, would you choose the active or passive voice?

5. When you want to sound objective

Using passive sentences is a common practice in scientific and technical writing. When you are reporting the results of an experiment or describing a study, it helps to sound objective and fair. Thus reports are filled with sentences like these:

The pigeons were observed over a period of three weeks.

The subjects were divided into three groups.

The use of the passive voice in lab reports also keeps the reader focused on the experiment itself, rather than on the researchers.

Summary: When you look over your writing, think about whether you have used too many passive sentences. Passive sentences are longer and more difficult to read and understand, so use them only when they help you to emphasize something important.

Too Many Long Sentences

Experts believe that the average sentence length should be between 15 and 20 words. This length allows your reader to absorb your ideas more easily. For example, the following sentence may be confusing to read because of its length:

My favorite place to visit is my grandparents' house near the lake where we love to fish and swim, and we often take the boat out on the lake.

Breaking the sentence into two (or more) can make your writing clearer and more interesting.

My favorite place to visit is my grandparents' house near the lake. We love to fish and swim there, and we often take the boat out on the lake.

Good writers usually mix longer sentences with shorter ones to make their writing more effective. You may even want to try a short sentence (or a single-

word sentence) after a few long ones to help you to emphasize what you are saying.

Benjamin Franklin, who was one of America's "founding fathers," helped write the Declaration of Independence. He also invented many things such as bifocals and the Franklin stove, and he discovered electricity. Think about that discovery. Where would we be without electricity?

In the example above, the paragraph starts with long sentences and ends with short ones. This combination makes the paragraph more lively and effective. Compare it with the paragraph below, which is made up of only long sentences:

Benjamin Franklin, who was one of America's "founding fathers," helped write the Declaration of Independence. He also invented many things such as bifocals and the Franklin stove, and he discovered electricity, which became very important to modern life.

Which paragraph do you prefer?

Summary: It is a good idea to mix long sentences with short ones. A good combination of long and short sentences makes writing lively.

Too Many Short Sentences

You may have too many short sentences in your writing. Good writing usually contains a variety of sentence lengths to make the writing more interesting. Too many short sentences often make the writing sound choppy. You should combine some of your short sentences to make the writing smoother. Here is an example of a paragraph with too many short sentences:

I knew my friends would throw me a party. It was for my birthday. There was something in the air. I felt it for a whole week before that. I was nervous. I was also very excited. I got home that night. My friends didn't disappoint me. I walked in my house. All my friends yelled, "Surprise!"

The paragraph can be improved by joining some of the short sentences using sentence connectors:

Because it was my birthday, I knew my friends would throw me a party. There was something in the air for a whole week before that. I was nervous but excited when I got home that night. I wasn't disappointed. When I walked in my house, all my friends yelled, "Surprise!"

Summary: Good writing usually contains a variety of long and short sentences. A good mix of sentence lengths makes the writing more interesting. Too many short sentences often make the writing sound choppy.

Sentences Beginning with Coordinating Conjunctions

Coordinating conjunctions are words such as *and*, *but*, *as*, *or*, *yet*, *for*, and *nor*. They link or join thoughts together in the middle of a sentence. For example:

I love pizza, so I eat it for breakfast.

Mother drove to town to buy groceries, <u>but</u> she came home with a present for me.

Coordinating conjunctions can also be used to begin sentences, as in these examples:

And I didn't like parties.

So I did not do well on that test.

When you have too many sentences beginning with coordinating conjunctions, your writing becomes choppy. To make your writing smoother, use coordinating conjunctions only when joining ideas within sentences.

In the paragraph below, the writer uses a lot of coordinating conjunctions to begin sentences:

Baseball is the great American sport. And, it is thought of as a summer pastime. So as soon as the weather turns warm, all the neighborhood kids find a field to toss a ball around. And soon they form teams and play each other. But all summer, they always find time to listen to progames on the radio. And they watch them on TV.

The paragraph can be improved by getting rid of beginning coordinating conjunctions:

Baseball, the great American sport, is thought of as a summer pastime. As soon as the weather turns warm, the neighborhood kids find a field to toss a ball around. Soon, they form teams to play each other, but all summer, they always find time to listen to pro games on the radio and to watch them on TV.

Summary: Coordinating conjunctions are very useful for joining thoughts together in the middle of a sentence. However, try to avoid using them to begin sentences in academic writing.

Organization and Development

The purpose of this section is to explain how a strong essay is typically organized and how to develop your ideas in an essay. It will provide answers to the following questions:

Introduction

- What is an introduction?
- How do I write an introduction?

Thesis

- What is a thesis?
- How do I make sure that my reader understands my thesis?
- Do I have enough main ideas to support my thesis?

Main Ideas

- Does each of my main ideas begin with a topic sentence?
- Have I discussed each main idea completely?
- Have I arranged my ideas in an orderly manner?

Supporting Ideas

- Have I done my best to support and develop my ideas?
- Do I include enough details in each paragraph so that the main idea and topic sentence are explained fully?

Transitional Words and Phrases

• Do I use words and phrases that help the reader think about relationships between different ideas in the essay?

Conclusion

• Do I restate the importance of my ideas based on what I have written in my essay?

Introduction

What Is an Introduction?

An introduction is the first paragraph or two of an essay. It tells the reader what the essay is about and provides background for the thesis (main idea).

A good introductory paragraph does several things:

- It makes the reader want to read the essay.
- It tells the reader the overall topic of the essay.
- It tells the reader the main idea (thesis) of the essay.

How Do I Write an Introduction?

Introductions can be written in many different ways. Here are some ideas you can use to write a good introduction:

- Background about the topic
- Narrative

- Ouotation
- Dramatic statistics/facts
- Shocking statement
- Questions that lead to the thesis

The following are examples of these ideas. The essay's thesis sentence is highlighted in bold.

Background About the Topic

Since the beginning of time, there have been teachers. The "classroom" teacher has many important tasks to do. A teacher has to teach information while keeping things interesting. She also sometimes has to be a referee, a coach, and a secretary. At times, a teacher has to be a nurse or just a good listener. **This career demands a lot, but it's a career I most want to have.**

Narrative

My fourth-grade teacher, Miss Vela, was not a big woman. She was about five feet tall and was no longer young. Even though she did not look very strong, she never had trouble controlling all her students. She could quiet us down with just a stare. We always wanted to make her happy because we knew how much Miss Vela cared about us. She expected us to do the best we could, and we all tried our hardest. Miss Vela was the kind of teacher who made me know that I wanted to be a teacher.

Quotation

"Teaching is better than tossing a pebble into a pond of water and watching those ripples move out from the middle. With teaching, you never know where those ripples will end." I remember those words of my fourth-grade teacher. Miss Vela once told me that years after they left her class, her students would come back to tell how much she helped them. Miss Vela's students said that it was because of her that they learned to work hard and to feel proud of what they did. I would like to teach because I would like to make that kind of difference.

Dramatic Statistics/Facts

Three out of four people said that they thought it didn't matter how many students were taught in one class. However, our class researched this and found that the opposite is true. Studies completed at a university show that having small class sizes, especially in the primary grades, makes a big difference in how much students learn. Before we decide how many students to assign to a primary school teacher, we need to think more carefully about how important smaller class size is.

Shocking Statement

Some teenagers today say that they think that wives should earn money and that husbands should help with child care and other household tasks. Recent studies indicate that 13 percent of teenage boys would prefer a wife to stay at home, while 96 percent of the teenage girls surveyed wanted to work outside of the home. However, couples who marry today may have grown up in very traditional households and therefore may find it difficult to accept wives of equal, not to mention greater, job status.

Questions That Lead to the Thesis

What exactly is "voice"? Is it a speaking voice or a singing voice? When people say that they have a voice in their head but no way to get it out, what does that mean? "Voice" has less to do with throats and mouths than it has to do with being human, being alive.

Thesis

What Is a Thesis?

The thesis statement tells the main idea—or most important idea—of the essay. It emphasizes the writer's idea of the topic and often answers the question, "What important or interesting things do I have to say?" Thinking about the thesis statement can help you decide what other information needs to be presented or omitted in the rest of the essay.

A good thesis statement

- gives the reader some hint about what you will say about the topic
- presents your opinion about the topic and is not just a fact or an observation
- is written as a complete statement
- does not formally "announce" your opinion about the topic

A good thesis statement gives the reader some hint about what you will say about the topic.

Weak thesis: Mahatma Gandhi was an interesting man.

Good thesis: Mahatma Gandhi was a person of contradictions.

Weak thesis: Television is a total waste of time.

Good thesis: Parents should carefully choose appropriate, educational television shows for their children to watch.

A good thesis statement presents your opinion about the topic and is not just a fact or an observation.

Weak thesis: London is the capital of England.

Good thesis: For tourists interested in British history, London is an ideal travel destination.

Weak thesis: Many movies today are violent.

Good thesis: The violence in movies today makes children less sensitive to other people's suffering.

A good thesis statement is written as a complete statement.

Weak thesis: Should something be done about bad drivers?

Good thesis: Bad drivers should have to take a driving course before being allowed to drive again.

Weak thesis: There is a problem with the information on the Internet.

Good thesis: To make sure information found on the Internet is valid, Internet users must make sure the sources of the information are credible.

A good thesis statement does not formally "announce" your opinion about the topic.

Weak thesis: In my paper, I will write about whether schools should require uniforms.

Good thesis: Public schools should not require uniforms.

Weak thesis: The subject of this essay is drug testing.

Good thesis: Drug testing is needed for all professional athletes.

How Do I Make Sure That My Reader Understands My Thesis?

Sometimes you might use a word in your introduction or thesis that you should define or explain. For example, if you are writing about "Who is a hero?" you should first explain what you think the word *hero* means. Is a hero a person who risks his or her life to save others? Is a hero a person whom you admire for any reason? People might have their own ways of thinking about a certain word. When you define the word, you help your reader better understand what you mean.

Do I Have Enough Main Ideas to Support My Thesis?

A main idea is a point that you feel strongly about. It is important to you, and you want the reader to understand this idea. Some writers like to give the reader three main ideas. However, the number of main ideas will vary among good essays. The important thing to remember is that your main ideas need to support your thesis adequately.

If you do not have enough main ideas, you may want to do some rethinking. Here are five suggestions for how to think of more ideas about your subject.

Ask yourself these questions to get you started again:

Who?

Who in my life has influenced me to consider becoming a teacher?

What?

What do teachers do?

When?

When did I start thinking about becoming a teacher?

• Where?

Where are teachers needed the most?

Why?

Why would a person want to become a teacher? Why do I want to become a teacher?

• How? How much?

How does a teacher learn how to teach?

How has my idea of becoming a teacher changed over the years?

How much does a teacher influence his or her students?

How much time does a teacher have to work outside of school?

What if? Why not?

What if teachers do not have all of the materials they need? Why teach in the classroom and not just over the Internet?

Talk to others about your topic.

Lots of people are happy to share what they know. Take good notes, because you may want to quote them in your essay.

- Other students in your school probably have opinions.
- A teacher who knows about the issue or subject could give you some opinions.
- Other people who are experts may have valuable information or opinions.
- Research your subject on the Internet or in a library.
- Send an email to someone who may be an expert.

Think about the kind of writing you are doing.

Consider the questions below to help you figure out which ideas you need to add or how you should arrange those ideas.

- Are you explaining how things are alike (comparison) and different (contrast)? You can use this purpose when you are describing something (such as how to teach primary school students compared with how to teach high school students) or when you are analyzing different viewpoints (such as whether children should go to school year-round).
- Are you putting your ideas in categories? You might be able to describe something in general and then describe its particular qualities. For example, you might want to talk about what it takes to be a good teacher and then talk about the unique qualities of a particular teacher you have had.

- Are you giving reasons to show how a problem developed and what the effects of the problem are? For example, if you were discussing how students' attitudes are affected by their environment, you might want first to describe what has caused a particular attitude to develop. Then you might want to discuss the effects of that attitude.
- Are you trying to persuade someone to think like you or to do something that will improve a situation in the way that you want it to be improved? For example, if you are trying to persuade a friend to think about an issue the way you think about it, you might want to start by saying what the issue is and why your ideas are the best.

Start all over and see where you go this time with your writing.

Do not be afraid to start over. Lots of writers get new and better ideas when they write about something more than once.

Reread your draft.

Look at your previous draft and start where the writing is the most interesting or at the point that you think is your best statement.

- Try to write three more sentences to explain your best sentence.
- Review the three new sentences, pick the best one, and write three more sentences that explain the most important idea in that best sentence.

Main Ideas

Does Each of My Main Ideas Begin with a Topic Sentence?

Each main idea needs to be discussed fully. The main idea is part of a sentence that explains the idea. This sentence is called the topic sentence, and its goal is to help the reader think of questions about the topic.

Pretend that you are the reader of this topic sentence:

Not passing a test in fourth grade in Miss Vela's class made me think about what a teacher is.

What questions do you have?

Do you want to know more about what happened to this writer in fourth grade?

Do you think that you will learn what the writer thought or meant by the words "what a teacher is"?

Use your topic sentence to prepare the reader for understanding what is written in the essay.

You can review your sentences to see which words are the influential words. They are the words that seem more important in your sentence.

In this topic sentence, which words or phrases are important?

Teachers don't get paid for every hour that they work.

Would you say that "every hour that they work" are the important words?

Here are the other sentences in this paragraph:

Teachers sometimes do work even when they are not in the classroom. Sometimes my mother grades papers and projects all day on Sunday. Even though she does not get paid, she says that that is the only time she can grade all of her students' work. My neighbor spends three weeks of his summer vacation on a ship that does scientific experiments. He doesn't get paid for any of that work, but he says the things that he learns help him be a better teacher.

Use topic sentences to connect two paragraphs or two main ideas.

Here is a sample paragraph that begins with a topic sentence:

Teachers get many benefits in their careers. My neighbor has children and likes having the summer off when his children are home. Some teachers say their work is very enjoyable. At least that's what my mom says when she mixes up her magic bubble formula for science class. My mom also says that one of the benefits of teaching is that she is using her college education every day. She also gets paid to take refresher courses. But she works hard.

Can you see how the next topic sentence connects to another thought?

In fact, teachers don't get paid for every hour that they work, but the teachers that I know say that they love their work.

What do you expect the writer to tell you about in this paragraph?

Have I Discussed Each Main Idea Completely?

In good writing, you (the writer) and the reader feel as if all of your questions/ concerns have been discussed. Remember that your reader needs to understand what you are writing, so discuss each idea completely.

Give each main idea its own paragraph.

Each main idea should be treated as a unit. However, if a main idea is very broad, it will need more than one paragraph, because it is too complicated to be discussed in a single paragraph.

Have I Arranged My Ideas in an Orderly Manner?

You can arrange your ideas in many different ways. You can organize your ideas in chronological order, which means the order in time in which they occurred. You can begin with the oldest point first and then use paragraphs to discuss what happened next or later.

Here are two main ideas that will be developed into paragraphs:

Idea 1

I have wanted to be a teacher ever since I failed a test in Miss Vela's class in fourth grade.

Idea 2

Then in eighth grade I had an assignment to teach a science lesson to a class in my former primary school, and that experience showed me how good I felt when the students didn't want the class to be over.

You can organize your ideas by importance, either most important to least important or the other way around.



If your writing assignment has to be completed in a short time, as in an essay test, you probably want to begin with the most important parts or reasons first.

Here are what two different writers think is their most important idea:

Writer 1

The most important reason to be a science teacher is to help the next generation learn about the Earth.

Writer 2

Getting to do fun activities is the reason why I want to be a science teacher.

Supporting Ideas

What Are Some Ways to Develop Supporting Ideas?

Supporting ideas help to convince your reader that your main idea is a good one. Here are some things that professional writers do:

- Tell a story that clarifies the main idea.
- Give examples of the main idea to explain what the paragraph is about.
- Give reasons that support the thesis. These can be facts, logical arguments, or the opinion of experts.
- Use details that are very specific so the reader can understand how this idea is different from others.
- Tell what can be seen, heard, smelled, touched, felt, or experienced.
- Try to see the idea from many different angles.
- Tell how other events, people, or things might have an influence on the main idea.
- Use metaphors or analogies to help the reader understand an idea by comparing it to something else.

Have I Done My Best to Support and Develop My Ideas?

Think of your reader as a curious person. Assume that your reader wants to know everything that you can say about this subject.

Here are some specific questions that are appropriate for certain types of writing:

• If you are describing a problem or issue, you might want to consider the following:

What type of problem or issue is it?

What are the signs that a problem or issue exists?

Who or what is affected by the problem or issue?

What is the history of the problem or issue—what or who caused it or contributed to it, and what is the state of the problem now?

Why is the issue or problem significant? What makes this issue or problem important or less important?

• If you are arguing or trying to persuade your reader to agree with your opinion, consider the following:

What facts or statistics could you mention as support?

What ideas could you discuss to prove your points?

What comparison could you make that would help the reader understand the issue?

What expert opinion would make your opinion more valid?

Could you support your point with some examples?

Could you describe the views of someone holding a different opinion?

Tip

Strong arguments are often made by discussing what is good in the opponent's view. You can use expressions such as although that is a point well taken, granted, while it is true that, or I agree that to discuss an opposite view.

• If you are analyzing literature or writing a review of a story or movie, consider these questions:

Can you summarize the story so that your reader knows what happens?

Can you give the details about the place or time so that your reader has a context for understanding the story?

What can you say about the main characters so that the reader can understand what makes them special or interesting?

Can you describe the point where the main character(s) is (are) in a crisis and must make an interesting choice?

Can you quote what characters say about each other or about what they are experiencing?

Does the story have a deeper theme that you could discuss?

Can you describe the style in which the story is told or the camera angles of the movie?

Are there interesting images or symbols?

• If you are describing something or providing a definition, consider the following:

Can you tell what the thing looks like or what its parts are?

Can you say what it does or means?

If what it does or means has changed over time, can you describe what it used to mean or used to do and what it now means or does?

If what you are describing has a different name or meaning, can you tell the reader the different name or meaning?

• If you are telling how to do or make something, consider these points:

Have you started at the right place—the first step—and proceeded logically?

Have you defined any terms that might be unfamiliar to your reader?

Have you given an example that might help your reader understand what you mean?

Have you tried to explain your instructions clearly? Have you numbered these instructions so that the reader knows the order in which it is best to do them?

Tip

You may want to think of a way to arrange your material so that your reader can understand it better. For example, in a recipe the ingredients are listed at the top and the instructions are in short paragraphs or are numbered as steps.

Conclusion

What Is a Conclusion?

The concluding paragraph is separate from the other paragraphs and brings closure to the essay.

- It discusses the importance of your ideas.
- It restates the thesis with fresh wording.
- It sums up the main ideas of the paper.
- It can also include an anecdote, a quotation, statistics, or a suggestion.

Concluding Approaches

You might consider some of the following approaches to writing concluding paragraphs:

- Summarize main points.
- Provide a summarizing story.

- Include a provocative or memorable quotation.
- Make a prediction or suggestion.
- Leave the reader with something to think about.

Here are two different concluding paragraphs:

Good teaching requires flexibility, compassion, organization, knowledge, energy, and enthusiasm. A good teacher must decide when a student needs to be prodded and when that student needs mercy. Good teaching requires knowing when to listen and reflect and when to advise or correct. It requires a delicate balance of many skills, and often a different mix of approaches for different students and different situations. Is this profession demanding? Yes! Boring? Never! Exciting? Absolutely!

When I become a teacher, I want fourth graders like Miss Vela's. We adored her and wanted to please her. But more important, I want to be a Miss Vela for my students. I want to challenge my students to become good citizens. When the river in our town flooded its banks and some classmates had to be evacuated, Miss Vela asked us to think about what we could do. We came up with three decisions. We packed lunches for our classmates, we shared our books and pencils in class, and we gave them clothing. Later when we studied civics, we realized that we were taking care of our classmates the way the local or federal government does in a disaster. Miss Vela was helping her fourth graders become more civic minded. I'm hoping to help my students think like that when I'm a teacher.

Transitional Words and Phrases

Do I Use Transitional Words and Phrases to Take the Reader from One Idea to the Next?

Transitional words and phrases connect what a reader has already read to what the reader is going to read. They give the reader an idea of the relationships between the various ideas and supporting points. They also help to show the relationship between sentences.

You can guide the reader as he or she reads an essay by using transitional words or phrases in paragraphs and sentences.

These words can help you talk about time and the relationship between events:

today, tomorrow, next week, yesterday, meanwhile, about, before, during, at, after, soon, immediately, afterward, later, finally, then, when, next, simultaneously, as a result

These words can help you show the order of ideas:

first, second, third, finally, lastly, most important, of least importance

These words can help you show location:

above, over, below, beneath, behind, in front of, in back of, on top of, inside, outside, near, between, beside, among, around, against, throughout, off, onto, into, beyond

These words can help you compare or demonstrate similarity:

also, as, similarly, in the same way, likewise, like

These words can help you contrast or demonstrate difference:

in contrast, however, although, still, even though, on the other hand, but

These words can help you add information:

in addition, for instance, for example, moreover, next, likewise, besides, another, additionally, again, also, in fact

These words can help you clarify a point:

in other words, for instance, that is, just to reiterate, in summary

These words can help you add emphasis to a point that you are making:

truly, in fact, for this reason, again, just to reiterate

These words can help you conclude or summarize:

all in all, lastly, as a result, in summary, therefore, finally

Does Each of My Paragraphs Support and Develop/Explain the Main Idea/Topic Sentence?

Paragraphs are a group of sentences about a thought or discussion. Each paragraph is about a main topic.

Some paragraphs are long and some are short. Some paragraphs are just one sentence, which can be a very interesting way to present information.

Some contain an interesting story that can take several sentences to tell.

Some paragraphs answer all of the topic issues. Others are more like transitions between two main ideas.

Here are some questions to help you evaluate your paragraphs:

• Have you said enough so that each paragraph is complete?

Tip

Try giving each paragraph a title and see if, read by itself, it could be something meaningful. If the reader asked you a specific question, would this paragraph be the answer? If some of the sentences do not fit as an answer, then you should probably delete them.

- Have you used words that need to be explained or defined? If you are trying to sound important and do not explain what you mean, your reader might feel frustrated. Try using more than one sentence to define or explain something. Three sentences might really explain your idea!
- Have you provided evidence (proof)? Would an example show what you mean? Use a good example to show that what you say is true. This is important.
- Is there a personal experience or quotation from another source that would validate what you are trying to say?

Tip

Personal experiences are appropriate in some essays but not in others. Make sure you understand the type of information that is expected in each essay you write.

Tip

If you are quoting from another source, make certain that you are quoting (reproducing the words) accurately. Also be sure that you are using quotation marks correctly.

• Have you used clear transitions that establish connections between sentences and ideas? You might think of your paragraph as a train and the sentences as cars (and the topic sentence as an engine). Do all the parts of the paragraph link or fit together?

Advice to Writers

This section provides information about the different kinds of essays you may be asked to write.

- Persuasion
- Informative Writing
- Comparison/contrast
- Description
- Narration
- Cause and Effect
- Problem and Solution
- Description of a Process
- Writing as Part of an Assessment
- Response to Literature
- Writing in the Workplace

Persuasion

When you write a persuasive essay, you are trying to make the reader agree with you. You thus have to offer good reasons to support your opinion, deal with opposing views, and perhaps offer a solution.

Here is how to start:

- List specific arguments for and against your opinion (the pros and cons).
- Decide whether you need to find more information (for example, *statistics* that support your argument, *direct quotes* from experts, *examples* that make your ideas concrete, *personal experience*, *facts*).
- Think of good arguments from someone who holds the opposite view. How could you respond to that person?



In this kind of writing, you might want to keep your best argument for last.

Summary: When you write a persuasive essay, you have to be clear and convincing. Any kind of writing improves with practice. Try to practice writing and revising, and expose yourself to as many good models of persuasive essays as you can.

Informative Writing

This kind of writing presents information that helps your reader understand a subject (for example, global warming, jazz music, pollution). Informative writing can be based on formal research (reading, interviews, Internet browsing). Sometimes you may also be asked to write about a personal experience or observation.

Here is how to start:

- Find a specific focus (for example, not *recycling in general* but *the recycling of paper*).
- Choose several important points to discuss (*how paper is recycled, what recycled paper is used for*).
- Think about the supporting details for each point. These details can be facts, observations, descriptions, and/or examples (*items that use recycled paper are paper towels, greeting cards*).

Comparison/contrast

Writing a comparison/contrast paper involves comparing and contrasting two subjects. A comparison shows how two things are alike. A contrast shows how two things are different.

You can use comparison and contrast to describe, define, analyze, or make an argument—for, in fact, almost any kind of writing.

Here is how to start:

- Select two subjects that have some basic similarities or differences.
- Look for how these subjects are similar and different.
- Decide how you want to present your information. Choose one way and stick with it throughout your essay.
 - Do you want to discuss a point for one subject and then the same point for the second subject?
 - Do you want to show all the important points of one subject and then all the important points of the second subject?
 - Do you want to discuss how your two subjects are the same and then how they are different from each other?
- Remember to make clear to your reader when you are switching from one point of comparison or contrast to another. Use clear transitions. Some transition words that you may find useful are as follows:

For similarities: similarly, likewise, furthermore, besides
For differences: in contrast, in comparison, on the other hand, although, however, nevertheless, on the other hand, whereas, yet

Description

In descriptive writing, you write about people, places, things, moments, and theories with enough detail to help the reader create a mental picture of what is being described. You can do this by using a wide range of vocabulary, imaginative language, interesting comparisons, and images that appeal to the senses.

Here is how to start:

- Let the reader see, smell, hear, taste, and feel what you are writing about. Use your five senses in the description (for example, *The ancient driver nervously steered the old car down the red mud road, with me bouncing along on the backseat.*).
- Be specific (not *this dessert is good* but *the fudge brownie is moist, chewy, and very tasty*).
- Show the reader where things are located from your perspective (for example, *As I passed through the wooden gates, I heard a cough. A tiny woman came out from behind the trees.*).
- Decide whether you want to give a personal view (subjective) or a neutral viewpoint (objective).

Tip

What seems unusual or contradictory can make your subject more interesting (for example, Martin Luther King probably contributed more than anyone else to changes in civil rights, but he hardly earned any money for his speeches and work.).

Narration

This kind of essay offers you a chance to think and write a story about yourself, an incident, memories, and experiences. Narratives or stories usually include a plot, a setting (where something happened), characters, a climax, and an ending. Narratives are generally written in the first person, using *I*. However, as the storyteller, you can choose to "speak" like different people to make the story more interesting.

Here is how to start:

- If you are writing about a quarrel with a friend:
 - Think of what caused the quarrel.
 - Think of who is involved and how.
 - Think of how the quarrel developed, how it was settled, or whether you and your friend are talking now.
- Remember the details that make the event real to you (for example, what your friend said to you and the tone of voice your friend used).
- Try to answer the question, "What did this event mean to me?"
- Choose a way to begin; for example:
 - Build your story in scenes (the way you see in movies).
 - Summarize what happened and tell only the most important scene.
 - Begin at the ending and tell why this was such an important event.

Cause and Effect

Cause-and-effect essays are concerned with why things happen (causes) and what happens as a result (effects). In the cause-and-effect essay, it is very important that your tone be reasonable and that your presentation look factual and believable.

Here is how to start:

- Think about the event or issue you want to write about.
- Brainstorm ideas.
- Introduce your main idea.
- Find relevant and appropriate supporting details to back up your main idea. You can organize these details in the following ways:
 - *Chronological*, the order in which things/events happen
 - Order of importance, from least to most important or vice versa
 - *Categorical*, by dividing the topic into parts or categories

• Use appropriate transition words and phrases, such as the following:

because, thus, therefore, due to, one cause is, another is, since, for, first, second, consequently, as a result, resulted in, one result is, another is

Problem and Solution

A problem-solution essay starts by identifying a problem (or problems) and then proposes one or more solutions. It is usually based on topics that both the writer and the reader care about (such as the quality of cafeteria food).

Here is how to start:

- Think of all the reasons that the problem exists.
 - Why did it happen?
 - How did it begin?
 - Why does it exist now?
- List possible solutions to the problem.
- Evaluate your solutions—which ones will most likely work?
- Write the pros and cons of one or more good solutions, but give the most space in your essay to the best solution.
- Explain why the best solution is the one to choose.

Description of a Process ("How-to")

This kind of essay explains how to do something (for example, *how to bake your favorite cake*) or how something occurs (for example, *how movies are made*).

For how to do something, here is how to start, along with the pertinent questions

- Think about all the equipment, skills, or materials needed.
- How many steps are there in the process? Put the steps in the right order. Why is each step important?
- What difficulties are involved in each step?
- How long does the process take?

Tip

Give any signs or any advice that can help the reader accomplish the step with success!

For how something occurs, here is how to start:

- Give any background that can help your reader understand the process.
- Tell what happens in the order that it happens.

Tip

Do not forget to explain any terms that your reader might not understand!

Process essays are usually organized according to time: they begin with the first step in the process and continue until the last step. To indicate that one step has been completed and a new one will begin, we use transitions. Some common transition words and phrases used in process essays are as follows:

first of all, first, second, third, next, soon after, after a few hours, afterward, initially, at the same time, in the meantime, before, before this, immediately before, in the meanwhile, currently, during, meanwhile, later, then, previously, at last, eventually, finally, last, last but not least, lastly

Writing as Part of an Assessment

This kind of writing may be more difficult, because you are trying to write your best in a certain place and a limited amount of time. There are a few tricks, however.

Here is how to start:

- Take a few moments to understand the question and to note down some ideas that come to mind.
- Before beginning to write, take a few moments to plan. How are you going to organize your main ideas and supporting details? Some students find making an outline to be a helpful strategy.
- During your writing, if other ideas come to mind and they feel right, use them.
- Keep track of your time, but do not panic.
- Revise. Look at the paper from the reader's point of view; reorganize and add explanations if necessary.
- Proofread if you have time.

Tip

As with any other kind of writing, writing on a test improves with practice. You can practice this skill by writing and revising essays while working within a set time limit.

Response to Literature

When you write about literature, you are telling why that work of literature (story, movie, poem, or play) is interesting and what makes it effective (for example, why it makes you laugh, why you care about the characters).

You can write about why the literary work seems true, you can analyze the characters or actions, or you can analyze how the literary work accomplishes its effect.

There are many ways to respond to literature, but here are a few ways to start, along with pertinent questions:

- Write for a while about your personal feelings about the literature. Are
 you most interested in the setting, the situation, the characters, or the
 atmosphere that the work creates? These are clues to what you can write
 about.
- What is the situation or the mood?
- What clues does the author give you about the true meaning of this story, poem, or movie? (For example, the many "Cinderella" stories in the world have the same meaning: kindness is rewarded no matter how poor you are.)
- Organize your thoughts and support them with examples from the literary work. Do not assume that your reader knows the story or movie that you are writing about!

Writing in the Workplace

Letters, memos, and reports are the kinds of writing that are most often done when we do business with each other. In this kind of writing, you want to make your points as quickly and clearly as possible. So try to be brief and direct.

Here is how to start:

- Organize your thoughts. Most business letters should take one page.
- Think about whether there is a special format you should follow.
- Decide if you want the reader to take action (persuasive), to understand a problem (informative), or to fix something (problem-solution). (*Refer to the relevant sections under this "Advice to Writers" heading.*)
- Write clearly and courteously.
- Include relevant quotations.
- Leave the reader with something to think about (for example, make a prediction or suggestion).

Revising, Editing, and Proofreading

The Writing Process

The writing process has several stages: planning, drafting, writing, revising, editing, and proofreading. Many writers and instructors maintain that improving your essay has three distinct stages: revising, editing, and proofreading. Review each column of the following chart to understand each stage completely.

As you write, you may wish to revise and edit your essay several times as you clarify and develop your ideas. The *Writer's Handbook* sections on Style, Organization and Development, and Advice to Writers can be very helpful as you

revise and edit your essay. When you have a final version of your essay, be sure to proofread it carefully.

	Revising	Editing	Proofreading
Purpose	See the complete concept. Decide if your essay says what you want it to say. Add ideas.	Correct grammar and usage. Make changes in word choice, style, and the way you explain your ideas.	Correct typos, as well as spelling, punctuation, and formatting errors.
When	After you have written your first draft, do not do anything with it; then begin revising.	Begin when you have a complete draft of your essay.	Make this the final stage before you submit your essay.
What	Read your entire essay from beginning to end.	As you read each sentence, revise that sentence before you do the next sentence.	Read word by word and line by line to make corrections.
Strategies	Identify each part of the essay: introduction, thesis, main ideas, supporting ideas, and conclusion. Review carefully how the ideas are connected and	Ask your teacher, a peer editor, or a friend to give you ideas and advice. List the kinds of grammar and usage errors you make and look at those errors first.	Print a copy of your essay and make the changes on the paper copy. Read your essay aloud to your teacher or to someone who is more English proficient than you and circle identified errors.
	the order of paragraphs. Do not be afraid to cut and paste, delete, or add new ideas.	do not revise it. Think about just the parts that seem to have problems. Use a handbook to help you correct errors and more proficient in English re your essay backward. Start with the last sentence, then to second to the last, and so on Use a dictionary, handbook,	with the last sentence, then the
	Ask a peer reviewer to say what is good and what could be better in your essay.		Use a dictionary, handbook, and spell-checker to help you correct

Step 1: Organization and Development

Think about your topic and, if necessary, change the way your essay is organized and developed.

Step 2: Style

Read each sentence to see if your ideas are easy to understand.

Step 3: Grammar, Usage, Mechanics

Check each word and sentence for errors.

Step 4: Proofreading

Check spelling and typing as you read your final draft.

Using a Computer to Write

Computers make the writing process much easier than handwriting. Computers let you do all of the following:

- Write faster than you can with a pen
- Save or delete ideas and drafts
- Move words, paragraphs, and sentences
- Try out new ways of expressing yourself
- Locate and correct mistakes

Always remember that the computer is a tool that lets you think about how to write. You will still have to make decisions about how to draft and revise your essays and other writing.

Glossary

- active voice—English sentences can be written in either the active or passive voice. In the active voice, the subject is the doer of an action. For example, in <u>Sam kicked</u> the ball, the action is kicked, and the doer is Sam. An active sentence emphasizes the doer of an action.
- adjective—Adjectives give more information about nouns. In English, they usually come before nouns. For example: a <u>red</u> <u>umbrella</u>, a <u>rainy</u> day, a <u>beautiful</u> woman.
- **adverb**—Adverbs are words such as *quickly*, *happily*, or *carefully*. They can tell more about an adjective (for example, *very big*), another adverb (for example, *very quietly*), or a verb (for example, *walk slowly*).
- **antecedent**—A noun to which a pronoun refers is the antecedent. In the following sentence, *John* is the antecedent of the pronoun *he*: *John* was late for school because he missed the bus.
- **apostrophe**—This punctuation mark (') shows the omission of letters in contractions (*cannot-can't*), or possession (the *girl's* dress, the *animals'* cages).
- article—Articles are *a*, *an*, and *the*, the little words in English that come before nouns. English has two types of articles. The definite article (*the*) is used to refer to one or more specific things, animals, or people (for example, *the house on the hill*). The indefinite articles (*a*, *an*) are used to refer to a thing, animal, or person in a nonspecific or general way (for example, *a house*, *an elephant*).
- **clause**—A clause is a group of related words that contains a subject and a verb. There are two kinds of clauses: independent and dependent. An independent clause expresses a complete thought and can be seen as a sentence (for example, *She* saw *Jim.*). A dependent clause is a part of a sentence and cannot stand on its own. (*When she saw Jim* is a dependent clause.) To make a complete sentence, you need to add an independent clause (for example, *When she saw Jim, she smiled.*).
- **collective noun**—A collective noun refers to a *group* of people or animals: *population*, *family*, *troop*, *committee*.
- **comma**—This punctuation mark (,) is used to separate words (*She bought apples, oranges, and grapes.*) or parts of a sentence (*He was here, but he left.*).
- **compound subject**—This is a plural subject, a subject that consists of more than one part: *Lions, tigers, and bears are kept in the zoo*.
- **compound verb**—This type of verb consists of more than one part: *The baby started crying*.
- **compound words**—These are words that are made up of two words: *everywhere, boyfriend, himself, weekend*.

- **conclusion**—This is the last paragraph of an essay, the paragraph that closes the essay. In a conclusion, you can restate the thesis or sum up the main ideas of the essay.
- **conjunction**—A conjunction is a word that connects words, phrases, or sentences. It also shows relationships between words or clauses. There are two kinds of conjunctions: coordinating and subordinating. Coordinating conjunctions such as *and*, *but*, *or*, *nor*, and *for* connect parts that are equal: In the sentence *She bought a desk and a chair*, both *desk* and *chair* are nouns. Subordinating conjunctions such as *although*, *because*, *if*, *since*, and *when* connect parts that are not equal: In the sentence *Because he missed the train*, *he was late for work*, the clause *Because he missed the train* is a dependent clause, and *he was late for work* is an independent clause.
- **contraction**—Contractions are short forms. You make a contraction when you combine two words, shorten one of them, and add an apostrophe: *cannot*—*can't*; *does not*–*doesn't*; *should not*–*shouldn't*; *it is*–*it's*.
- **dependent clause**—A dependent clause is a part of a sentence and cannot stand on its own. For example, *When she saw Jim* is a dependent clause. To make a complete sentence, you need to add an independent clause: *When she saw Jim*, *she smiled*.
- **exclamation point**—This mark of punctuation (!) at the end of a sentence is used to show surprise or strong emotion.
- **fragment**—A fragment is a group of words that is not a complete sentence, even though it sometimes starts with a capital letter or ends with a punctuation mark and often contains a subject and verb.
- **helping verb**—This type of verb is also called an auxiliary verb. Helping verbs are used with main verbs in a verb phrase: <u>is going; were singing; can talk; may leave; must tell; will see.</u>
- **hyphen**—This mark (-) is used to separate the different parts of a compound word: *mother-in-law*, *self-motivated student*.
- independent clause—An independent clause has a subject and a verb, expresses a complete thought, and can be seen as a sentence (for example, *She saw him.*). It can also be combined with another independent clause to make a compound sentence (*She saw him, so she called him over.*). It can also take a dependent clause to make a complex sentence (*She saw him, even though it was dark.*).
- *to go, to swim, to wish*). It can function as a noun, adjective, or adverb. For example: *To swim the English Channel is my friend's strongest dream*. Here, the infinitive *to swim* acts as a noun. It is the subject of the sentence.
- **intransitive verb**—This type of verb does not need an object to complete its meaning. For example: *John ran. Bob left. Jane slept.*
- **introduction**—An introduction is the first paragraph of an essay. Effective introductions do two basic things: grab the reader's interest and let the reader know what the whole essay is about. This is why most introductions include a thesis statement that clearly states the writer's topic and main argument.

- main idea—Main ideas are the important points of an essay. They state what will be discussed in each paragraph (or set of paragraphs for longer essays). Main ideas develop the thesis statement of an essay and are in turn developed by supporting details.
- **modal verb**—A modal verb is a kind of helping verb. Modal verbs help to express meanings such as permission (*may*), obligation (*must*), prediction (*will*, *shall*), or ability (*can*).
- **noun phrase**—This type of phrase consists of several words that together function as the noun of a sentence. For example: <u>Talking to my mother made me feel better</u>. Here, <u>Talking to my mother</u> is a noun phrase that is acting as the subject of this sentence.
- **paragraph**—An essay is made up of smaller sections called paragraphs. Each paragraph should focus on one main idea; you tell your reader what this idea is by using a topic sentence. A good paragraph is one in which every sentence supports the topic sentence.
- **passive voice**—English sentences can be written in either the active or passive voice. In a passive sentence, the verb *to be* is combined with the past participle form of a verb (for example, *John was kicked*.) A passive sentence emphasizes the receiver or the results of an action.
- **period**—In English grammar, this punctuation mark (.) is used to signal the end of a declarative sentence. (A declarative sentence is one that is not a question or an exclamation.) It is also used to indicate abbreviations (for example, *Mr.*, *St.*, *Ave.*).
- **phrase**—A phrase is a group of related words with a single grammatical function (for example, a noun phrase, a verb phrase). The noun phrase acts as a noun or subject in this sentence: *The girl in the corner is Mary*.
- **plural**—*Plural* means "more than one." In English grammar, nouns, pronouns, and verbs can take plural forms. For example, *cars* is a plural noun, *they* is a plural pronoun, and *climb* is a plural verb.
- **possessive pronoun**—These are pronouns that show possession or ownership (for example, *my*, *our*, *his*, *her*, *their*, *whose*). Some possessive pronouns can function as nouns: *Is this yours? That book is mine*.
- **prefix**—A prefix is a word part, such as *co* in *costar*, attached to the front of a word to make a new word. For another example, the prefix *re* can be added to the word *sell* to make the word *resell*, which means "to sell again".
- **preposition**—Prepositions are words such as *in*, *of*, *by*, and *from*. They describe the relationship between words in a sentence. In the sentence *The professor* sat on the desk, the preposition on shows the location of the professor in relation to the desk.
- **pronoun**—A pronoun can replace a noun or another pronoun. You can use pronouns such as *she*, *it*, *which*, and *they* to make your writing less repetitive.
- **question mark**—This is the punctuation mark (?) used at the end of a direct question. For example: *Is David coming to the party?*

- **sentence combining**—Sometimes writers combine two or more short sentences to make a longer one. The reason for doing this is that too many short sentences often make the writing sound choppy. Using sentence-combining techniques in the revising process can improve the style of your essay.
- **singular**—*Singular* means "single," or "one." In English grammar, nouns, pronouns, and verbs can take singular forms. For example, *car* is a singular noun, *he* or *she* is a singular pronoun, and *climbs* is a singular verb in the present tense.
- **subject**—The subject of a sentence tells who or what a sentence is about. For example, in the sentence *Stephen ran into the parking lot, Stephen* is the subject of the sentence.
- **supporting idea**—Supporting ideas are the details that develop the main idea of a paragraph. They can be definitions, explanations, illustrations, opinions, evidence, and examples. They usually come after the topic sentence and make up the body of a paragraph.
- **tense**—Tenses indicate time. Sometimes tenses are formed by changes in the verb, as in *He sings* (present tense) and *He sang* (past tense). At other times, tenses are formed by adding modals, or helping verbs. For example: *He will give me fifty dollars* (future tense); *He has given me fifty dollars* (perfect tense).
- **thesis**—The thesis or thesis statement of an essay states what will be discussed in the whole essay. It offers your reader a quick and easy summary of the essay. A thesis statement usually consists of two parts: your topic and what you are going to say about the topic. Thesis statements are supported by main ideas.
- **topic sentence**—The topic sentence states the main idea of a paragraph. It tells your reader what the paragraph is about. An easy way to make sure your reader understands the topic of a paragraph is to put your topic sentence near the beginning of the paragraph. (This is a good general rule for less experienced writers, although it is not the only way to do it.)
- **transition word or phrase**—Transition words and phrases are used to connect ideas and signal relationships between them. For example, *First* can be used to signal the first of several points; *Thus* can be used to show a result.
- **transitive verb**—Transitive verbs require an object. For example, in the sentence *He mailed the letter, mailed* is a transitive verb, and *letter* is its object.
- **verb**—A verb is an "action" word (for example, *climb*, *jump*, *run*, *eat*). English verbs also express time. (For example, past tense verbs such as *climbed*, *jumped*, *ran*, and *ate* show that the action happened in the past.) Verbs also show states of being—"to be" words—mentioned earlier in the chapter.
- **verb phrase**—A verb phrase is a phrase (or a group of words) that consists of a main verb (for example, *climb*, *jump*, *run*, *eat*) plus one or more helping verbs (for example, *may*, *can*, *has*, *is*, *are*). Examples of verb phrases are *She may go*, and *The students will receive certificates*.

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