

[Referans: https://drive.google.com/file/d/1DFxttFbCsIKMfntYP7c3rp19OUA8yCnx/view](https://drive.google.com/file/d/1DFxttFbCsIKMfntYP7c3rp19OUA8yCnx/view)

<https://s3.eu-central-1.amazonaws.com/tstprep-toefl-tests-audio-files/listening-section-audio-files/listening-audio-files-test13/13.02.01-student-conversation-directons-and-questions.mp3>

Passage #1:

1. Why does the student go to see the professor?

- a. To talk about her paper on farming practices
- b. To ask if she can study abroad in Guatemala
- c. To discuss her research on agricultural practices and environmental conditions
- d. To see if she can become a Spanish major

2. Why does Christy want to go to Guatemala? Select two.

- a. To continue her research on cost-effective farming
- b. Because she has already studied it and wants to learn more in person
- c. The agricultural and economic landscape closely matches what she wants to research
- d. She wants to learn more Spanish

3. Why might Christy not be able to go on the trip to Guatemala?

- a. She is not a Spanish major
- b. The Spanish department is in charge of this program
- c. She does not speak enough Spanish
- d. There are no more spots left in the program

4. Why does the professor decide to help Christy? Select two.

- a. Christy is one of the most intelligent students in the class
- b. The professor agrees that Guatemala is a good place to do more research
- c. Christy is extremely motivated to study abroad in Guatemala
- d. Christy knows some Spanish so it will be easy to convince the Spanish department

5. Why does the professor ask Christy if she has thought of other places to go?

- a. He wants to know if there are any other countries Christy wants to travel to
- b. He does not think Christy will be allowed to go to Guatemala
- c. He is leading up to suggesting a better place for her to study abroad
- d. He is **curious** if Christy can do her research in another country

<https://s3.eu-central-1.amazonaws.com/tstprep-toefl-tests-audio-files/listening-section-audio-files/listening-audio-files-test13/13.02.02-student-conversation-directons-and-questions.mp3>

Passage #2

1. What is the professor mainly discussing?

- a. How the moon formed after a giant object impacted the Earth
- b. The composition of the moon in comparison to Earth
- c. Problems with theories about the origin of the moon
- d. Whether or not the moon was connected to the Earth at one point

2. How is the lecture organized?

- a. The professor discusses information previously learned before introducing a new idea
- b. The professor introduces an experiment and some possible problems with it
- c. The professor compares theories about the moon with other objects in space
- d. The professor gives a historical account of theories on the origin of the moon

3. What are some problems with the capture theory? Select two.

- a. There are too many chemical differences between the Earth and the moon
- b. It is more plausible that the Earth and the moon were never connected
- c. During entry into the solar system, the moon would have had too much energy to be captured
- d. The moon would have a strange orbital path if it were captured by Earth

4. Which theory about the moon is most likely true?

- a. The fission theory
- b. The giant impact hypothesis
- c. The sister theory
- d. The capture theory

5. What does the professor imply about the sister theory?

- a. Modern astronomers do not believe this theory is correct
- b. It explains why the moon is made out of the same materials as Earth
- c. The density of the moon compared to Earth proves it true
- d. It was less popular than the capture and fission theories

6. Why is the giant impact hypothesis also problematic?

- a. The impact likely would have caused Earth to break apart into many pieces
- b. The moon is too small for such an impact
- c. There is more proof that the sister theory is correct
- d. There is no way to prove it is correct

<https://s3.eu-central-1.amazonaws.com/tstprep-toefl-tests-audio-files/listening-section-audio-files/listening-audio-files-test13/13.02.03-student-conversation-directons-and-questions.mp3>

Passage #3

1. What is the purpose of the lecture?

- a. To describe how plate tectonics has contributed to the way Earth looks today
- b. To prove that plate tectonics is the reason Pangea broke up into several continents

- c. To provide examples of why it is important to have solid research to support scientific theories
- d. To explain why geology is an important subject to study

2. Why does the professor start the lecture by defining geology?

- a. To make sure the students know which class they are in
- b. To remind the students what they learned in the previous class
- c. To introduce the topic of plate tectonics and its relevance
- d. To compare it to plate tectonics

3. How is the lecture organized?

- a. The topic is introduced followed by an example and a historical narrative
- b. Historical views of plate tectonics are compared to current theories
- c. A problem is introduced followed by a possible solution
- d. The topic is described and then followed by two examples

4. According to the lecture, what is the purpose of plate tectonics?

- a. To create valleys, volcanoes, and mountains
- b. To shape the continents
- c. It allows the earth to cool itself off
- d. It is a theory explained by continental drift

5. Why does the professor say this?

- a. To prove that she knows a lot about Wegener
- b. To emphasize Wegener's relevance to the topic
- c. To show the students that it is important to have dreams
- d. To describe what Wegener was like as a child

6. According to the lecture, what evidence did Wegener find to support his theory of Pangea? Select two.

- a. He found similarities in fossils on separate continents
- b. He discovered rare plants in Africa and South America
- c. He identified the continents were similar in shape
- d. He noticed a likeness among animal species living in South America and Africa

<https://s3.eu-central-1.wasabisys.com/tstprep-toefl-tests-audio-files/listening-section-audio-files/listening-audio-files-test13/13.02.04-student-conversation-directons-and-questions.mp3>

Passage #4:

1. What do the professor and student mainly discuss?

- a. How the student can improve her grades
- b. What information the student must read
- c. Where the student can get access to books
- d. Why the professor has called her into the office

2. Why is the student confused?

- a. She believes that she understood the writing assignment
- b. She thought the deadline for submitting her work was later than it was
- c. The professor's instructions for completing the homework were wrong
- d. She misunderstood which books she should read to complete the task

3. Listen again to part of the conversation. Why does the student say this?

- a. To ask the professor to explain his expectations again
- b. To prove the professor **misworded** the assignment instructions
- c. To confirm she has understood what the professor wanted
- d. To give an example of a topic she could discuss in her essay

4. Listen again to part of the conversation. What does the professor imply when he says this?

- a. His instructions for the assignment were confusing

- b. The student should have asked if something was unclear
- c. Most of the other students understood the assignment
- d. A number of students submitted excellent assignments

5. What do you think the student is most likely to do next?

- a. Start to work on the assignment again
- b. Submit a formal complaint about the professor
- c. Ask another professor to look at her assignment
- d. Wait until the weekend to work on the assignment

<https://s3.eu-central-1.amazonaws.com/tstprep-toefl-tests-audio-files/listening-section-audio-files/listening-audio-files-test13/13.02.05-student-conversation-directons-and-questions.mp3>

Passage #5:

1. What is the lecture mainly about?

- a. What happens when you do not get enough sleep, in college
- b. How many hours of sleep people should get each night
- c. The effects of sleep deprivation on the body
- d. Why people need plenty of sleep

2. Why does the professor start the lecture talking about circadian rhythms?

- a. To provide an example of sleep debt
- b. To begin his lecture on this topic even though he changes the subject
- c. To later compare sleep deprivation to circadian rhythms
- d. To introduce the idea that lack of sleep disrupts our natural sleep cycle

3. Why does the professor mention college students in the lecture?

- a. To show that he empathizes with his students
- b. To prove that sleep debt is an important topic because it is relevant

- c. To highlight the need for his students to sleep more
- d. To show that college students have too much work interfering with their sleep

4. What does the professor imply about the dangers of sleep deprivation?

- a. It could be as dangerous as driving a car while intoxicated
- b. People could fall asleep no matter what they are doing
- c. The person will probably do a poor job at work and may risk getting fired
- d. It may lead to overconsumption of alcohol

5. Which one of the following is an indicator that you might suffer from sleep debt?

- a. You tend to fall asleep at 10 pm or earlier
- b. You wake up multiple times throughout the night
- c. You fall asleep easily when you lay down during the day
- d. Your age since almost all young people and college students have sleep debt

6. Why does the professor say this?

- a. To tell the class how many hours of sleep per day someone over 65 years old gets
- b. To prove that people are more sleep deprived as they age
- c. To emphasize the idea that older people get less sleep naturally
- d. To give an example of an average night's sleep for a 65-year-old

Section 2: Structure and Written Expression

Time: 25 minutes, including the reading of directions

Now set your clock for 25 minutes.

This section is designed to measure your ability to recognize language that is appropriate for standard written English. There are two types of questions in this section, with special directions for each type.

Structure

Directions: Questions 1-15 are incomplete sentences. Beneath each sentence you will see four words or phrases, marked (A), (B), (C) and (D). Choose the **one** word or phrase that best completes the sentence. Then, on your answer sheet, find the number of the question and fill in the space that corresponds to the letter of the answer you have chosen.

Now begin work on the questions.

1. Since the early 1950's, _____ throughout the world has more than doubled.
(A) the demand for food
(B) there is demand for food
(C) if food is in demand
(D) food, a demand that
2. Even though he did not attend school until he was twelve, Dr. Samuel C.C. Ting was _____ the Nobel Prize in Physics in 1976.
(A) won
(B) the winning
(C) the winner of
(D) to be won
3. Gas particles move _____ when the gas is hot than when it is cold.
(A) fast
(B) faster
(C) as fast
(D) fastest
4. The different colors of the different temperatures of the stars' surfaces.
(A) the stars indicate
(B) indicating stars
(C) the indication that the stars
(D) stars indicating that
5. As a country develops from an agricultural to an industrial economy, the attitudes, values, structures, and functions of the family_.
(A) the change
(B) which change
(C) change
(D) changing
6. Only a few sounds produced by insects are heard by humans____most of the sounds are pitched either too low or too high.
(A) in spite of
(B) because
(C) as a result of
(D) instead of
7. The ordinary chair_____in countless shapes, sizes, styles, and materials.
(A) has been made
(B) to be made
(C) is making
(D) been making
8. For 125 years after_____initial use at Harvard in 1642, the Bachelor of Arts degree was the only degree awarded by colleges in the United States.
(A) its
(B) it was
(C) being
(D) when

9. Since the Sun illuminates half the surface of the Moon, only half the surface__ can be seen from the Earth.
(A) most
(B) much
(C) with more
(D) at most
10. The novels of Constance Fenimore Woolson,_____, have special interest for their regional settings.
(A) in a nineteenth-century writer
(B) a nineteenth-century writer
(C) the nineteenth-century writing
(D) wrote about the nineteenth century
11. _____ Oklahoma is important as a farming state, it is even more important for its rich oil deposits.
(A) By
(B) Although
(C) In order for
(D) Concerning
12. No animal seems_____ on a diet of peat moss.
(A) survived
(B) can survive
(C) of surviving
(D) able to survive
13. The upper part in a harmonic arrangement _____by mixed voices is usually written for a soprano voice.
(A) to be sung
(B) as singing
(C) to be singing
(D) was sung
14. The first school_____the state of Washington was opened at old Fort Vancouver in 1832.
(A) is now
(B) is that in
(C) what is that
(D) in what is now
15. Radio,_____, developed from the theories and experiments of many people.
(A) like other many inventions
(B) like many other inventions
(C) inventions like many other
(D) many other like inventions

Written Expression

Directions: In questions 16-40, each sentence has four underlined words or phrases. The four underlined parts of the sentence are marked (A), (B), (C) and (D). Identify the **one** underlined word or phrase that must be changed in order for the sentence to be correct. Then, on your answer sheet, find the number of the question and fill in the space that corresponds to the letter of the answer you have chosen.

Now begin work on the questions.

16. While attempting to fly hers plane around the world in 1937, Amelia Earhart
 A B C
mysteriously disappeared.
 D
17. Richard Wright's *Uncle Tom's Children*, a collection of short stories, were a
 A B
 critical success when it appeared in 1938.
 C D
18. The principle on which the boat called a hydrofoil is designed is identically to
 A
 that demonstrated by an airplane wing moving through air.
 B C D
19. Migrating butterflies can travel long distant over water.
 A B C D
20. During a early period in the settlement of the western United States, pioneers
 A
 claimed parts of the wilderness by marking trees to establish a boundary.
 B C D
21. All digital computers use binary, or two-valued, digits instead than decimal, or
 A B C
 ten-valued, digits to represent and store data.
 D
22. An ambassador serves as a nation's highest-ranking diplomacy in another
 A B C
country.
 D
23. Early adolescence is a developmental phase consisting of rapid changes in
 A B C
 behavior, psychological, and hormones.
 D
24. Knowledge from the frontiers of research genetic will increasingly pose difficult
 A B C
 problems for policy makers and for society in general.
 D

25. Pictures called glass mosaics are made by setting small pieces of colors glass
into fresh plaster.
 A B C
 D
26. Approximately every nineteen month Venus and the Sun reach their greatest
 angular separation in the solar system.
 A B
 C D
27. Anthropologists recently have found evidence that, centuries ago, Inuits
used to entering their subterranean homes through tunnels, which
 B
helped keep the cold out and the heat in.
 C D
28. The tree porcupine is found in wooded areas throughout most from
 A B C D
 North America.
29. To date, only a small percentage of all glass manufactured in the United States
 A
is recycled, but markets for recycled glass that are growing steadily.
 B C D
30. The oceans are the major source of the atmospheric moisture that is obtained
 A B C
 through evaporator.
 D
31. Only those insects with high developed, multilensed eyes have good
 A B C
color vision.
 D
32. The Earth's atmosphere functions much like a giant greenhouse, admitting
 A
 sunlight between outer space but preventing heat from escaping.
 B C D
33. The almond tree which produces the oldest species of nut and is the most
 A B
widely grown of all nut trees.
 C D

34. Fran Tannenbaum, a paleontology student doing summer fieldwork, found a completely seventy-five-million-year-old fossil egg near Chateau, Montana.
A B C D
35. Fencing, originally developed as a sport in fourteenth century, was included in the first modern Olympic Games of 1896.
A B C D
36. Depth within ancient tombs, 3,000-year-old peanuts have been found alongside mummies.
A B C D
37. Art Nouveau developed in the 1890's when artists did a conscious effort to break with what they regarded as worn-out formulas of the past.
A B C D
38. The most widely cultivated all of fruit trees, the apple is second only to the grape in its importance as a temperate-zone fruit.
A B C D
39. Pawnbroking, or making loans to customers who pledge personal or household goods as security, is one of the oldest trade known.
A B C D
40. Of 1901 to 1914, acclaimed actor Douglas Fairbanks appeared on stage in a series of light comedies.
A B C D

This is the end of Section 2.

If you finish in less than 25 minutes, check your work on Section 2 only.
 DO NOT read or work on any other section of the test.

At the end of 25 minutes, go on to Section 3.

Section 3: Reading Comprehension

Time: 55 minutes, including the reading of the directions Now

set your clock for 55 minutes.

Directions: In this section you will read several passages. Each passage is followed by several questions about it. For questions 1-50, you are to choose the **one** best answer, (A), (B), (C) or (D), to each question. Then, on your answer sheet, find the number of the question and fill in the space that corresponds to the letter of the answer you have chosen.

Answer all questions following a passage on the basis of what is **stated** or **implied** in the passage.

Now begin work on the questions.

Questions 1-10

The ballpoint pen is the universal writing instrument of the twentieth century. When the tiny metal ball at the writing tip is drawn across a sheet of paper, it rotates within a housing at the end of an ink reservoir and is coated with ink, which it transfers to the paper.

Line

5 The first ballpoint pen was invented by John Loud in 1888. Loud has been working on a design for a nonleaking pen to mark leather and fabrics and, although his cumbersome design was similar in essence to the modern item, it was never manufactured in large quantities and the patent was allowed to expire. The first workable design was patented in 1938 and became widely accepted in 10 1942 when the United States Army required a pen that would not leak in high-flying aircraft.

15 The ball of the pen is fitted into a socket so that it rotates freely. Several internal ducts in the socket feed ink to the ball; the other end of the socket is fitted onto a metal or plastic tube that contains the ink. When the ball is pressed on paper and moved, the capillary action draws the ink from the reservoir. In effect, the ball functions as a valve to prevent overflow, and on rotation it acts as a suction pump drawing out the ink.

20 One problem was that as some of the ink ran out, a partial vacuum was formed between the back of the ball and ink reservoir, which cut off the supply. This was solved by making a small hole at the far end of the reservoir. As the ink at the tip is sucked out, more ink from the tube is drawn into the socket to fill its place, the vacuum being prevented by air that is drawn through the vent.

25 Disposable ballpoints have improved considerably in efficiency and reliability since 1938. Further improvements made recently include the production of a pen that writes at any angle, even upside down, and the development of a new ink that is erasable.

1. The word “it” in line 2 refers to
 - (A) paper
 - (B) ink reservoir
 - (C) writing instrument
 - (D) ball
2. The word “housing” in line 3 is closest in meaning to
 - (A) point
 - (B) residence
 - (C) case
 - (D) orbit
3. It can be inferred from the passage that there was interest in designing a new type of pen because the old ones
 - (A) were too big
 - (B) were expensive
 - (C) leaked
 - (D) cracked
4. The word “expire” in line 8 is closest in meaning to
 - (A) end
 - (B) change
 - (C) copy
 - (D) expand
5. It can be inferred that the ballpoint pen first gained popularity among
 - (A) military personnel
 - (B) businesspeople
 - (C) scientists
 - (D) artists
6. Which of the following statements is true of the ball in a ballpoint pen?
 - (A) It is fitted directly into the tube.
 - (B) It controls the flow of ink.
 - (C) It has a small hole.
 - (D) It contains a reservoir of ink.
7. The author mentions a “suction pump” in line 17 to indicate a function of the
 - (A) reservoir
 - (B) plastic tube
 - (C) socket
 - (D) ball
8. The word “which” in line 19 refers to
 - (A) supply
 - (B) back of the ball
 - (C) partial vacuum
 - (D) ink reservoir
9. What was the purpose of the small hole mentioned in line 20?
 - (A) To drain off excess ink
 - (B) To improve ink flow to the tip of the pen
 - (C) To reduce the amount of air in the pen
 - (D) To allow the reservoir to be refilled

10. Until recently one limitation of ballpoint pens was
- (A) their inability to function upside down
 - (B) the cost of replacing empty reservoirs
 - (C) the fragility of the point
 - (D) corrosion due to the ink

Section 3 continues. Turn the page and read the next passage.

Questions 11-20

By the 1920's in the United States, great change had been made in daily life by an accumulation of inventions that had been produced in increasing numbers since the Civil War. These technological innovations created what, in effect, was a social revolution.

Line

5

Improvements in communications served to knit more closely citizens of diverse ethnic and political backgrounds. Rapid printing presses, typesetting devices, and page-plate processes made printed matter more widely accessible. The telephone simplified person-to-person communication. The phonograph, the silent motion picture, the radio, and the sound picture for the first time made auditory and visual impact simultaneously possible over the whole country and had the inevitable, and perhaps undesirable, effect of establishing a trend to national conformity in thought and feeling. One could call this revolution the nationalization of thought and taste.

10

15

Improvements in transportation made all parts of the country less remote from each other when measured by the time required to go from one place to another. Bicycles and trolleys put the nation on wheels. Then the automobile provided the means for speed and mobility, now so dear to Americans, and brought a demand for better highways. By the 1920's cargo trucks were beginning to cut into railroad revenues, and the latest wonder, the airplane, was a fairly common sight.

20

The transport revolution was made possible by the development and perfection of new engines and motors. The internal-combustion engine, using gasoline or oil, could be built in compact power units admirably suited to automobiles, aircraft, and boats. The use of electricity, generated by water power or coal-burning plants, simplified the problems of mechanical power for industrial use and made electrical illumination commonplace in cities, indoors and out. Electricity also powered an increasing variety of domestic appliances.

25

11. The passage focuses on the United States in the 1920's primarily in terms of the
- (A) creativity of American inventors
 - (B) decline in social relationships
 - (C) influence of technology on society
 - (D) negative side of technological progress
12. The word "knit" in line 5 is closest in meaning to
- (A) unite
 - (B) attract
 - (C) inform
 - (D) study
13. The word "accessible" in line 7 is closest in meaning to
- (A) understandable
 - (B) read
 - (C) printed
 - (D) available
14. According to the author, expanded communications led to a decrease in
- (A) individuality
 - (B) travel
 - (C) patriotism
 - (D) entertainment
15. The words "each other" in line 15 refer to
- (A) improvements in transportation
 - (B) parts of the country
 - (C) bicycles and trolleys
 - (D) better highways
16. The word "mobility" in line 17 is closest in meaning to
- (A) excitement
 - (B) movement
 - (C) modernity
 - (D) control
17. According to the passage, which of the following modes of transportation was negatively affected by motor vehicles?
- (A) Trolleys
 - (B) Bicycles
 - (C) Trains
 - (D) Airplanes
18. The passage suggests that a major advantage of the internal-combustion engine was its
- (A) safety
 - (B) size
 - (C) durability
 - (D) price

19. The author identifies all of the following as contributors to the “social revolution” of the 1920’s EXCEPT
- (A) improved communication
 - (B) improved transportation
 - (C) improvements resulting from electricity
 - (D) improvements in the arts
20. Where in the passage does the author give an example of a technological advance that led to a demand for improvement in another area?
- (A) Lines 6-7
 - (B) Lines 16-17
 - (C) Lines 21-23
 - (D) Line 26

Section 3 continues. Turn the page and read the next passage.

Questions 21-30

Line Astronomers have long used direct photography to gather large amounts of information from telescopes. To do this, they have special light-sensitive coatings on glass plates, whose size depends on the type of telescope employed. Certain wide-field telescopes commonly required very large glass plates. These plates do not bend, can be measured accurately, and can preserve information over a long period of time, providing a record that an astronomer at a later time can examine. However, even though long time exposures increase the amount of light striking the plate so that very faint objects in the sky eventually show up clearly, even the most sensitive plates convert only a small percent of the photons striking them into an image. For this reason, photography cannot make very efficient use of short time exposures on a telescope. Despite this inefficiency, photography is still very useful because it works as a two-dimensional detector covering a large area at a telescope's focus. Hence, the information contained in a single photograph can be enormous, especially when the photograph is taken with wide-field telescopes.

Today, the technology of newer radio and x-ray telescopes has allowed astronomers to view images otherwise invisible to the eye, and direct photography is now used less often to gather images. Today's astronomers can study an enhanced view of a telescope's focus on a television monitor; and in most cases, the data can later be converted by computer into digital form. This procedure, called image processing, plays a central role in astronomy today. Using false colors, the computer can display images of information otherwise undetectable to the unaided eye. These colors are false in the sense that they are not the actual colors of the object in the visual range of the spectrum. Rather, they are codes to a specific property, such as the x-ray emissions from stars.

21. What is the main topic of the passage?
- (A) The use of false colors in image processing
 - (B) The use of wide-field telescopes in astronomy
 - (C) New astronomical theories
 - (D) Methods used by astronomers to obtain information
22. The word “employed” in line 3 is closest in meaning to
- (A) measured
 - (B) inspected
 - (C) used
 - (D) purchased
23. The word “efficient” in line 10 is closest in meaning to
- (A) productive
 - (B) frequent
 - (C) objective
 - (D) visible
24. Which of the following is NOT mentioned as an advantage of glass-plate photographs?
- (A) They can be measured accurately.
 - (B) They can capture the images of faint objects.
 - (C) They can be stored for a long time.
 - (D) They can be processed quickly.
25. Astronomers most probably use direct photography less frequently today than in the past because
- (A) glass plates are no longer available
 - (B) only a small amount of information is contained in a single photograph
 - (C) alternate ways of observing images have been developed
 - (D) photographic data deteriorates quickly
26. What is image processing?
- (A) The process of light waves striking a glass plate
 - (B) A way to produce images more quickly
 - (C) A reevaluation of old photographs
 - (D) A way computers can present data for analysis
27. The word “undetectable” in line 23 is closest in meaning to
- (A) immense
 - (B) inferior
 - (C) imperceptible
 - (D) intolerable

28. Why do computer-generated images use false colors?
- (A) The real objects are too bright to look at.
 - (B) The computer screens have a limited range of colors.
 - (C) The properties represented in the image are not otherwise visible.
 - (D) The colors are used to convert black-and-white photographs.
29. Why does the author mention “x-ray emissions” in line 25?
- (A) To discuss the measurement of energy flow
 - (B) To emphasize the precision of direct photography
 - (C) To provide an example of what false colors represent
 - (D) To compare the properties of color and movement
30. Where in the passage does the author mention a disadvantage of photography?
- (A) Lines 1-3
 - (B) Lines 7-11
 - (C) Lines 18-21
 - (D) Lines 24-25

Section 3 continues. Turn the page and read the next passage.

Questions 31-39

The artistic movement known as Impressionism was first identified in 1874 when a group of artists, dissatisfied with the reception of their works by the academic art establishment of their period, chose to hold a separate exhibition of their paintings.

Line

5 Despite obvious differences in style, all of these painters were connected by an ability to catch a moment and preserve it on canvas, and in their belief in the importance of that moment. They readily accepted and made use of the technological advances available to them, and in the end became recognized as proponents of one of the most significant movements in the history of art, a
10 movement that produced an aesthetic revolution in art.

10

Several technological breakthroughs were responsible, to some degree, for the creation and execution of the new Impressionist style. One of these was the invention of a new brush that gave artists greater control. Another useful invention was the collapsible tin tube. This easily reclosed container preserved the oil paint
15 in a stable condition without altering the color. It was a great improvement over animal bladders, which had been used for centuries to hold oil paint. The new tube was portable and made it possible for artists to work outside. This freedom made it possible for Impressionist paintings to “capture the moment,” giving them a feeling of immediacy.

15

20 Another innovation was color. Nineteenth-century chemists had created a new palette of colors, derived from cola tar and other substances. These were first used by textile manufacturers and then adopted by artists. They included some of the brighter colors - new shades of blue, green, and yellow, whose tones gave the Impressionist paintings their characteristic shimmering quality.

20

31. What did the group of Impressionist artists do in 1874?
- (A) They radically changed their style of painting.
 - (B) They held their own exhibition.
 - (C) They adopted new techniques and technologies.
 - (D) They refused to paint anything that year.
32. The word “it” in line 6 refers to
- (A) style
 - (B) moment
 - (C) ability
 - (D) canvas
33. The word “readily” in line 7 is closest in meaning to
- (A) purposely
 - (B) cautiously
 - (C) cleverly
 - (D) eagerly
34. According to the passage, Impressionism is regarded historically as
- (A) a significant, revolutionary movement
 - (B) an innovative yet minor style
 - (C) an unenlightened, radical phase
 - (D) a traditional form of nineteenth-century painting
35. In line 15 the word “It” refers to
- (A) container
 - (B) condition
 - (C) oil paint
 - (D) color
36. Which of the following words does NOT refer to something that holds paint?
- (A) Bladder
 - (B) Tube
 - (C) Condition
 - (D) Container
37. What contribution did chemists make to the Impressionist movement?
- (A) New textiles
 - (B) Better canvases
 - (C) Additional colors
 - (D) Tin tubes
38. It can be inferred that Impressionist paintings differed from other nineteenth-century paintings in terms of which of the following?
- (A) The size of the canvas
 - (B) The brightness of the colors
 - (C) The value of the painting
 - (D) The talent of the artists

39. Where in the passage does the author mention two new technologies available to artists in the nineteenth century?
- (A) First paragraph
 - (B) Second paragraph
 - (C) Third paragraph
 - (D) Fourth paragraph

Section 3 continues. Turn the page and read the next passage.

Questions 40-50

Line Radiocarbon dating and tree-ring dating, in combination, have provided
5 a very powerful tool to establish a time spectrum for more recent dates in the
past. The initial idea for dating by tree rings can be traced back to 1811. Modern
scientific tree-ring dating, dendrochronology, stems from pioneering work in
early 1900's.

10 Usually, but not always, trees produce one ring each year. This ring is formed
by the cambium, which lies between the old wood and the bark. In spring,
wood cells with large lumens are manufactured, but in summer and autumn,
the cells become smaller and more thick-walled until with the onset of winter
the production of a new cell stops. The same process is repeated the following
year. In this way a year's growth (annual ring) is imprinted as new wood. The
demarcation line between summer and autumn wood of the previous year, with
its characteristic small cells, and the spring wood of the year following, with its
large cells, enables annual rings to be counted relatively easily.

15 Growth rings, however, are not always the same thickness. They vary for
several reasons. Environmental factors rigidly control the degree of growth of an
annual ring or determine whether, in fact, an annual ring appears at all in any
particular year. Thus in a specific locale or, more accurately, a specific climatic
province, tree-ring counts will reflect climatic conditions and variations due to
20 inequalities of climate from year to year. In years with abnormal drought, for
example, narrow rings are produced and sometimes no ring at all. In this way a
fossil record is imprinted for as long as the wood remains intact. From this pattern
a historical template can be constructed to correlate one set of growth rings in
one tree with a set of growth rings in another tree or piece of timber.

25 Another important factor is that tree-ring growth varies with age of the tree.
As the tree matures, the rings become narrower, and this results in the central
rings being wider than those on the outer part of the tree.

40. What does the passage mainly discuss?
(A) The effect of drought on tree-ring growth
(B) The history of dating trees
(C) The problems of tree-ring dating
(D) The formation of growth rings in trees
41. The word “stems” in line 4 is closest in meaning to
(A) distinguishes
(B) recovers
(C) derives
(D) returns
42. The approximate age of a tree can be determined by
(A) counting the rings
(B) analyzing the structure of the cells
(C) examining the cambium
(D) measuring the width of the rings
43. The word “onset” in line 9 is closest in meaning to
(A) beginning
(B) coldness
(C) difficulty
(D) darkness
44. The word “enables” in line 14 is closest in meaning to
(A) combines
(B) forces
(C) encourages
(D) allows
45. The word “They” in line 15 refers to
(A) large cells
(B) growth rings
(C) several reasons
(D) environmental factors
46. According to the passage, the production of rings from year to year in any given tree is
(A) random
(B) predetermined
(C) variable
(D) accelerated
47. The word “reflect” in line 19 is closest in meaning to
(A) indicate
(B) affect
(C) confuse
(D) limit
48. A narrow growth ring between two wide growth rings would probably indicate
(A) an unusually warm winter
(B) the death of an old tree
(C) unfavorable climatic conditions during a single year
(D) wood cells that had grown to be very large
49. Which of the following terms is defined in the passage?
(A) dendrochronology (line 4)
(B) lumens (line 8)
(C) drought (line 20)
(D) template (line 23)

50. The phrase “this pattern” in line 22 refers to
- (A) the change of seasons
 - (B) different climates in different places
 - (C) the destruction of trees and forests
 - (D) variation in the thickness of tree rings

This is the end of Section 3.

**If you finish in less than 55 minutes, check your work on Section 3 only.
Do NOT read or work on any other section of the test.**

Answer Keys

- Use the answer keys below to determine which questions you answered correctly and incorrectly.
- Print the script for Practice Test A or B on pages 96-120 and place it next to the test questions so you can see the four answer choices.
- Replay the audio track while reading the script to help you recognize words you may not have understood correctly.

Practice Test A - Answer Key

Writing Section		Reading Section		Listening Section	
1. A	21. C	1. D	26. D	1. B	
2. C	22. C	2. C	27. C	2. B,C	
3. B	23. D	3. C	28. C	3. A	
4. A	24. B	4. A	29. C	4. B,C	
5. C	25. C	5. A	30. B	5. B	
6. B	26. A	6. B	31. B	1. C	
7. A	27. B	7. D	32. B	2. A	
8. A	28. D	8. C	33. D	3. C,D	
9. D	29. C	9. B	34. A	4. B	
10. B	30. D	10. A	35. A	5. A	
11. B	31. B	11. C	36. C	6. D	
12. D	32. B	12. A	37. C	1. A	
13. A	33. A	13. D	38. B	2. C	
14. D	34. D	14. A	39. C	3. A	
15. B	35. A	15. B	40. D	4. C	
16. B	36. A	16. B	41. C	5. B	
17. B	37. B	17. C	42. A	6. A,D	
18. A	38. A	18. B	43. A	1. D	
19. C	39. D	19. D	44. D	2. A	
20. A	40. A	20. B	45. B	3. C	
		21. D	46. C	4. C	
		22. C	47. A	5. A	
		23. A	48. C	1. C	
		24. D	49. A	2. D	
		25. C	50. D	3. B	

		4. A 5. C 6. C
--	--	----------------------

Passage #1: Transcript

Woman: Hi Professor, you got a minute?

Man: Sure Christy, did you pick up your paper yet? I just finished grading them and I was really impressed with yours.

Woman: Really?

Man: Of course, I loved your arguments and what you wrote about farming for less than \$10 a day, it really has incredible real-world applications...I can tell you put a lot of thought into this paper.

Woman: Speaking of real-world applications, that's sort of what I wanted to talk to you about the student exchange program.

Man: Oh sure, absolutely. Are you thinking of going somewhere? That's a great program.

Woman: Well, I have a couple of places in mind, but I really have my heart set on Guatemala.

Man: What draws you to Guatemala?

Woman: I think Guatemala would be the most relevant place for me. It would be perfect to go there so I can do some research about my ideas.

Man: I can see where you're coming from Christy. ...I think you have some good reasons. I hate to tell you this, but the exchange program in Guatemala is only for Spanish majors, and the Spanish department is usually pretty strict about that.

Woman: Nooo, there has to be some way I can go. I've already done so much research about it. Guatemala is perfect for my research. It has the exact type of agricultural practices, economy, and environmental conditions I want to study and explore.

Man: You make a fair argument, but have you thought of other places? I really wouldn't want you to get your hopes up, since it's a program run by the Spanish department and I can't remember the last time a student was able to go who wasn't a Spanish major.

Woman: That doesn't seem fair! Is there nothing I can do? They must have let someone go before who isn't a Spanish major, right? I mean, I know some Spanish, if that's any consolation.

Man: Look, I want you to have the opportunity to go, and I agree that it could be an ideal place for your research. Since you are very passionate about going, I will talk to the person in charge of the situation and see if they can find a way to accommodate you.

Woman: Really professor? Thank you! Thank you! That means so much to me.

Man: I think you should prepare a solid argument to present to the Spanish department just in case. Can you do that?

Woman: Of course, absolutely, I'll do anything. I will be ready!

Man: Ok glad to hear it. Let me talk to the department and I will let you know if anything changes, ok?

Woman: Ok! Thanks, Professor!

Passage #2: Transcript

“Source: Fraknoi, A., Morrison, D., & C. Wolff, S. C. (2016).

So, I would like to continue our discussion about the moon, more particularly about the origins of the moon and how it was actually created.

We talked about three possible solutions, uh, more like theories, about how the moon was created. Can anyone tell me the name of one of these theories?

Sarah.

Well, I do remember the capture theory, which proposes that the moon was located somewhere else in the galaxy until eventually it was kind of, like, captured, by the Earth's gravitational pull.

Yes, and I'm glad you started with the capture theory because it's the easiest one to reject. Its primary drawback is that no one knows of any way that early Earth could have captured such a large moon from elsewhere. One body approaching another cannot go into orbit around it without a serious loss of energy. Furthermore, if such a capture did take place, the captured object would go into a very strange orbit rather than the nearly circular orbit our moon goes through today. Finally, there are too many similarities in composition between Earth and the moon. It's much more likely than the Earth and the moon were somehow connected at one point in the past.

What was another theory discussed, James?

The fission theory. Like you just said, the moon was once a part of the Earth but somehow separated from it early in their history. But I remember you mentioned some problems with this theory, too.

Yes, the fission theory suggests that the moon separated from the Earth, but modern calculations have shown that this type of splitting is nearly impossible. Furthermore, it is difficult to understand how a moon made out of materials from the Earth could have developed so many chemical differences from our own.

And the third? James again.

Yeah, the last one is the sister theory. It claims that the moon formed together with the Earth, but also remained independent from it. This is what many other astronomers once believed of other moons in the solar system, too.

Yes, the sister theory was the dominant idea accepted by most astronomers in the past, but, like the capture and fission theory, it had some problems, particularly when trying to explain how it could have such a lower density when compared to the Earth.

Now, in an effort to resolve these apparent contradictions, scientists developed a fourth hypothesis for the origin of the moon, one that involves a giant impact early in Earth's history. This idea, known as the giant impact hypothesis, proposes that Earth was struck by an object approximately one-tenth of Earth's mass, which is about the size of Mars. This is very nearly the largest impact Earth could experience without being shattered. Such an impact would disrupt much of Earth and eject a vast amount of material into

space, releasing almost enough energy to break the planet apart. Computer simulations indicate that material totaling several percent of Earth's mass could be ejected in such an impact. Most of this material would be from the stony mantles of Earth and the impacting body, not from their metal cores. This ejected rock would then cool and form a ring of material orbiting Earth. It was this ring that ultimately came together and formed the moon.

While we do not have any current way of showing that the giant impact hypothesis is the correct model of the moon's origin, it does offer potential solutions to most of the major problems raised by the chemistry of the moon. Most importantly, since the moon's raw material is from the deep rocks of Earth and the asteroid that hit it, the composition and chemistry of the moon is better understood and explained."

Passage #3: Transcript

"Geology is the study of Earth's crust and the processes that have shaped its surface throughout history. Heat escaping from the interior provides energy for the formation of our planet's mountains, valleys, volcanoes, and even the continents and oceans themselves. But not until the middle of the twentieth century did geologists succeed in understanding just how these landforms are created.

Plate tectonics is a theory that explains how slow motions within the earth's interior move large pieces of land, resulting in a gradual "drifting" or spreading out of the continents. Plate tectonics is a concept as basic to geology as evolution by natural selection is to biology or gravity is to understand the orbits of planets. Looking at it from a different perspective, plate tectonics is a way for Earth to transport heat efficiently from the interior, where it has accumulated, out to space. It is a cooling system for the planet. All planets develop a heat transfer process as they evolve.

Earth's crust is divided into about a dozen tectonic plates that fit together like the pieces of a puzzle. In some places, such as the Atlantic Ocean, the plates are moving apart; in others, such as off the western coast of South America, they are being forced together. The power to move the plates is provided through a process by which heat escapes from the interior through the upward flow of warmer material and the slow sinking of cooler material.

As the plates slowly move, they bump into each other and cause dramatic changes in Earth's crust over time.

You know, when studying maps of Earth, many students notice that the coast of North and South America could fit pretty well against the coast of Europe and Africa. It seems as if these great landmasses could once have been together and then were somehow torn apart. The same idea had occurred to others, including Francis Bacon, as early as 1620, but not until the twentieth century could such a proposal be more than just speculation.

The scientist who made the case for continental drift in 1920 was the German meteorologist named Alfred Wegener.

Born in Berlin in 1880, Wegener, from an early age, dreamed of exploring. Later in his

life, his interests turned more toward Earth's weather. He carried out experiments using kites and balloons, becoming so accomplished that he and his brother set a world record in 1906 by flying for 52 hours in a balloon.

Wegener first thought of continental drift in 1910 while examining a world map in an atlas, but it took 2 years for him to assemble enough data to propose the idea in public. He published the results in book form in 1915.

Wegener's evidence went far beyond the similarities in the shapes of the continents. He proposed that the similarities between fossils found only in South America and Africa indicated that these two continents were joined at one time. He also showed that similarities among living animal species on different continents could be best explained by assuming that the continents were once connected in a supercontinent he called Pangaea (from Greek elements pan meaning "all" and Gaea meaning "land").

Wegener's suggestion was met with a hostile reaction from most scientists. Although he had collected an impressive list of arguments for his hypothesis, he was missing a mechanism. No one could explain how solid continents could drift over thousands of miles. A few scientists were impressed by Wegener's work and continued searching for additional evidence, but many found the idea of moving continents too revolutionary to take seriously. Developing an understanding of the mechanism --plate tectonics-- would take decades of further research.

Critics of science often point to the resistance to the continental drift hypothesis as an example of the flawed way that scientists regard new ideas. But there is a more positive light in which to view Wegener's story. Scientists in his day maintained a skeptical attitude because they needed more evidence and a clear mechanism that would fit what they understood about nature. Once the evidence was clear, Wegener's hypothesis quickly became the centerpiece of our view of a dynamic Earth."

Passage #4: Transcript

“Woman: Hi professor, you wanted to see me?”

Man: Yes, come in, Anya. It's about the paper you submitted for your assignment. I'm afraid I'm going to ask you to do the assignment again.

Woman: Really? I'm kind of shocked. I mean, I worked so hard on that paper-- wasn't it good?

Man: I can see how much work you put in. In many ways, it's a very good assignment, but...

Woman: I'm confused. If it's good, why do I have to do it again?

Man: I understand that you are upset, Anya, but let me finish, OK? The situation isn't nearly as bad as you think.

As I was saying, your assignment was well written and well researched, but it wasn't what I asked you to do. You submitted a review of one of the books from a reading list, but the assignment I said was to write an essay.

Woman: Really? I remember the assignment and I'm sure it said to review a book from

the reading list.

Man: It did say that, but here. Let me get the actual assignment and read it. Here we go. It says, 'Review one of the three books on this week's reading list and then write an essay that compares the arguments in the book with those we discussed in class.' Do you see the difference? I wanted you to review the opinions in the book, and then write about how that differs from what we discussed in class. And you just reviewed the book and didn't address the second part of the assignment at all.

Woman: So, you were using the phrase 'review a book' in the assignment to mean something like 'study the book' rather than write a review for the book?

Man: Yes, that's exactly right. And as you are the only person who misunderstood the assignment, I don't think what I wrote was unclear, do you?

Woman: I see. Listen, I'm really sorry about my mistake, professor. Can I submit a revised assignment next week on Tuesday or Wednesday?

Man: Actually, Anya, it's only Monday. So, I'd like it before the weekend, please."

Passage #5: Transcript

"All right let's settle down and start talking about everyone's favorite subject: sleep.

And we are going to start with your circadian rhythm.

So, a circadian rhythm is a biological rhythm that takes place over a period of about 24 hours. It's basically how we biologically experience each day. Our sleep-wake cycle, which is linked to our environment's natural light-dark cycle, is perhaps the most obvious example of a circadian rhythm, but we also have daily fluctuations.

Now, does anyone remember a few other examples? Janet?

Yes, I think that your glucose level changes based on the last time you ate.

Yes, that's right, anyone else?

I think they also mentioned heart rate and body temperature, but I forget the specific examples.

Don't worry about that George. We will discuss these other circadian rhythms in much more detail later in the course. For now, the most important thing to keep in mind about circadian cycles is that they are usually aligned with the outside world. For example, most people sleep during the night and are awake during the day. Now, one important regulator of sleep-wake cycles is the hormone, melatonin. Melatonin release is stimulated by darkness and inhibited by light.

When people have difficulty getting sleep due to their work or the demands of day-to-day life, they accumulate a sleep debt. A person with a sleep debt does not get sufficient sleep on a chronic basis. The consequences of sleep debt include decreased levels of alertness and mental efficiency. Interestingly, since the advent of the electric light, the amount of sleep that people get has declined. While we certainly welcome the convenience of having the darkness lit up, we also suffer the consequences of reduced amounts of sleep because we are more active during

the nighttime hours than our ancestors were. As a result, many of us sleep less than 7–8 hours a night and accumulate a sleep debt. While there is tremendous variation in any

given individual's sleep needs, the National Sleep Foundation cites research to estimate that newborns require the most sleep, between 12 and 18 hours a night, and that this amount declines to just 7–9 hours by the time we are adults.

If you lie down to take a nap and fall asleep very easily, chances are you may have a sleep debt. Given that college students are famous for suffering from significant sleep debt, chances are you and your classmates deal with these issues on a regular basis.

Sleep debt and sleep deprivation have significant negative psychological and physiological consequences.

As mentioned earlier, lack of sleep can result in decreased mental alertness and cognitive function. In addition, sleep deprivation often results in depression-like symptoms. These effects can occur as a function of accumulated sleep debt or in response to more acute periods of sleep deprivation. It may surprise you to know that sleep deprivation is associated with obesity, increased blood pressure, increased levels of stress, and reduced immune functioning. A sleep-deprived individual generally will fall asleep more quickly than if they were not sleep

deprived. Some sleep-deprived individuals have difficulty staying awake when they stop moving, for example sitting and watching television or driving a car. That is why individuals suffering from sleep deprivation can also put themselves and others at risk when they go behind the wheel of a car or work with dangerous machinery.

Some research suggests that sleep deprivation affects cognitive and motor function as much as, if not more than, alcohol intoxication.

The amount of sleep we get varies across our lives. When we are very young, we spend up to 16 hours a day sleeping. As we grow older, we sleep less. In fact, recent research indicates that by the time we are 65 years old, we average fewer than 7 hours of sleep per day. As the amount of time we sleep varies over our lifespan, presumably the sleep debt would adjust accordingly.”

