

# Section 2

## Structure and Written Expression



*Time: 25 minutes*

This section is designed to test your ability to recognize language structures that are appropriate in standard written English. The questions in this section belong to two types, each of which has special directions.

**DIRECTIONS:** Questions 1–15 are partial sentences. Below each sentence you will see four words or phrases, marked (A), (B), (C), and (D). Select 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 contains the letter for the answer you have chosen. Fill in the space completely.

### EXAMPLE I

**Sample Answer**

Drying flowers is the best way - - - - them.

☒ (A) ☐ (B) ☐ (C) ☐ (D)

- (A) to preserve
- (B) by preserving
- (C) preserve
- (D) preserved

The sentence should state, "Drying flowers is the best way to preserve them." Therefore, the correct answer is (A).

### EXAMPLE II

**Sample Answer**

Many American universities - - - - as small, private colleges.

☐ (A) ☐ (B) ☒ (C) ☐ (D)

- (A) begun
- (B) beginning
- (C) began
- (D) for the beginning

The sentence should state, "Many American universities began as small, private colleges." Therefore, the correct answer is (C).

After you read the directions, begin work on the questions.

1. Fort Niagara was built by the French in 1726 on land - - - - the Seneca Indians.
  - (A) they buy from
  - (B) bought from
  - (C) buying from
  - (D) was bought from
2. Soil texture depends on the proportions of clay and sand particles, - - - - soil porosity.
  - (A) both alter
  - (B) which alter
  - (C) where altered
  - (D) although altered

**GO ON TO THE NEXT PAGE. ➡**

2 2 2 2

3. The writers of the realist movement embraced the notion that art should depict life - - - - .

- (A) accurately and objectively
- (B) accuracy and objectivity
- (C) accurate and objective
- (D) accurate objectivity

4. A ratio is a comparison of - - - - - whole or a part to another part.

- (A) part to the
- (B) a part to
- (C) a part to the
- (D) the part to the

5. The bones of the elderly are more prone to fractures and splintering - - - - - of young people.

- (A) than that
- (B) than those
- (C) those than
- (D) that than

6. English and Scottish settlers - - - - - Belfast as a trading post in 1613.

- (A) they established
- (B) established themselves
- (C) established
- (D) establishing

7. The formulation of economic policies necessitates meticulous consideration - - - - - large segments of the population.

- (A) because they affect
- (B) they are affected because
- (C) affect them because
- (D) because affecting them

8. Only - - - - - feathered creatures inhabit the Arctic region year round.

- (A) fewer
- (B) fewer than
- (C) as few as
- (D) a few

2 2 2 2

9. Before Richard Bennett accepted the appointment as the prime minister of Canada in 1930, he - - - - - as a lawyer.

- (A) had achieved a successful
- (B) had been achieved successfully
- (C) has achieved success
- (D) had achieved success

10. Gardeners transplant bushes and flowers by moving them from one place to - - - - - .

- (A) other
- (B) others
- (C) another
- (D) each other

11. Museums of natural history are ordinarily - - - - - by special interest groups created for that purpose.

- (A) owned and operated
- (B) they own and operate
- (C) owning and operating
- (D) the owner operates

12. A surge in the level of stress - - - - - the recurrence of nightmares.

- (A) apparent increase
- (B) apparently increase
- (C) apparently increases
- (D) apparent increases

13. Each bowler - - - - - in each frame, unless a strike is bowled.

- (A) rolling the ball twice
- (B) the ball is rolled twice
- (C) rolls the ball twice
- (D) the ball rolls twice

**GO ON TO THE NEXT PAGE. ➡**

2

2

2

2

2

2

2

2

14. William Hearst had five sons, - - - -  
eventually became executives in the  
Hearst newspaper conglomerate.

(A) all of them  
(B) of them all  
(C) all of whom  
(D) who of all

15. An axiomatic assumption in physics  
holds that all matter has kinetic energy  
- - - - motion and mass.

(A) because its  
(B) because of its  
(C) because it is  
(D) because of it

**GO ON TO THE NEXT PAGE. ➡**

**DIRECTIONS:** In questions 16–40 every sentence has four words or phrases that are underlined. The four underlined portions of each sentence are marked (A), (B), (C), and (D). Identify the one word or phrase that makes the sentence incorrect. Then, on your answer sheet, find the number of the question and fill in the space that contains the letter for the answer you have chosen. Fill in the space completely.

### EXAMPLE I

### Sample Answer

☐ ☐ ☒ ☐

Christopher Columbus has sailed from Europe in 1492 and discovered a new land he

thought to be India.  
D

The sentence should state, “Christopher Columbus sailed from Europe in 1492 and discovered a new land he thought to be India.” Therefore, you should choose answer (A).

## EXAMPLE II

### Sample Answer

Ⓐ Ⓑ Ⓒ Ⓓ

As the roles of people in society change, so does the rules of conduct in certain situations.

A B C D

The sentence should state, “As the roles of people in society change, so do the rules of conduct in certain situations.” Therefore, you should choose answer (B).

After you read the directions, begin work on the questions.

16. In summer, warm southern air carries moist north to the eastern and central United States.

17. Billie Holiday became recognized as the most innovative jazz singer of her day and was

admiration for her vocal range.

18. To raise livestock successfully, farmers must selecting cattle for breeding and apply a dietary regimen.

19. In the 1960s, urban renewal projects cleared land for commerce and offices building.

20. In 1868, Sioux leaders signed a treaty preventing whites from traveling through the Sioux

territorial.  
D

**GO ON TO THE NEXT PAGE. ➡**



21. A number multiplied by zero is zero, and a number multiplied by one is the same as number.  
A B C D
22. Muscles aids in attaching portions of the skeleton to one another and ultimately shape the torso.  
A B C D
23. Thomas More, who fell into disfavor with the king, was a great English author, statesman, and scholars.  
A B C D
24. The first microprocessors were fabricated in 1971 for installation in handhold calculators.  
A B C D
25. If autistic children form an attachment, it predominantly was to inanimate objects.  
A B C D
26. Technology is define as the tools, skills, and methods that are necessary to produce goods.  
A B C D
27. Fruit flies do not have to leap to take off because of they become airborne solely by wing movement.  
A B C D
28. Historians postulate that Eskimos migrated from Alaska to Greenland in two greater movements.  
A B C D
29. Electric wires carry current for lighting and outlets designing for household appliances.  
A B C D
30. Troops housing in Fort Bliss, Texas, train to operate aircraft equipment and artillery.  
A B C D
31. Charles Kettering patented the first success spark-based starter for automotive vehicles in 1911.  
A B C D
32. During the 1700s, public concerts proliferated when composers wrote music for their audiences' enjoying.  
A B C D
33. The philosophers and artists of ancient Greece and Rome emphasized the study of human as fundamental to their doctrine.  
A B C D
34. Computer graphics software has infinite applications in a widely array of fields.  
A B C D
35. The planet Mercury rotates slow than any other planet except Venus.  
A B C D



36. Van Cliburn he studied piano from 1951 to 1954 and won multiple awards between 1958 and 1960.

A

B

C

D

37. Not only comics show a part of a story but they also convey the complete story.

A

B

C

D

38. How much information can be retained in short-term memory depends almost exclusively on how it arranged.

A

B

C

D

39. When readers contribute funds to private libraries, these readers are used the library without charge.

A

B

C

D

40. Diagrams display informations in a conspicuous way and vividly show differences and similarities.

A

B

C

D

**>STOP<**

This is the end of Section 2.

Read the directions for Section 3.

Do not read or work on any other section of the test.

Look at the time now before you begin work on Section 3.

Use exactly 55 minutes to work on Section 3.

## Section 3

# Reading Comprehension



*Time: 55 minutes*

**DIRECTIONS:** In this section you will read several passages. Each passage is followed by a series of questions. For questions 1–50, you need to select the 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 contains the letter of the answer you have selected. Fill in the space completely.

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

Read the following passage:

A tomahawk is a small ax used as a tool and a weapon by the North American Indian tribes. An average tomahawk was not very long and did not weigh a great deal. Originally, the head of the tomahawk was made of a shaped stone or an animal bone and was mounted on  
*Line* a wooden handle. After the arrival of the European settlers, the Indians began to use toma-  
(5) hawks with iron heads. Indian males and females of all ages used tomahawks to chop and cut wood, pound stakes into the ground to put up wigwams, and do many other chores. Indian warriors relied on tomahawks as weapons and even threw them at their enemies. Some types of tomahawks were used in religious ceremonies. Contemporary American idioms reflect this aspect of American heritage.

### EXAMPLE I

Sample Answer

● (B) (C) (D)

Early tomahawk heads were made of

- (A) stone or bone
- (B) wood or sticks
- (C) European iron
- (D) religious weapons

According to the passage, early tomahawk heads were made of stone or bone. Therefore, the correct answer is (A).

### EXAMPLE II

Sample Answer

How has the Indian use of tomahawks affected American daily life today?

(A) (B) ● (D)

- (A) Tomahawks are still used as weapons.
- (B) Tomahawks are used as tools for certain jobs.
- (C) Contemporary language refers to tomahawks.
- (D) Indian tribes cherish tomahawks as heirlooms.

The passage states, "Contemporary American idioms reflect this aspect of American heritage." The correct answer is (C).

After you read the directions, begin work on the questions.

**GO ON TO THE NEXT PAGE. ➡**



## Questions 1-12

Charles Lindbergh was born in Detroit, Michigan, in 1902 but was raised on a farm in Minnesota, where his father was elected to the U.S. Congress in 1907. From then on, he spent his boyhood alternately in Washington, D.C., Detroit, and Little Falls, Minnesota.

*Line* Because Lindbergh exhibited exceptional mechanical talent, in 1921 he was admitted to  
 (5) the University of Wisconsin to study engineering. However, the young man was seeking more challenging endeavors, and two years later he became a stunt pilot who performed feats at county fairs and public assemblies. This unusual and dangerous undertaking paid off handsomely in the sense that it allowed him to gain a diverse and well-rounded experience in aeronautics. He particularly delighted in what he called "wing-walking" and para-  
 (10) chute jumping.

After a year of training as a military cadet, Lindbergh completed his program at the Brooks and Kelly airfields at the top of his class and earned the rank of captain. Robertson Aircraft Corporation of St. Louis, Missouri, offered him employment as a mail pilot to run the routes between St. Louis and Chicago, and Lindbergh retained his position with the  
 (15) company until 1927. During this period, he set out to win the Raymond B. Orteig prize of \$25,000 to be awarded to the first pilot to fly nonstop from New York to Paris. This ambition would irreversibly change his life and accord him a prominent place in the history of aviation.

Embarking on the greatest adventure of his time, Lindbergh left Roosevelt Field at 7:52  
 (20) A.M. on May 20, 1927, and landed at Le Bourget Field at 5:24 P.M. the next day. Fearing that he would be unknown when he arrived, Lindbergh carried letters of introduction to dignitaries in Paris, but when his plane came to a stop, he was overwhelmed by tremendous welcoming crowds. He was decorated in France, Great Britain, and Belgium, and President Coolidge sent a specially designated cruiser, the *Memphis*, to bring him back. His accom-  
 (25) plishments in aeronautics brought him more medals and awards than had ever been received by any other person in private life.

1. Which of the following is the best title for the passage?
  - (A) A Benchmark Adventure in Aeronautics
  - (B) The Early Life of Charles Lindbergh
  - (C) Groundbreaking Events in Aviation
  - (D) Charles Lindbergh's Explorations
2. According to the passage, Lindbergh did not complete his degree because he
  - (A) opted for the life of an exhibition pilot
  - (B) pursued training in the military
  - (C) was seeking a sedentary life-style
  - (D) set out to win recognition
3. In line 7, the word "assemblies" is closest in meaning to
  - (A) hearings
  - (B) houses
  - (C) gatherings
  - (D) shows
4. In line 7 the word "undertaking" refers to
  - (A) studying at the university
  - (B) exhibiting mechanical talent
  - (C) seeking challenging endeavors
  - (D) performing feats

**GO ON TO THE NEXT PAGE. ➔**





5. In line 8, the word “handsomely” is closest in meaning to
  - (A) honorably
  - (B) handily
  - (C) well
  - (D) in time
6. It can be inferred from the passage that as a military cadet, Lindbergh
  - (A) was in top form
  - (B) earned a good salary
  - (C) was the best among students
  - (D) trained with the best students
7. The author of the passage implies that Lindbergh’s job with Robertson Aircraft Corporation
  - (A) required regular intercity flights
  - (B) was not intended as long-term employment
  - (C) required him to perform dangerous flights
  - (D) necessitated his running long distances
8. In line 17, the word “irreversibly” is closest in meaning to
  - (A) forever
  - (B) formerly
  - (C) irresistibly
  - (D) only
9. According to the passage, how old was Lindbergh when he carried out his challenging flight?
  - (A) Twenty-one
  - (B) Twenty-three
  - (C) Twenty-four
  - (D) Twenty-five
10. The author of the passage implies that Lindbergh did not anticipate becoming a
  - (A) pilot
  - (B) celebrity
  - (C) mail carrier
  - (D) army captain
11. It can be inferred from the passage that in the early 1920s it was NOT common for young people to
  - (A) study engineering
  - (B) train as officers
  - (C) go on exhibition tours
  - (D) be elected to an office
12. A paragraph following the passage would most probably discuss
  - (A) the development of commercial and military aviation
  - (B) the reaction of the government to Lindbergh’s flight
  - (C) the effect of instant celebrity on Lindbergh
  - (D) Lindbergh’s aircraft and engine modifications

**GO ON TO THE NEXT PAGE. ➔**



## Questions 13-21

Lithography is a planographic process that performs a significant function in illustration and offset printing. It is based on the principle that water does not combine with grease-based substances, preventing them from smearing an outline on an unpolished surface. The *Line* contour does not need to be engraved into the plate, as in the case of gravure printing, or (5) raised above the surface, as in the letterpress process. These laborious operations ensure that only the design to be printed catches and retains the ink transferred to the paper.

In lithography, the artist draws on a leveled, grainy plate made of limestone, zinc, aluminum, or specially treated paper with a grease pencil, a crayon, or tusche, a greasy liquid. After sketching the contour on the plate, the artist coats both the drawn and the undrawn portions (10) of the plate with an inking roller dipped in a solution of nitric acid and gum arabic. The gum arabic envelops the greased surfaces and prevents ink from penetrating into the greaseless areas. The artist dampens the surface with water, which is repelled by the greased areas. Then the surface is covered with thick, oily ink and pressed onto paper. The sheet picks up the ink from the design while the damp stone around the pattern keeps the ink (15) from spreading.

In offset lithography, shiny sheets of zinc and aluminum are used instead of the heavy, hard-to-handle stone plates. The metal plates are scoured by emery dust and marble chips to give them a grained finish. The subjects to be printed are laid down photographically, and rotary presses automatically moisten, ink, and print hundreds of impressions per hour.

- |   |   |
|---|---|
| <p>13. What does the passage mainly discuss?</p> <p>(A) Commercial printing of mass-produced lithographs</p> <p>(B) Steps in a technique for making impressions</p> <p>(C) The equipment necessary for offset lithographs</p> <p>(D) The evolution of lithograph printing to rotary presses</p>                       | <p>16. In line 7, the word "leveled" is closest in meaning to</p> <p>(A) elevated</p> <p>(B) low</p> <p>(C) flawed</p> <p>(D) flattened</p>   |
| <p>14. According to the passage, lithographic printing makes use of the fact that</p> <p>(A) artists can draw on flat, greaseless surfaces</p> <p>(B) oily substances do not mix with water</p> <p>(C) gravure etching is work- and time-consuming</p> <p>(D) limestone, zinc, and aluminum can be used as planes</p> | <p>17. In line 11, the word "envelops" is closest in meaning to</p> <p>(A) sends</p> <p>(B) soils</p> <p>(C) coats</p> <p>(D) coils</p>   |
| <p>15. In line 4, the word "contour" is closest in meaning to</p> <p>(A) contrast</p> <p>(B) content</p> <p>(C) outline</p> <p>(D) edge</p>   | <p>18. It can be inferred from the passage that in making lithographic prints, the paper</p> <p>(A) absorbs the ink from the printing plate</p> <p>(B) spreads the ink on the greased areas</p> <p>(C) shrinks away from the printing stone</p> <p>(D) keeps the oil from sliding off</p> |

**GO ON TO THE NEXT PAGE. ➡**



19. Where in the passage does the author point out the advantages of lithography over other types of printing?

(A) Lines 1–2  
(B) Lines 3–5  
(C) Lines 7–8  
(D) Lines 16–18

21. In line 19, the word “impressions” is closest in meaning to

(A) originals  
(B) reproductions  
(C) photographs  
(D) plates

20. A paragraph following the passage would most probably discuss

(A) photosynthesis in commercial lithographs  
(B) the offset printing of billboard advertisements  
(C) technological advancements in offset printing  
(D) types of unique lithographs printed in rare books

**GO ON TO THE NEXT PAGE. ➡**



## Questions 22–32

Although a few protozoans are multicellular, the simplest are unicellular organisms, such as amoebas, bacteria, sarcodina, ciliates, flagellates, and sporozoans, which can be amorphous in shape and smaller than .001 inch. Cytoplasm fills the cell membrane that *encloses* it and functions as a barrier between cells. The membrane serves as the outer tissue, (5) and any compound that may destroy the cell has to penetrate it to reach the cytoplasm.

Some types of organisms are termed colonial because they represent loosely assembled groups of structurally similar and unifunctional cells. Colonial organisms maintain a symbiotic relationship within their particular environments.

Unlike colonial organisms, almost all species of animals and plants are multicellular and (10) include various types of specialized or somatic cells, each with its own nucleus, genetic code, and RNA. The overall size of a multicellular body is contingent on the total number of cells that comprise it, not the size of individual cells. The simplest multicellular animals are hydras, sponges, and jellyfish, which have well-defined tissues, a cellular nucleus, and an element of cell functions. Sponges have a few specialized cells but largely resemble colonial (15) organisms that can readily form a new individual group. If the cells of a sponge are separated, they rejoin and continue as a newly formed colonial organism.

- |   |   |
|---|---|
| <p>22. How many cells do the simplest organisms contain?</p> <p>(A) One<br/>(B) One hundred<br/>(C) Many<br/>(D) An unknown number</p>  | <p>26. In line 6, the word “loosely” is closest in meaning to</p> <p>(A) lively<br/>(B) naturally<br/>(C) freely<br/>(D) feebly</p>   |
| <p>23. In line 4, the phrase “outer tissue” is closest in meaning to</p> <p>(A) outside force<br/>(B) outlying area<br/>(C) shell<br/>(D) cell</p>  | <p>27. In line 8, the word “symbiotic” is closest in meaning to</p> <p>(A) mutually dependent<br/>(B) mutually exclusive<br/>(C) mutually hostile<br/>(D) mutually resistant</p>  |
| <p>24. In line 5, the word “it” refers to</p> <p>(A) the cell<br/>(B) any compound<br/>(C) the membrane<br/>(D) the cytoplasm</p>   | <p>28. The author of the passage implies that large animals and plants have</p> <p>(A) larger cell sizes than amoebas and protozoans<br/>(B) larger quantities of protoplasm than smaller life-forms<br/>(C) stronger cellular membranes than flagellates<br/>(D) a greater number of cells than smaller life-forms</p> |
| <p>25. It can be inferred from the passage that a cell serves as</p> <p>(A) a partition of organism functions<br/>(B) the smallest colonial group<br/>(C) the smallest genetic unit<br/>(D) a flagellate reproductive organ</p> |   |

**GO ON TO THE NEXT PAGE. ➔**



29. In line 10, the word “each” refers to

- (A) animals
- (B) species
- (C) cells
- (D) plants

30. According to the passage, sponges and jellyfish are

- (A) the simplest one-cell organisms
- (B) the simplest multicellular animals
- (C) tissues and cellular nuclei
- (D) cellular and colonial organisms

31. The author mentions all of the following EXCEPT:

- (A) procreative mechanisms
- (B) colonial organisms
- (C) cell contents
- (D) specialized cells

32. This passage would most likely be found in a textbook on which of the following subjects?

- (A) Genetics
- (B) Anatomy
- (C) Biology
- (D) Biochemistry

**GO ON TO THE NEXT PAGE. ➡**



## Questions 33–42

When parchment, which was extraordinarily costly, was replaced by papyrus, it became feasible to establish libraries. At the onset, they began as archives for record keeping and document storage. According to second-hand reports, the most renowned papyrus library

*Line* was the Alexandrian, founded by Alexander the Great around 330 B.C. in Alexandria, Egypt.

(5) His successors as rulers of Egypt, Ptolemy I and Ptolemy II, expanded the library into the greatest collection of scrolls in the ancient world. To acquire this collection, the rulers borrowed scrolls and manuscripts from libraries in Athens, Rome, and other localities and ordered them duplicated. At times, the library employed more than 100 scribes and illustrators. Some historians claim that the Alexandrian library purchased entire lesser libraries to

(10) contribute to and enhance the quality of its possessions.

The library owned a copy of every contemporary scroll known to the library's administrators and contained more than 400,000 items, all of which were classified and organized. The contents of the papyrus rolls were edited, and a bibliography of Greek literature was compiled and cross-referenced, reflecting the emergence and dissemination of a highly developed Greek culture. Over time, a succession of leading scholars directed this library, which

(15) was acclaimed for the scholarly undertakings it supported as well as for the size of its collection. At one time, 72 scholars were engaged to translate religious testaments, historical annals, and mercantile accounts. Although the library flourished, it was accessible to only a minority of the population because in ancient times the vast majority of urban dwellers were

(20) illiterate. Because papyrus was extremely perishable, not a trace of the Alexandrian library remains today, and archaeologists have several hypotheses as to what became of it.

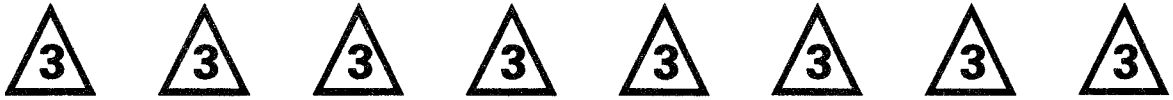
- |   |  |
|---|--|
| <p>33. What does the passage mainly discuss?</p> <p>(A) The use of papyrus in ancient scroll collections</p> <p>(B) The origin and history of a library</p> <p>(C) The cultural initiatives of Alexander the Great</p> <p>(D) The expansion of libraries in ancient times</p> | <p>36. The author of the passage implies that the rulers of Egypt</p> <p>(A) oversaw the expansion of the library directly</p> <p>(B) devoted funds and other resources to the library collections</p> <p>(C) sought to make the library self-contained</p> <p>(D) marshaled worldwide support for the library collections</p> |
| <p>34. In line 2, the word "feasible" is closest in meaning to</p> <p>(A) practicable</p> <p>(B) easy</p> <p>(C) prestigious</p> <p>(D) ebullient</p>   | <p>37. According to the passage, the main goal of the library in Alexandria was</p> <p>(A) collecting scrolls loaned by other libraries</p> <p>(B) gradually replacing papyrus with parchment</p> <p>(C) translating scrolls in ancient Egypt and Greece</p> <p>(D) accumulating translations and originals of texts</p>       |
| <p>35. It can be inferred from the passage that reports of the Alexandrian library</p> <p>(A) were highly exaggerated</p> <p>(B) could not be verified</p> <p>(C) were secondary in importance</p> <p>(D) could not be made known</p>   |  |

**GO ON TO THE NEXT PAGE. ➡**



38. In the second paragraph, the author implies that
- (A) parchment was more durable than books
  - (B) libraries were necessary to conduct research
  - (C) the library collection cannot be examined
  - (D) the library was historically relevant
39. With which of the following statements about Greek literature is the author of the passage most likely to agree?
- (A) It was nurtured in libraries in Athens and Rome.
  - (B) It was integral to Greek culture.
  - (C) It was compiled and cross-referenced in the library.
  - (D) It was beginning to emerge when the library was expanded.
40. In line 15, the word "succession" is closest in meaning to
- (A) series
  - (B) success
  - (C) sundry
  - (D) substitution
41. It can be inferred from the passage that in ancient times
- (A) books and scrolls were updated regularly
  - (B) libraries benefited upper social classes
  - (C) maintaining collections was fruitless
  - (D) the population should have been educated
42. In the last sentence, the phrase "not a trace" most probably means
- (A) absolutely no one
  - (B) absolutely nothing
  - (C) not a penny
  - (D) not a soul

**GO ON TO THE NEXT PAGE. ➡**



## Questions 43–50

According to data obtained from radioactive dating, the oldest rocks found on earth are approximately 500 million to 4 billion years old. Similar ages have been determined for meteorites and the rocks gathered from the moon's surface. Different methods of arriving at the

*Line* earth's age generate very similar results. Modern theories about the formation, develop-

(5) ment, and eventual burning out of stars suggest that the sun is about 5 billion years old. Experts contend that the earth and the sun were formed at almost the same time from a cloud of dust and gas resulting from a cosmic explosion. The present rate of expansion of the galaxies can be extrapolated to suggest that, if the universe began with a "big bang" about 15 billion years ago, an age of 5 billion years for both the earth and the sun can be considered plausible.

(10) Long before radioactive dating was implemented, mythology and oral narratives alluded to a conjecture that the earth was nearly 6,000 years old. The methods of computation based on the analysis of genealogical trees in scant archaeological findings provide evidence that can be difficult to date accurately. Today, radioactive dating of particles and whole objects has rejected this figure of the earth's age as unreliable.

43. What does the passage mainly discuss?
- (A) Dating techniques in research  
(B) Modern theories and radioactive dating  
(C) Research and narratives about the earth's formation  
(D) Establishing the earth's age
44. It can be inferred from the passage that radioactive dating is important for estimating the age of
- (A) all known meteors  
(B) all existing planets  
(C) the earth  
(D) the trees
45. In line 5, the word "eventual" is closest in meaning to
- (A) ultimate  
(B) eventful  
(C) utter  
(D) enduring
46. According to the passage, the moon is
- (A) older than the earth and the sun  
(B) newer than the earth and the sun  
(C) approximately the same age as the earth and the sun  
(D) approximately the same density as the earth and sun
47. The author of the passage implies that
- (A) the earth and the sun are of similar origin  
(B) the earth and the sun can be explosive  
(C) meteorites and the moon have been analyzed  
(D) the galaxies are expanding at a substantial rate
48. With which of the following statements would the author be most likely to agree?
- (A) The moon and the sun are 15 billion years old.  
(B) The moon can be viewed as a meteorite.  
(C) The formation of galaxies is an on-going process.  
(D) The earth can be dated as far back as 6,000 years.

**GO ON TO THE NEXT PAGE. ➔**





49. In line 9, the word "plausible" is closest in meaning to

- (A) reasonable
- (B) rational
- (C) relative
- (D) relational

50. What conclusion does the author of the passage make?

- (A) Radioactive dating is refuted by researchers.
- (B) Radioactive dating is more accurate than other methods.
- (C) The earth is a part of a galaxy that includes many moons.
- (D) The sun's radioactivity is scant and can be negligible.