ENGLISH TEST

45 Minutes—75 Questions

DIRECTIONS: In the five passages that follow, certain words and phrases are underlined and numbered. In the right-hand column, you will find alternatives for the underlined part. In most cases, you are to choose the one that best expresses the idea, makes the statement appropriate for standard written English, or is worded most consistently with the style and tone of the passage as a whole. If you think the original version is best, choose "NO CHANGE." In some cases, you will find in the right-hand column a question about the underlined part. You are to choose the best answer to the question.

You will also find questions about a section of the passage, or about the passage as a whole. These questions do not refer to an underlined portion of the passage, but rather are identified by a number or numbers in a box.

For each question, choose the alternative you consider best and fill in the corresponding oval on your answer document. Read each passage through once before you begin to answer the questions that accompany it. For many of the questions, you must read several sentences beyond the question to determine the answer. Be sure that you have read far enough ahead each time you choose an alternative.

PASSAGE I

The Triangular Snowflake

[1]

Snowflakes form from tiny water droplets,[1] following a specific process of chemical bonding as they freeze, which results in a six-sided figure. The rare "triangular" snowflake, similarly,[2] confounded scientists for years because it apparently defied the basic laws of chemistry. [A] The seemingly triangular shape of those snowflakes suggests that forming[3] through a different process of chemical bonding. [B] By re-creating snowflake formation, a discovery has revealed to scientists Kenneth Libbrecht and Hannah Arnold the cause of this apparent variation.[4]

[2]

Snowflakes begin to form when water in the atmosphere freezes it causes[5] the water molecules to bond into a hexagonal shape. During the flake's descent from Earth's upper atmosphere, other water vapor molecules bumps[6] into the hexagonal structure.

1. **A.** NO CHANGE
B. form, from tiny, water droplets,
C. form from tiny, water, droplets
D. form, from tiny water droplets

2. **F.** NO CHANGE
G. for example,
H. additionally,
J. however,

3. **A.** NO CHANGE
B. the manner in which formation
C. which had formed
D. that they form

4. **F.** NO CHANGE
G. the discovery of the cause of this apparent variation has been made by scientists Kenneth Libbrecht and Hannah Arnold.
H. scientists Kenneth Libbrecht and Hannah Arnold have discovered the cause of this apparent variation.
J. the cause of this apparent variation has been discovered by scientists Kenneth Libbrecht and Hannah Arnold.

5. **A.** NO CHANGE
B. freezes, causing
C. freezes, it causes
D. freezes, this causes

6. **F.** NO CHANGE
G. has bumped
H. bumped
J. bump

Bypassing the liquid water phase, those molecules
7
condense directly onto the established hexagonal pattern. As a result, the flake grows outward into bigger and more complex hexagonal arrangements surrounding the original hexagonal shape at the center of the flake. [C]

[3]

In 2009, Libbrecht and Arnold's experiments revealed that triangular snowflakes begin with the same process of chemical bonding and forms
8
a hexagonal shape. The triangular shape is an illusion resulting from one significant addition to the process
9
dust.

[4]

Triangular snowflakes begin to form when a tiny dust particle or other such impurity collides with the flake as it falls, thereby pushing one edge upward. [D] The downward edge of the snowflake encounters more wind resistance than the rest of the flake. The greater the pressure from the wind,
10
causes bonds to form quick
11
at this edge than in the rest of the snowflake.

[5]

The resulting snowflake has three long sides and three sides that are so short they are difficult to detect. Although these snowflakes appear to have a triangular shape—
12
they actually have a hexagonal pattern. Such snowflakes offer evidence that even when impurities interfere, the basic laws of chemistry still apply.
13

7. If the writer were to delete the underlined portion (adjusting the capitalization as needed), the sentence would primarily lose:

- **A.** an explanation of the process water molecules undergo to change from liquid to vapor to solid.
- **B.** a detail that mentions a step some water molecules skip in changing from vapor to solid.
- **C.** a visual description of what water vapor molecules look like.
- **D.** an explanation of how molecules react to various air temperatures.

8.
- **F.** NO CHANGE
- **G.** were they to form
- **H.** if they formed
- **J.** form

9.
- **A.** NO CHANGE
- **B.** process is
- **C.** process:
- **D.** process;

10.
- **F.** NO CHANGE
- **G.** pressure from the wind, which
- **H.** the pressure, as the wind
- **J.** pressure from the wind

11.
- **A.** NO CHANGE
- **B.** more quickly
- **C.** most quickly
- **D.** quickest

12.
- **F.** NO CHANGE
- **G.** shape,
- **H.** shape;
- **J.** shape:

13. Which choice most effectively concludes the sentence and the essay?

- **A.** NO CHANGE
- **B.** scientists can be certain that a solution to even the most confusing event will be found.
- **C.** snowflakes will still fall if atmospheric conditions are favorable.
- **D.** snowflakes come in many different shapes and sizes.

Questions 14 and 15 ask about the preceding passage as a whole.

14. The writer is considering adding the following sentence to the essay:

> This growth can take the form of either branching (which forms stable, symmetrical shapes) or faceting (which forms unstable, complex shapes).

If the writer were to add this sentence, it would most logically be placed at Point:

F. A in Paragraph 1.
G. B in Paragraph 1.
H. C in Paragraph 2.
J. D in Paragraph 4.

15. Suppose the writer's primary purpose had been to offer an example of a discovery that changed the way scientists viewed the basic laws of chemistry. Would this essay accomplish that purpose?

A. Yes, because it describes how the observation of triangular snowflakes has led scientists to discover that their understanding of the basic laws of chemistry is flawed.
B. Yes, because it describes how scientists have applied the knowledge they've gained through studying snowflakes to other areas of chemistry.
C. No, because it focuses on how scientists are struggling to determine how triangular snowflakes are formed.
D. No, because it explains that triangular snowflakes appeared to, but don't actually, violate the basic laws of chemistry.

PASSAGE II

Climbing Mt. Fuji

[1]

Bundled up in wool sweaters and thick coats, and we watched[16] the sun setting on Mt. Fuji in Japan. It was August and our clothes were stifling, but we would have needed[17] the warmth from our bodies sealed around us as we hiked into the high altitudes. Three friends and I stepped away from the crowd of other hikers and spoke our intention: "Sunset at the base, sunrise at the top." [A]

[2]

As we hiked, a patchwork of clouds swept across the darkening sky, hiding all traces of our surroundings outside our flashlights' beams. The trail gradually changed from compact dirt to a jumble of volcanic rocks. [B]

16. **F.** NO CHANGE
G. coats while watching
H. coats, we watched
J. coats watching

17. **A.** NO CHANGE
B. would need
C. will need
D. need