2

2

Writing and Language Test

35 MINUTES, 44 QUESTIONS

Turn to Section 2 of your answer sheet to answer the questions in this section.

DIRECTIONS

Each passage below is accompanied by a number of questions. For some questions, you will consider how the passage might be revised to improve the expression of ideas. For other questions, you will consider how the passage might be edited to correct errors in sentence structure, usage, or punctuation. A passage or a question may be accompanied by one or more graphics (such as a table or graph) that you will consider as you make revising and editing decisions.

Some questions will direct you to an underlined portion of a passage. Other questions will direct you to a location in a passage or ask you to think about the passage as a whole.

After reading each passage, choose the answer to each question that most effectively improves the quality of writing in the passage or that makes the passage conform to the conventions of Standard Written English. Many questions include a "NO CHANGE" option. Choose that option if you think the best choice is to leave the relevant portion of the passage as it is.

2

2

Questions 1–11 are based on the following passage and supplementary material.

Physician Assistants

As the American population grows, ages, and gains better access to affordable health insurance, the demand for primary medical services **1** are expected to skyrocket. As a result, the United States Department of Health and Human Services projects a shortage of about 20,000 primary care physicians by 2020. Therefore, an important challenge facing the healthcare industry is how to address this shortfall without sacrificing quality of care. One possible solution is to **2** elevate more medical school graduates to choose primary care as their field instead of **3** their choosing the more lucrative specialties like surgery and dermatology.

1

A) NO CHANGE
B) is
C) has been
D) would be

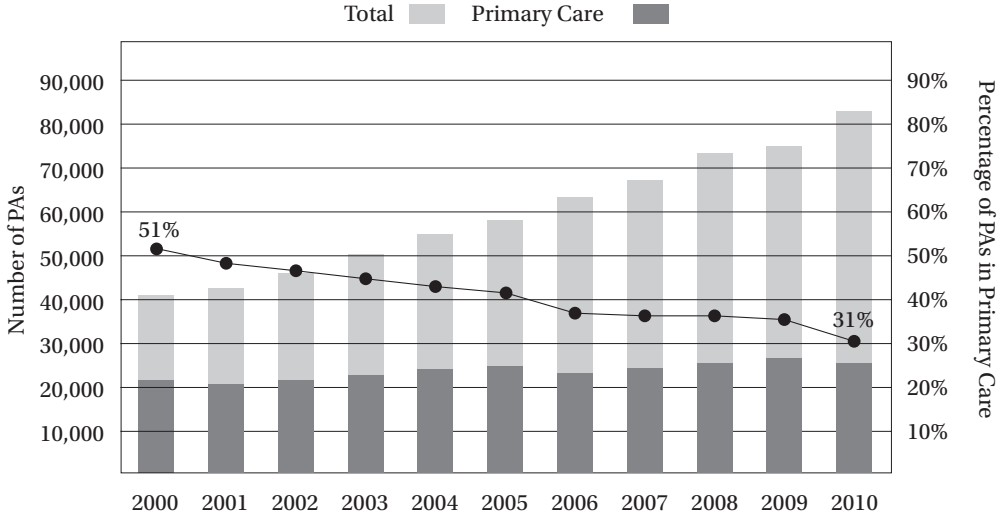
2

A) NO CHANGE
B) interest
C) incentivize
D) expect

3

A) NO CHANGE
B) to choose the more lucrative specialties
C) the more lucrative specialties
D) the more lucrative specialties they might choose

PAs (PHYSICIAN ASSISTANTS) IN THE U.S.



Source: American Academy of PAs, *American Medical News*, September 27, 2011

CONTINUE

2

[1] Another option is to incorporate more medical professionals like physician assistants (PAs) and nurse practitioners (NPs) into primary care teams. [2] They can talk with patients about treatment options, prescribe medications, and even **4** perform technical procedures like bone marrow aspirations. [3] Many healthcare providers are moving toward this "team-based" model, **5** where physicians can better focus on their specialties while relying on trained professionals to provide other necessary services. [4] Team-based medicine allows medical practitioners to best utilize their particular skills, **6** still sharing the successes and struggles of the team. [5] If organized around the principles of professionalism, trust, communication, and accountability, these teams may be able to provide better care to patients at less cost. **7**

For all the promise of team-based primary medicine, it cannot work without an adequate supply of well-trained health professionals. Although the total number of PAs in the United States more than doubled between 2000 and 2010, **8** the number of PAs going into primary care has decreased by 20% over that same time period. In the years ahead, we must encourage more of these new PAs to choose careers in primary care.

4

A) NO CHANGE
B) performing technical procedures
C) technical procedures
D) to perform technical procedures

5

A) NO CHANGE
B) whereby
C) by this
D) when

6

A) NO CHANGE
B) while at the same time
C) while
D) although

7

The author is considering inserting the following sentence into this paragraph.

> Although they receive less training than physicians do, these professionals have advanced degrees and can provide direct treatment to patients.

Where should it be placed?

A) Immediately after sentence 1
B) Immediately after sentence 3
C) Immediately after sentence 4
D) Immediately after sentence 5

8

Which choice is best supported by the data in the graph?

A) NO CHANGE
B) the number of PAs going into primary care has increased by only 50%
C) more PAs have gone into dermatology than into primary care
D) the fraction of those PAs going into primary care has declined from over one-half to under one-third

CONTINUE

2

Undergraduate students considering a career in medicine have many more options **9** than they did just a generation ago. Graduate PA and NP programs, which take about three years, are becoming increasingly attractive, especially **10** being that MD programs, including residency, lasting seven to ten years and often leave students saddled with tens of thousands of dollars in debt.

Anyone thinking about pursuing a PA or NP degree should keep in mind that these programs aren't cheap, either, and that most states impose strict limits on the kinds of treatment **11** they can provide.

9

A) NO CHANGE
B) than
C) than it was
D) to choose from than

10

A) NO CHANGE
B) when MD programs, including residence, are lasting
C) being that MD programs last, including residency,
D) because MD programs, including residency, can last

11

A) NO CHANGE
B) he or she
C) these professions
D) these professionals

2

2

Questions 12–22 are based on the following passage.

Maria Montessori

What is education? Is it a program of institutionally approved performances, or a collection of self-directed experiences? Such questions absorbed Maria Montessori throughout her life. Born in 1870 in **12** Chiaravalle Italy, Montessori showed a strong independent will even as a child. As a teenager, she told her parents that she wanted to study engineering, **13** a position that was widely thought unladylike. By the age of 20, she had changed her mind and decided to pursue an even less traditional path: medicine. Despite suffering ridicule and isolation, **14** Montessori's medical studies at the University of Rome were completed and she became one of the first female physicians in Italy.

Although Montessori's practice focused on psychiatry, her interests gravitated toward education. In 1900, she was appointed co-director of the *Scuola Magistrale Ortofrenica*, a training institute for special education teachers. Montessori believed that, in order for so-called "deficient" children to thrive, they needed respect and stimulation rather than **15** the regimentation they were receiving in institutions.

12

A) NO CHANGE
B) Chiaravalle, Italy. Montessori showed a strong independent will, even
C) Chiaravalle, Italy, Montessori showed a strong, independent will, even
D) Chiaravalle, Italy; Montessori showed a strong, independent will even

13

A) NO CHANGE
B) despite its reputation for being unladylike
C) although widely considered unladylike
D) which was unladylike in reputation

14

A) NO CHANGE
B) Montessori completed her medical studies at the University of Rome by becoming
C) Montessori's medical studies were completed, at the University of Rome, and thus she became
D) Montessori completed her medical studies at the University of Rome and became

15

A) NO CHANGE
B) receiving regimentation in institutions
C) the regimented institutions they were receiving
D) the regimentation of the institutions they were receiving

2

2

In 1907 Maria opened the Casa dei Bambini, or "Children's House," a daycare center for impoverished children in which she could test her theory that **16** children's minds each learn according to they're own schedule. She personalized a curriculum for each child rather than providing a standardized course of study. While learning important academic and life skills, many formerly aggressive and unmanageable children became more emotionally balanced and self-directed. Word of her success with the Casa dei Bambini soon began to **17** distribute internationally, and her methods for child-centered education became widely adopted across Europe.

18 In the 25 years after their founding, Montessori schools were regarded as a remedy to the educational problems associated with rapid urban population

16

A) NO CHANGE
B) each child's mind learns according to its own schedule
C) childrens' minds learn according to its own schedule
D) children's minds each learn according to their own schedule

17

A) NO CHANGE
B) increase
C) spread
D) exhibit

18

Which choice provides the most effective introduction to this paragraph?

A) Montessori dedicated herself to travelling the world and preaching the benefits of child-centered education.
B) Montessori's first school enrolled 50 students from poor working families.
C) Montessori did not have a particularly nurturing relationship with her own son, Mario, who was raised by another family.
D) As the Montessori method was gaining a foothold, Europe was undergoing dramatic social and political change.

2

growth throughout Europe. **19** So as fascism began to proliferate in the 1930s throughout Spain, Italy, and Germany, child-centered education came to be seen as a threat to the power of the state. In 1933, the totalitarian regimes in Italy and Germany closed all Montessori schools and declared **20** them subversive and that they were undermining their power.

Even outside of Europe, **21** the response to Montessori's ideas were divided. Many eminent scholars, inventors, and politicians—among them Alexander Graham Bell, Helen Keller, Thomas Edison, Mahatma Gandhi, and Woodrow Wilson— greeted her ideas with enthusiasm. But her theories were challenged by William H. Kirkpatrick, a leading educational reformer and professor at Teachers College, Columbia University. His 1914 book, *The Montessori System Examined*, declared Montessori's psychological theories wildly out-of-date. **22**

It was not until 1958 that a new generation of Montessorians revived and updated her methods in the United States. In 1958, the first American Montessori school, the Whitby School, was founded in Greenwich, Connecticut, where it thrives today.

19

A) NO CHANGE
B) When
C) However, as
D) Furthermore, as

20

A) NO CHANGE
B) that they were subversive in undermining their power
C) them subversive in undermining power
D) them subversive

21

A) NO CHANGE
B) the response to Montessori's ideas was
C) Montessori's ideas had a response that was
D) Montessori's ideas response was

22

At this point, the paragraph would benefit most from a discussion of

A) how Kirkpatrick's book was received among American educators
B) why totalitarian governments regarded Montessori's methods as a threat
C) those American educators whose influence was comparable to Montessori's
D) how other reform movements of the era contrasted with Montessori's

2 2

Questions 23–33 are based on the following passage.

Platonic Forms

When we look at the moon, we see a spherical object. But do "spheres" really exist? This may seem to be a silly question, because it's not hard to understand the definition of a sphere: "the set of all points in space that are a fixed distance (called the radius) from a fixed point (called the center)." We see examples of "spherical" objects all the time, don't we?

23 First, nothing that we can observe in our physical world **24** complies perfectly to this mathematical definition of a sphere. The moon, a beach ball, and even water droplets are all "bumpy," at least at the atomic level. So can we say that the concept of "sphere" is real **25** if there is no such thing as a real sphere?

Pondering this question as so many ancient Greek philosophers did, **26** the argument Plato made was that the sphere is an "ideal form," inaccessible to our physical senses yet **27** the mind can apprehend it

23

A) NO CHANGE
B) So
C) While
D) In fact,

24

A) NO CHANGE
B) overlaps
C) corresponds
D) concurs

25

A) NO CHANGE
B) where no such thing exists
C) as if nothing is
D) if there were nothing

26

A) NO CHANGE
B) it was Plato who argued
C) Plato had argued
D) Plato argued

27

A) NO CHANGE
B) it can be apprehended by the mind
C) apprehensible to the mind
D) it is apprehensible to the mind

CONTINUE

through pure reason. He also reasoned that, since our senses can be fooled, logic provides a much more reliable path to the truth. Therefore, a Platonic idealist believes that these abstract forms are **28** as effective, if not more so, than sensory experience at revealing the nature of reality. **29**

Modern scientists and philosophers are unlikely to be Platonic idealists. Today, we can understand the origin of abstract concepts **30** and not having to believe that they come from a higher, physically inaccessible reality. We simply need to understand **31** the process by which our brains make inferences.

Take an abstract idea like "orangeness." Most of us would say that orangeness "exists" because we see examples of it every day, such as carrots, traffic cones, and pumpkins. But what if, by some magic, we could remove all orange-colored objects from the universe? In other words, what if, as with "sphereness," no real examples of "orangeness" **32** would exist? Would "orangeness" still exist?

28

A) NO CHANGE
B) as effective as, if not more effective than,
C) as effective, if not more effective, than
D) equally as effective, if not more effective than,

29

At this point, the author is considering adding the following true statement:

> The sphere is just one of many ideal forms, like lines and tetrahedrons, that are studied in geometry.

Should the author make this addition here?

A) Yes, because it indicates a particular application of ideal forms.
B) Yes, because explains a claim made in the previous sentence.
C) No, because it detracts from this paragraph's discussion of philosophy.
D) No, because it undermines the Platonists' point of view.

30

A) NO CHANGE
B) in not having to believe
C) and not be believing
D) without having to believe

31

A) NO CHANGE
B) our brain's process by which they
C) the process by which our brain's
D) the process by which our brain

32

A) NO CHANGE
B) would have existed
C) existed
D) had an existence

In an important sense, the answer is yes. We can demonstrate the existence of "orangeness" without appealing to any higher reality. We could measure the wavelength of red light (about 650 nm), and yellow light (about 570 nm) and make the reasonable inference, because wavelengths fall on a continuum, that a color exists with an intermediate wavelength, of 610 nm, even if we have never directly measured such light.

Our brains do not contain sophisticated instruments for measuring wavelengths of light, but they do make similar inferences constantly. 33 For instance, when you drive, you unconsciously make inferences about quantities like the speeds of surrounding cars and qualities like dangerous driving conditions. Our brains are continually making inferences based on the limited information from our senses, and these inferences are the substance of abstract thought.

33

Which of the following changes would best improve this sentence's cohesiveness with the rest of the paragraph?

A) Change "For instance" to "Nevertheless."

B) Change both instances of "you" to "we."

C) Change "you unconsciously make changes" to "changes are unconsciously made"

D) Delete the phrase "like dangerous driving conditions."

2

2

Questions 34–44 are based on the following passage and supplementary material.

The Eureka Effect

You've probably had the experience. After racking your brain for hours to solve a problem, you finally put it aside and move on to other things. Then, much later, seemingly out of **34** nowhere, perhaps while showering or driving—the answer suddenly strikes you. Psychologists call this the "Eureka effect," from the ancient Greek word meaning "I have found it," **35** which Archimides is said to have shouted as he ran naked from his bathtub through the streets of Syracuse upon suddenly solving a vexing physics problem.

Does this feeling arise from our emotional centers or our cognitive centers? In other words, is it simply an emotional response to finding a solution, or does it **36** foretell a fundamental different way of thinking? Psychologists have tried to answer this question by looking inside subjects' brains as they solve problems, using electroencephalograms (EEGs) and other tools.

34

A) NO CHANGE
B) nowhere—perhaps
C) nowhere: perhaps
D) nowhere; perhaps

35

A) NO CHANGE
B) what Archmides is said to shout
C) that Archimedes shouted, it is said
D) which Archimedes it is said had shouted

36

A) NO CHANGE
B) indicate
C) provide
D) generate

CONTINUE

2 2

In one **37** experiment, subjects performed a word association task, scientists measured the activity in the region of the brain called the right hemisphere anterior superior temporal gyrus (RH aSTG). This region is known to be active in tasks, such as finding a theme in a story, **38** that requires integrating and bringing together information from many distant parts of the brain, but is not particularly active in emotional responses.

The subjects were asked to perform a challenging verbal association task, press a button as soon as **39** solving it, and report whether or not they felt the "Aha!" feeling. If they did, the response was classified as an "insight" solution. If they did not, it was classified as a "non-insight" solution.

40 What was interesting, experimenters found that the insight solutions were accompanied by an elevated level of "gamma band" activity in the RH aSTG, supporting the theory that the feeling **41** had corresponded

37

A) NO CHANGE
B) experiment by which subjects
C) experiment where subjects
D) experiment, in which subjects

38

A) NO CHANGE
B) that require integrating and bringing together
C) that require integrating
D) that requires integrating

39

A) NO CHANGE
B) it was being solved
C) they solved it
D) it's solution

40

A) NO CHANGE
B) The interesting thing was that
C) It was interesting that
D) Interestingly,

41

A) NO CHANGE
B) corresponds
C) is corresponding
D) will correspond

CONTINUE

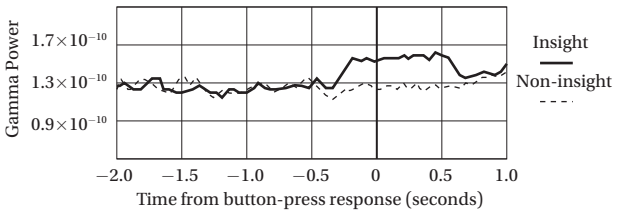
2

2

to a cognitive process rather than purely an emotional one. 42

Interpreting 43 this data is not a very simple matter, however. Many questions remain to be answered. For instance, does the increased gamma-band activity represent a transition of cognitive processing from an unconscious state to a conscious one? 44 If that is true, a question would be what are the unconscious processes that are working? Also, in what way do those processes become conscious all of a sudden?

GAMMA-BAND INTENSITY IN RIGHT ANTERIOR TEMPORAL REGION DURING VERBAL ASSOCIATION TASK



Source: Adapted from Beeman, Bowden et al., "Neural Activity When People Solve Problems with Insight," *PLOS*, 2004

42

At this point in the passage, the author wants to mention specific evidence indicated by the graph. Which statement is most justified by the data in this graph?

A) The gamma power in the RH aSTG for the insight solution is more than double that for the non-insight solution.

B) This increase in activity seems to begin about 0.3 seconds prior to the button-press response, and to lasts about 1 second.

C) The gamma activity for the insight solution appears to be roughly equivalent to that for the non-insight solution until the instant the button is pushed.

D) This increase in activity seems to begin about 0.3 seconds after the button-press response, and to last about 0.5 second.

43

A) NO CHANGE

B) this data are

C) these data are

D) these data is

44

Which of the following best combines the last two sentences into one?

A) If so, what are the unconscious processes that are working, suddenly becoming conscious?

B) If so, what unconscious processes are at work, and how do they suddenly become conscious?

C) If so, what would be the unconscious processes working, and how would they suddenly become conscious?

D) If so, what are both the unconscious process at work, and how do they suddenly become conscious?

STOP

If you finish before time is called, you may check your work on this section only. Do not turn to any other section of the test.