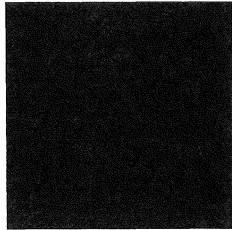


Form D05

(April 2021)

English/Reading
Version



The **ACT**[®]

2020 2021

In response to your request for Test Information Release materials, this booklet contains the test questions, scoring keys, and conversion tables used in determining your ACT scores. Enclosed with this booklet is a report that lists each of your answers, shows whether your answer was correct, and, if your answer was not correct, gives the correct answer.



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

Beat Nation

[1]

A cymbal skitters over a powwow chant. The intonations of the Cree language create a staccato soundscape. Artist Jordan Bennett adorns skateboard decks with traditional beadwork. Dylan Miner is adding painted hides to bikes which are lowriders.

Beat Nation, an art exhibition and website, showcases

works from Vancouver’s Indigenous art scene. [2]

- Which choice most closely maintains the sentence pattern the writer establishes in the first three sentences of the essay?
 - NO CHANGE
 - Adding painted hides to lowrider bikes is done by Dylan Miner.
 - On lowrider bikes, Dylan Miner has added painted hides.
 - Dylan Miner adds painted hides to lowrider bikes.
- At this point, the writer is considering adding the following true statement to the essay:

The greater Vancouver area’s population is around 2.4 million people.

 Should the writer make this addition here?
 - Yes, because it adds to the paragraph’s description of *Beat Nation*’s impact on viewers.
 - Yes, because it is relevant to the paragraph’s discussion of how various hip-hop art forms originated.
 - No, because it is irrelevant to the paragraph’s introduction of *Beat Nation*.
 - No, because it adds nothing to the paragraph’s description of different Indigenous languages spoken in Vancouver.

The works fusing graffiti, b-boying, MCing, and other hip-hop art forms with traditional Native culture. [A]

The artists strive not only to challenge stereotypes but also to provide a new lens for young people to explore their Indigenous roots.

[2]

Tania Willard, *Beat Nation*'s cofounder, traces the show's origins back to a powwow she attended in the 1990s. Standing amongst drummers from Canada's Secwepemc nation, an Indigenous break-dancing crew six-stepped and moonwalked to the rhythms of traditional hand drums. For Willard, the powwow represented the culmination of a generational trend. Throughout the 1990s, many Indigenous young people left Canada's rural territories for Vancouver's city streets. There, in Vancouver, they discovered hip-hop and used it as a means of self-expression. [B] In 2006, Willard began highlighting their talents by promoting their work.

[3]

The website took off, becoming a hub of Indigenous culture while also broadcasting political messages. However, on the site, MC Geronimo Inutiq raps about pollution that has affected Indigenous territories. [C] Corey Bulpitt, a graffiti artist, to spraypaint traditional Haida imagery in his mural *Raven*, located in downtown Vancouver. On the Beat Nation website, Bulpitt explains, that the mural expresses how Haida natives have reclaimed space within the cityscape.

3. A. NO CHANGE
B. works fuse
C. works to fuse
D. works, which fuse

4. F. NO CHANGE
G. powwow, she attended,
H. powwow, she attended
J. powwow she attended,

5. A. NO CHANGE
B. no longer in Canada's rural territories,
C. now in the city of Vancouver,
D. DELETE the underlined portion.

6. Which choice provides the clearest transition to the next paragraph?
F. NO CHANGE
G. around Vancouver.
H. online.
J. herself.

7. A. NO CHANGE
B. in it becoming
C. for becoming
D. to become

8. F. NO CHANGE
G. For example,
H. Either way,
J. Even so,

9. A. NO CHANGE
B. spraypainter of
C. spraypainting
D. spraypaints

10. F. NO CHANGE
G. Bulpitt explains
H. explains Bulpitt,
J. Bulpitt's explanation



[4]

Selected artworks from the Beat Nation site

has been shown in Vancouver's Grunt Gallery,
¹¹

in Musée d'Art Contemporain in Montreal, and Toronto's
¹²
Power Plant. [D] The artists in *Beat Nation* continue to
spread their message by collaborating with Idle No More,

a political group promoting Indigenous rights. "We're not
¹³

idle anymore," Inuitq muses. "We're agents of change."
¹⁴

11. A. NO CHANGE
B. have been
C. was
D. is
12. F. NO CHANGE
G. showing at the Montreal museum Musée d'Art Contemporain,
H. seen at Musée d'Art Contemporain located in Montreal,
J. Montreal's Musée d'Art Contemporain,
13. Given that all the choices are accurate, which one provides the most relevant information at this point in the essay?
A. NO CHANGE
B. an organization located in Canada.
C. a group that utilizes social media.
D. which was founded in 2012.
14. Which choice most clearly indicates that Inuitq is speaking decisively?
F. NO CHANGE
G. suggests.
H. asserts.
J. implies.

Question 15 asks about the preceding passage as a whole.

15. The writer is considering adding the following sentence to the essay:
- Videographer Jackson 2Bears criticizes popular culture's stereotypical representations of Native populations.
- If the writer were to add the sentence, it would most logically be placed at:
- A. Point A in Paragraph 1.
B. Point B in Paragraph 2.
C. Point C in Paragraph 3.
D. Point D in Paragraph 4.

PASSAGE II

What's Shaking, Tree Frog?

Red-eyed tree frogs (*Agalychnis callidryas*) lay their eggs in clutches, gelatinous sacs of dozens of eggs, on tree leaves that dangle over ponds and swamps. Mature tadpoles hatch in six to eight days, gently dropping into the water. Though the egg clutches are safer when stuck to a leaf, than they would be drifting in a pond ¹⁶ snakes can find and eat them. Fortunately, the clutches have a defense. As a snake attacks an *A. callidryas* egg clutch, the tadpoles that haven't been harmed hatch prematurely. As early as four days into development, ¹⁷ the tadpoles can burst out of their eggs to swim away.

Biologist, Karen Warkentin, ¹⁸ wanted to determine why the egg clutches react to being shaken and tugged during a snake attack they ¹⁹ rarely react to being jostled during a rainstorm. She inserted devices called accelerometers, which measure and record the frequency of vibrations, ²⁰ into egg clutches at Ocelot Pond, near Gamboa, Panama. Her recordings revealed that a snake attack and a rainstorm each cause sustained low-frequency vibrations of the egg clutch. However, it ²¹ also showed that a rainstorm usually produces ²² short periods of significantly higher-frequency vibrations.

16. F. NO CHANGE
 G. leaf, than they would be drifting, in a pond,
 H. leaf than they would be drifting in a pond,
 J. leaf than they would be drifting in a pond
17. If the writer were to delete the underlined portion (adjusting the capitalization as needed), the essay would primarily lose a detail that:
 A. states the age at which a hatched tadpole will have the best survival rate.
 B. explains why the tadpoles sometimes hatch after four days.
 C. suggests the typical age of a tadpole when it hatches.
 D. indicates how early the tadpoles are able to hatch.
18. F. NO CHANGE
 G. Biologist Karen Warkentin
 H. Biologist Karen Warkentin,
 J. Biologist, Karen Warkentin
19. A. NO CHANGE
 B. attack, however, they
 C. attack, the clutches
 D. attack but
20. Given that all the choices are accurate, which one provides the most relevant information at this point in the essay?
 F. NO CHANGE
 G. devices that are increasingly used in the biological sciences,
 H. often designed to measure the acceleration of vehicles,
 J. in this case small accelerometers,
21. A. NO CHANGE
 B. it itself
 C. they
 D. that
22. F. NO CHANGE
 G. have produced
 H. are producing
 J. produce

While these interruptions are nearly absent from the
²³
 vibrations caused by a snake attack.

Bringing the recordings back to her lab at Boston
²⁴

University, Warkentin's simulation of the snake-attack
²⁵
 vibrations and the rainstorm vibrations on several
 four-day-old egg clutches. Most eggs in the clutches
 that occupied only low-frequency vibrations hatched.
²⁶

But few eggs in the clutches that were exposed to
 low-frequency vibrations combined with periods
 of high-frequency vibrations hatched.

The periods of high-frequency vibrations that occurs
²⁷

during a rainstorm, however, seem to signal safety to
²⁸
A. callidryas egg clutches. Given that premature tadpoles

risk predation by fish or shrimp, needlessly hatching early
²⁹
 is dangerous. Warkentin has shown that the egg clutches
 have a complex, nearly perfectly controlled way to avoid

false alarms.
³⁰

23. A. NO CHANGE
 B. Having made clear that these
 C. Given that these
 D. These
24. F. NO CHANGE
 G. the vibrations she had recorded from clutches she had found in Gamboa, Panama,
 H. the data she had recorded with a device called an accelerometer
 J. what she had, recordings,
25. A. NO CHANGE
 B. Warkentin simulated
 C. simulating
 D. DELETE the underlined portion.
26. F. NO CHANGE
 G. experienced
 H. assimilated
 J. theorized
27. A. NO CHANGE
 B. tends to occur
 C. often occurs
 D. occur
28. F. NO CHANGE
 G. rainstorm, nevertheless,
 H. rainstorm, in addition,
 J. rainstorm
29. If the writer were to delete the underlined portion (adjusting the punctuation as needed), the essay would primarily lose:
 A. an indication that several creatures are more dangerous to premature tadpoles than are snakes.
 B. an explanation of why fish and shrimp prey on premature tadpoles but not on mature tadpoles.
 C. a detail that specifies the creatures that pose a threat to premature tadpoles in the water.
 D. an example of a technique premature tadpoles use to escape from fish or shrimp.
30. F. NO CHANGE
 G. alarms, preventing the dangerous "predator and prey" situation that was just mentioned.
 H. alarms, which is important since premature tadpoles risk being preyed upon.
 J. alarms; it's almost as if they can tell.



PASSAGE III

Maryam Mirzakhani's Abstractions

Maryam Mirzakhani believes the beauty of mathematics only shows itself to patient followers. Few have followed math more patiently than she has.

In 2014, at age thirty-seven, Iranian-born Mirzakhani became the first woman, to win the Fields Medal³¹ math's most prestigious prize. Her research focus,

highly abstract, theoretical problems relating to geometry,³²

is so imaginative and astonishingly complex that they defy³³ explanation even to many practiced mathematicians.

Mirzakhani's thinking about her mathematical research is as imaginative as the problems she challenges herself to solve. She compares her work to that of a writer crafting a novel. To her, math research is a slow, steady process of watching characters evolve.

31. A. NO CHANGE
 B. woman, to win the Fields Medal,
 C. woman to win the Fields Medal,
 D. woman to win the Fields Medal
32. If the writer were to delete the underlined portion (adjusting the punctuation as needed), the essay would primarily lose a:
 E. short clarification that indicates that Mirzakhani prefers not to describe her most complex work to people who aren't mathematicians.
 G. brief description that provides the reader some sense of the content of Mirzakhani's incredibly complex area of study.
 H. detail that makes clear that the writer attended a conference during which Mirzakhani discussed the complexities of her work.
 J. reference to a very complex area of mathematics that Mirzakhani began to study soon after she won the Fields Medal.
33. A. NO CHANGE
 B. they consistently have defied
 C. they are known to defy
 D. it defies



Mirzakhani studies the geometry of curved surfaces. Her characters are spheres, doughnut-shaped

34

objects, and wavering planes. Monotonous, playful drawings of these curved forms, interspersed with

35

equations and mathematical notes, cover huge sheets of white paper spread out over her office floor.

36

While her young daughter, Anahita, often watches on, Mirzakhani can visualize that her first impression of a character was wrong or that two seemingly opposing characters are connected.

37

Like a writer who believes strong characters

38

will act with accord to their natures as a story unfolds, Mirzakhani tries not to predict what connections her shapes and equations will make next. This approach has helped her find solutions so clear and elegant that

39

her colleagues refer to this as profound events in math.

40

34. Which of the following alternatives to the underlined portion would NOT be acceptable?
- F. surfaces; therefore, the mathematician's
G. surfaces, so the mathematician's
H. surfaces, her
J. surfaces: her
35. Which choice most precisely conveys, with the least negative connotation, that the same forms appear over and over?
- A. NO CHANGE
B. Recurring,
C. Tedious,
D. Stale,
36. Given that all the choices are accurate, which one most clearly evokes a visual image reminiscent of the curved forms that Mirzakhani studies?
- F. NO CHANGE
G. small, handwritten
H. spiraling
J. intricate
37. Given that all the choices are accurate, which one provides the best transition from the preceding sentence to the information that follows in this sentence?
- A. NO CHANGE
B. Remaining close friends with Roya Beheshti, a childhood classmate who became a professor of algebraic geometry,
C. By constantly doodling as she tries to resolve one of her mathematical story lines,
D. Even though the Fields Medal is not awarded every year,
38. F. NO CHANGE
G. whose believing that
H. who's belief is that
J. whom believes
39. A. NO CHANGE
B. in accordance with
C. according to given
D. accordingly to
40. F. NO CHANGE
G. that has been helping
H. which helped
J. helping
41. A. NO CHANGE
B. them
C. her
D. it

Over several years, she felt optimistic as she got to know her characters better, finally seeing them clearly.

Secondly, a few particularly labyrinthine plots have played out before Mirzakhani for over a decade. In 2014, researchers across the discipline has been wondering what new mathematical tales the Stanford professor and Fields medalist would conceptualize next. And what beautiful solutions she would slowly find.

42. Given that all the choices are accurate, which one most strongly emphasizes Mirzakhani's patient, methodical approach to finding solutions?
- F. NO CHANGE
 G. had the opportunity to work with some of her favorite collaborators
 H. noticed that her colleagues had found answers
 J. reformulated her ideas again and again
43. A. NO CHANGE
 B. To summarize, a
 C. Finally, a
 D. A
44. F. NO CHANGE
 G. appears to be
 H. were
 J. was
45. A. NO CHANGE
 B. working as a professor at Stanford
 C. being a Stanford professor
 D. as a professor at Stanford

PASSAGE IV

Starlight in the Park

My mom and I, both Michigan-born have been stargazing together since I was a toddler. I learned the names of major constellations long before I could write my own name. Every year, we spend warm August nights lounging in our yard each summer, gazing skyward in awe as the Perseid meteors trickle across the dark sky. So, when the nearby Headlands area was designated an International Dark Sky Park (a title recognizing the area's extraordinarily clear view of the starry night skies), we had to pay it a visit.

46. F. NO CHANGE
 G. I, both Michigan-born,
 H. I both, Michigan-born
 J. I both Michigan-born,
47. A. NO CHANGE
 B. yard, watching the Perseid meteors and
 C. yard to observe the night sky,
 D. yard,
48. The writer wants to emphasize the brightness and speed of the meteors. Which choice best accomplishes this goal?
- F. NO CHANGE
 G. streak brilliantly through
 H. twinkle throughout
 J. quickly traverse

That such a park existed just a few miles from our
home in Petoskey was incredibly fortunate, we knew.

The designation is granted by an organization committed
to protecting natural darkness from artificial light
pollution, the status of Dark Sky Park has been conferred
on only a select few places around the world. To justify the
designation, likewise, experts must measure the amount of
light in the area and from neighboring light sources. This
inspection serves to ensure there is little to no interference
among the nighttime view of the skies from the park.

[1] Driving into the park at sunset, we were
greeted by acres of trees silhouetted in the fading light.
[2] Eventually, we settled on a spot and snuggled into
our sleeping bags. [3] Bats flitted through the air, and
leaves rustled in the breeze as we walked along the rocky
shoreline of Lake Michigan. [4] I told Mom I hoped we'd
sight the northern lights, despite an unlikely forecast.
[5] Eagerly, me and her waited, the two of us peering
into the heavens as the sky darkened and stars began
to appear. 55

“There’s Cygnus,” I murmured, pointing out
the bright constellation that resembles a flying swan,
its neck and wings, outstretched. Mom easily spotted
Draco, the dragon, her favorite constellation,
even though it’s composed of relatively dim stars.

49. A. NO CHANGE
B. It was lucky that this
C. Being that this
D. Such a
50. F. NO CHANGE
G. The park’s status was granted
H. This honor was granted
J. Granted
51. A. NO CHANGE
B. in other words,
C. respectively,
D. DELETE the underlined portion.
52. F. NO CHANGE
G. toward
H. with
J. DELETE the underlined portion.
53. A. NO CHANGE
B. air, which had breezy conditions,
C. air near Lake Michigan’s shore,
D. air, flying around,
54. F. NO CHANGE
G. Mom and me
H. she and I
J. her and I
55. For the sake of the logic and cohesion of this paragraph, Sentence 3 should be placed:
A. where it is now.
B. before Sentence 1.
C. after Sentence 1.
D. after Sentence 4.
56. F. NO CHANGE
G. constellation that resembles a flying swan, its neck and wings
H. constellation, that resembles a flying swan, its neck and wings
J. constellation, that resembles a flying swan its neck and wings

We made a game of it; each of us taking turns
57
 identifying stars, constellations, and planets

as the night did what it does. The wide, starry swath
58
 of the Milky Way reflecting in the calm waters before

us, we fell asleep, dreaming of sparkling skies.
59

57. A. NO CHANGE
 B. it, we took
 C. it, taking
 D. it. Taking
58. F. NO CHANGE
 G. while the night just wouldn't quit.
 H. while the night carried forth.
 J. as the night wore on.
59. Which choice most effectively concludes the essay by alluding to a central idea?
 A. NO CHANGE
 B. although I had begun to worry about our cat, Orion, being left home alone all night.
 C. knowing tomorrow would be another day.
 D. despite the slightly chilly temperature.

Question 60 asks about the preceding passage as a whole.

60. Suppose the writer's primary purpose had been to discuss methods of making astronomical observations. Would this essay accomplish that purpose?
 F. Yes, because it describes particular astronomical phenomena appearing in the night skies.
 G. Yes, because it describes the narrator's background and interest in stargazing.
 H. No, because it instead focuses on describing the process of transforming a disused park into a popular tourist attraction.
 J. No, because it instead focuses on describing a particular stargazing experience the narrator had.

PASSAGE V

Replay It Again

[1]

“This is not live! Ladies and gentlemen, Army did not score again!” declared the television announcer during the 1963 Army-Navy football
61
 game. Army's quarterback had just carried the ball over the goal line to score a one-yard touchdown.
62
 Fans in the stands saw the touchdown only once.

61. A. NO CHANGE
 B. announcer, during the 1963,
 C. announcer during, the 1963,
 D. announcer during the 1963,
62. F. NO CHANGE
 G. which scored
 H. that scored
 J. scoring

Fans watching the telecast, however, were astounded as they witnessed the play twice, thanks to the first instant replay, in this case a touchdown, in a live event.

63

[2]

Responsible for this innovation Tony Verna, a television sports broadcaster and director of the Army-Navy game. Often bored by the lag time in between plays, Verna had toyed with the idea of filling them with replays of what had occurred on the field. He wanted to rerun footage of important, extraordinary, or controversial plays.

65

[A] The replays could be from different vantage points or in slow motion. Above all, he wanted the replay to be broadcast immediately.

[3]

Verna authored several books about his broadcasting career. Videotapes could not be cued precisely; there was no way to find a particular moment in the footage.

66

66

Verna's use of a system of multiple videotape decks,

67

solved this problem. [B] At the start and stop of each play, he would transmit beeps to an unused audio track on the recording. These beeps would bookmark moments of action. Verna could then rewind the tape, listen for the beeps, and restart the play at the chosen spot.

68

69

63. A. NO CHANGE
B. replay, while fans watched from home,
C. replay live on television
D. replay
64. F. NO CHANGE
G. was Tony Verna. A
H. was Tony Verna, a
J. Tony Verna a
65. A. NO CHANGE
B. this time
C. these
D. some
66. Which choice best introduces the main focus of the paragraph?
F. NO CHANGE
G. Though instant replay was first used in football, other sports soon adopted the technology.
H. Officials were new to the technology.
J. The technology, however, was limited.
67. A. NO CHANGE
B. Verna decided to use
C. Verna, using
D. Verna used
68. F. NO CHANGE
G. start, and stop, of each play
H. start and stop, of each play,
J. start and stop of each play
69. Which choice best indicates that the beeps served as placeholders for particular moments within the recording?
A. NO CHANGE
B. insert
C. yield
D. sort

[4]

Instant replay became a fixture in football, it changed⁷⁰ the way games are officiated and watched. Fractions of seconds can be slowed down and analyzed. [C] An official who rules that a running back took the ball⁷¹ into the end zone might have his call reversed when the replay shows the back was stopped just short. Fans really feel a part of the whole deal,⁷² making their own judgments about whether the wide receivers foot⁷³ was in bounds after he caught a pass. Instant replay reveals the truth that cannot always be perceived by the human eye in real time. And, it has potential,⁷⁴ the outcome of the game—or even a season—is altered. [D]

70. F. NO CHANGE
 G. football and it changed
 H. football, and changing
 J. football, changing
71. At this point, the writer wants to emphasize the force and action of the running back. Which choice best accomplishes that goal?
 A. NO CHANGE
 B. drove
 C. escorted
 D. moved
72. F. NO CHANGE
 G. are even more invested in the action,
 H. fancy themselves all official-like,
 J. are majorly into it,
73. A. NO CHANGE
 B. the wide receivers'
 C. a wide receivers'
 D. a wide receiver's
74. F. NO CHANGE
 G. it can potentially,
 H. potentially,
 J. its potential,

Question 75 asks about the preceding passage as a whole.

75. The writer wants to add the following sentence to the essay:
 Calls are either upheld or refuted.
 The sentence would most logically be placed at:
 A. Point A in Paragraph 2.
 B. Point B in Paragraph 3.
 C. Point C in Paragraph 4.
 D. Point D in Paragraph 4.

END OF TEST 1

STOP! DO NOT TURN THE PAGE UNTIL TOLD TO DO SO.

READING TEST

35 Minutes—40 Questions

DIRECTIONS: There are several passages in this test. Each passage is accompanied by several questions. After reading a passage, choose the best answer to each question and fill in the corresponding oval on your answer document. You may refer to the passages as often as necessary.

Passage I

LITERARY NARRATIVE: This passage is from the short story "Long Distance" by Alejandro Zambra.

Portillo was a good boss, a generous guy; I rarely saw him, sometimes only on the twenty-ninth, when I waited, with some stupendous circles under my eyes, to pick up my paycheck. What I remember most about him is his voice, so high-pitched, like a teenager's—a common enough tone among Chileans but, for me, a disconcerting one to hear from a Spaniard. He would call me very early, at six or seven in the morning, so I could give him a report on what had happened the previous night, which was pretty much pointless, because nothing ever happened, or almost nothing: maybe some call or other from Rome or Paris, simple cases from people who weren't really sick but who wanted to make the most of the medical insurance they had bought in Santiago. My job was to listen to them, take down their information, make sure the policy was valid, and connect them to my counterparts in Europe.

Portillo let me read or write, or even doze off, on the condition that I always answer the phone in good time. That's why he called at six or seven—although, when he was out partying, he might call earlier. "The phone should never ring more than three times," he would tell me if I took too long picking up. But he didn't usually scold me; on the contrary, he was quite friendly. Sometimes he asked me what I was reading. I would say Paul Celan, or Emily Dickinson, or Emmanuel Bove, or Humberto Díaz Casanueva, and he always burst out laughing, as if he had just heard a very good and very unexpected joke.

One night, around four in the morning, I received a call from someone whose voice sounded mock-serious, or disguised, and I thought it was my boss pretending to be someone else. "I'm calling from Paris," said the voice. The man was calling direct, which increased my feeling that it was a prank of Portillo's, because clients usually reversed the charges when they called. Portillo and I had a certain level of trust between us, so I told him not to mess with me, that I was very busy reading. "I don't understand, I'm calling from Paris," the man responded. "Is this the number of the travel insurance?"

I apologized and asked him for his number so I could call him back. When we talked again I'd become the nicest phone operator on the planet, which wasn't

really necessary, because I've never been impolite, and because the man with the unrealistic voice was also unrealistically nice, which was not usual in that job: it was more common for clients to show their bad manners, their high-handedness, their habit of treating phone operators badly, and surely also laborers, cooks, salespeople, or any other of the many groups made up of their supposed inferiors.

Juan Emilio's voice, on the other hand, suggested the possibility of a reasonable conversation, although I don't know if *reasonable* is the word, because as I was taking down his information (fifty-five years old, home address in Lo Curro, no preexisting conditions) and checking his policy (his insurance had the best coverage available on the market), something in his voice made me think that, more than a doctor, he just needed someone to talk to, someone who would listen.

He told me he'd been in Europe for five months, most of that time in Paris, where his daughter—whom he called la Moño—was working on her doctorate and living with her husband—el Mati—and the kids. None of this was in response to my questions, but he was talking so enthusiastically that it was impossible for me to break in. He told me how the kids spoke French with charmingly correct accents, and he also threw in a few commonplace observations about Paris. By the time he started talking to me about the difficulties la Moño had been having lately meeting her academic obligations, about the complexity of the doctoral programs, and about what kind of sense parenthood made in a world like this one ("a world that sometimes seems so strange nowadays, so different," he told me), I realized we'd been talking for almost forty minutes. I had to interrupt him and respectfully ask him to tell me why he was calling. He told me he was a little under the weather, and he'd had a fever. I typed up the fax and sent it to the office in Paris so they could coordinate the case, and then I started the long process of saying good-bye to Juan Emilio, who fell all over himself in apologies and politeness before finally accepting that the conversation had ended.

Back then I'd picked up a few evening hours teaching at the technical training institute. The schedule fit perfectly.

From Alejandro Zambra's "Long Distance," in *My Documents* (McSweeney's, 2015).

1. The point of view from which the passage is told is best described as that of a first person narrator who:
 - A. used to work with Portillo and Juan Emilio.
 - B. heard about Portillo from Juan Emilio, who was his close friend.
 - C. worked with Portillo and interacted with Juan Emilio over the phone.
 - D. became acquainted with Portillo and Juan Emilio through his teaching job.
2. Based on the passage, which of the following statements lists the events of the narrator's typical work schedule in chronological order?
 - F. He worked at the insurance company overnight, talked to Portillo the following morning, and taught just afterward.
 - G. He talked to Portillo in the evening, worked at the insurance company overnight, and taught the following morning.
 - H. He taught in the afternoon, worked at the insurance company in the evening, and talked to Portillo in the middle of the night.
 - J. He taught in the evening, worked at the insurance company overnight, and talked to Portillo the following morning.
3. Based on the passage, Portillo can best be described as a boss who was mostly:
 - A. kind and caring, unless he caught the narrator sleeping.
 - B. abrasive and distant, though he asked little of the narrator.
 - C. friendly and generous, requiring that the narrator meet simple standards.
 - D. boisterous and fun, though he had exacting standards.
4. Based on the passage, where and for what purpose did the clients who called the narrator purchase their insurance?
 - F. In Santiago to prepare for travelling to Europe
 - G. In Santiago to prepare for travelling in South America
 - H. In either Europe or Santiago in order to travel internationally
 - J. In Paris to prepare for an extended stay in Santiago
5. According to the passage, the narrator regarded his conversations with Portillo as pointless because:
 - A. Portillo did not understand the narrator's job.
 - B. nothing notable happened during the narrator's work shift.
 - C. Portillo did not pay attention to the narrator's report.
 - D. the narrator had too many calls to summarize.
6. The main idea of the fifth paragraph (lines 52–60) is that:
 - F. the narrator generally tried to have reasonable conversations with his clients.
 - G. Juan Emilio lived overseas with his daughter, son-in-law, and grandchildren.
 - H. the narrator could tell from Juan Emilio's voice that he needed someone to talk to.
 - J. Juan Emilio sounded tired and slightly ill, though he was usually in good health.
7. In the fifth paragraph (lines 52–60), the details in parentheses primarily serve to:
 - A. provide a sense of the information the narrator gathered while talking with Juan Emilio.
 - B. relate facts pertaining to the specific illness Juan Emilio was experiencing.
 - C. imply that Juan Emilio's health was better than he believed it to be.
 - D. emphasize the narrator's sense that Juan Emilio was different from most clients.
8. According to Juan Emilio, la Moño was struggling with:
 - F. finding time to spend with her father because of her academic obligations.
 - G. meeting the academic obligations of her doctoral program.
 - H. finding a job in Paris that related to her academic expertise.
 - J. learning enough French to succeed in her academic program.
9. Based on the passage, Juan Emilio says that the world "sometimes seems so strange nowadays, so different" (lines 74–75) while thinking about:
 - A. contemporary Paris.
 - B. modern-day parenthood.
 - C. changes in health care.
 - D. doctoral programs.
10. The passage indicates that what the narrator remembers most about Portillo is Portillo's:
 - F. pompous nature.
 - G. managerial style.
 - H. distinctive clothes.
 - J. high-pitched voice.

Passage II

SOCIAL SCIENCE: This passage is from the book *On the Map: A Mind-Expanding Exploration of the Way the World Looks* by Simon Garfield.

We are now sure—because we have seen it on maps—that California is firmly attached to Oregon, Arizona and Nevada. Even south of San Diego, when it eventually becomes the Mexican state of Baja California, it is firmly hitched to the mainland. But in 1622, something untoward happened. After eighty-one years officially attached to a huge landmass, California drifted free. It wasn't a radical act of political will, nor a single mistake (a slip of an engraver, perhaps), but a sustained act of cartographic misjudgment. Stranger still, the error continued to appear on maps long after navigators had tried to sail entirely around it and—with what must have been a sense of utter bafflement—failed.

The name California first appeared on a map in 1541. It was drawn as part of Mexico by Domingo del Castillo—a pilot on an expedition by Hernando de Alarcón—and it is shown as a peninsula and labeled. Its first appearance on a printed map occurred in 1562, when the Spanish pilot and instrument maker Diego Gutierrez again wrote its name at the tip of a peninsula, a very minor detail on a busy and very beautiful engraving of the New World. The map, the largest then made of the region at 107 x 104 cm, may have been engraved after Gutierrez's death by Hieronymus Cock, an artist who clearly took great delight in imaginative trappings: huge ships and legends populate its seas, with Poseidon driving horses on a seaworthy chariot, and a huge gorilla-type creature breaking the waves while it dines on a fish.

California subsequently appeared attached to the mainland for sixty years. And then off it floated into the Pacific, where it remained a cartographic island for more than two centuries.

Its first known insular appearance occurred in 1622, on an inset on a title page of a Spanish volume entitled *Historia General*. Two years later it was drifting free, bounded by the Mar Vermeio and Mar Del Zur on a Dutch map by Abraham Goos. But it received its most prominent currency on a London map of 1625 entitled "The North Part of America." This accompanied an article about the search for the Northwest Passage by the mathematician Henry Briggs. He supplemented the great untracked northerly spaces toward the Arctic with text describing the wonders of his map, "Conteyning Newfoundland, new Eng/land, Virginia, Florida, New Spaine . . . and upon ye West the large and goodly lland/ of California." On the eastern seaboard both Plymouth and Cape Cod are placed in Massachusetts, but not yet Boston.

The misconception persisted for decades. It was the seventeenth century's forerunner to a mistake on Wikipedia—doomed to be repeated in a thousand school essays until a bright spark noticed it and dared

to make amends. Compiling a paper for the California Map Society in 1995, Glen McLaughlin and Nancy H. Mayo catalogued 249 separate maps (not including world maps) which cast the Golden State adrift. Their names carry bold assertions, with no wiggle room: "A New and Most Exact map of America" claimed one, while another promised "America drawn from the latest and best Observations." Between 1650 and 1657, the French historian Nicolas Sanson published several maps that showed California as an island, and their translations into Dutch and German ensured that they superseded Briggs as the most influential mythmakers for half a century. But they also promoted newer, truer discoveries, including the first cartographic depiction of all five Great Lakes.

Even when new maps were published showing California attached to the mainland, the island kept on appearing. In the end, though, it was killed off by a royal decree issued by Ferdinand VII of Spain in 1747, which denied the possibility of this Northwest Passage with the reasonably clear statement: "California is not an Island." Yet news traveled slowly. California appeared as an island on a map made in Japan as late as 1865.

And how did it all begin? The cartographical point zero has been tracked to a Carmelite friar named Antonio de la Acensión who sailed with Sebastian Vizcaino along the West Coast in 1602–3 and kept a journal. Two decades later he is believed to have mapped his trip on paper, which featured California as an island nation. The map was sent to Spain, but the ship on which it traveled was captured by the Dutch, and it ended its journey in Amsterdam. In 1622, Henry Briggs wrote of seeing this map of California in London. And shortly afterward, the map drawn from the one "taken by Hollanders" was set in copper and began its journey through the world.

"Pocket Map: California as an Island", copyright © 2013 by Simon Garfield, from *ON THE MAP: A MIND EXPANDING EXPLORATION OF THE WAY THE WORLD LOOKS* by Simon Garfield. Used by permission of Gotham Books, an imprint of Penguin Publishing Group, a division of Penguin Random House LLC.

11. The main purpose of the passage is to:

- A. outline how explorers' maps of California came to be published in Europe.
- B. provide a partial cartographic history of California, focusing on when it was drawn as an island.
- C. compare the unreliable maps showing California as an island with the accurate early maps of North America.
- D. recount the discovery of California and explorers' trouble mapping the difficult terrain of that region.

12. Which of the following quotations is the clearest example of the author using a lighthearted tone?
- F. "It was drawn as part of Mexico" (line 16).
 - G. "And then off it floated into the Pacific" (lines 32–33).
 - H. "California appeared as an island on a map made in Japan as late as 1865" (lines 76–78).
 - J. "Two decades later he is believed to have mapped his trip on paper" (lines 83–84).
13. Which of the following events mentioned in the passage occurred first chronologically?
- A. De la Acensi3n and Vizcaino sailed along the west coast of North America.
 - B. Ferdinand VII decreed that California wasn't an island.
 - C. Sanson published several maps that showed California as an island.
 - D. Briggs published a map entitled "The North Part of America."
14. The author's central claim is that the depiction of California as an island was an error that mapmakers:
- F. knew about and ignored.
 - G. should have caught.
 - H. spread for centuries.
 - J. hoped would inspire exploration of North America.
15. The passage indicates that Sanson's maps were partly beneficial in that they:
- A. served as the basis for the first Japanese maps of the Western world.
 - B. encouraged explorers to sail around California in search of a Northwest Passage.
 - C. forced Ferdinand VII to issue a royal decree about the existence of the Northwest Passage.
 - D. included truer discoveries, such as the first cartographic depiction of all five Great Lakes.
16. The main idea of the sixth paragraph (lines 70–78) is that:
- F. explorers stopped searching for a Northwest Passage once Ferdinand VII issued a decree.
 - G. maps commissioned by Ferdinand VII finally attached California to the mainland.
 - H. California was depicted as an island even after accurate maps appeared and Ferdinand VII declared it was not an island.
 - J. Ferdinand VII was adamant that a Northwest Passage existed around California even after sailors explored the area.
17. As it is used in line 40, the word *currency* most nearly means:
- A. legal tender.
 - B. property.
 - C. monetary value.
 - D. attention.
18. In the context of the passage, the map titles presented in lines 59–62 primarily serve to:
- F. illustrate that cartographers were very confident in the accuracy of their maps.
 - G. help the reader visualize the first maps drawn of Virginia and Massachusetts.
 - H. support the claim that Briggs believed his maps were superior to others.
 - J. distinguish the maps created by Goos from the maps created by Briggs.
19. Based on the passage, the phrase "influential myth-makers" (line 66) refers to maps:
- A. drawn by Goos.
 - B. published by Sanson.
 - C. that Briggs and Sanson published together.
 - D. by cartographers whom Briggs and Sanson copied.
20. Based on the passage, before it reached London, de la Acensi3n's map was sent to:
- F. Amsterdam, but the British seized it and brought it to Spain.
 - G. Spain, but the Dutch intercepted it and brought it to California.
 - H. Spain, but the Dutch seized it and brought it to Amsterdam.
 - J. Amsterdam, but the Spanish intercepted it and brought it to Spain.

Passage III

HUMANITIES: This passage is from the book *Apollo's Angels: A History of Ballet* by Jennifer Homans.

I never thought of ballet as anything but contemporary, a here-and-now art. Even the oldest of ballets are of necessity performed by young people and take on the look of their generation. Besides, unlike theater or music, ballet has no texts and no standardized notation, no scripts or scores, and only the most scattered written records; it is unconstrained by tradition and the past. Choreographer George Balanchine encouraged this idea. In countless interviews he explained that ballets are here and gone, like flowers or butterflies, and that dance is an ephemeral art of the present; *carpe diem*. The point, he seemed to be saying, was not to bring back old musty dances such as *Swan Lake*: it was to “make it new.” For the dancers, however, this was a paradoxical injunction: history was all around us—in our teachers and the dances, but also in Balanchine’s own ballets, many of which were suffused with memories and a Romantic ethos. But we nonetheless made a cult of never looking back, of setting our sights resolutely on the present.

And yet it is because ballet has no fixed texts, because it is an oral and physical tradition, a storytelling art passed on, like Homer’s epics, from person to person, that it is more and not less rooted in the past. For it does have texts, even if these are not written down: dancers are required to master steps and variations, rituals and practices. These may change or shift over time, but the process of learning, performing, and passing them on remains deeply conservative. When an older dancer shows a step or a variation to a younger dancer, the ethics of the profession mandate strict obedience and respect: both parties rightly believe that a form of superior knowledge is passing between them. I never for a moment, for example, questioned the steps or style Alexandra Danilova conveyed when she taught us variations from *The Sleeping Beauty*: we clung to her every movement. The teachings of the master are revered for their beauty and logic, but also because they are the *only* connection the younger dancer has to the past—and she knows it. It is these relationships, the bonds between master and student, that bridge the centuries and give ballet its foothold in the past.

Ballet, then, is an art of memory, not history. No wonder dancers obsessively memorize everything: steps, gestures, combinations, variations, whole ballets. It is difficult to overstate this. Memory is central to the art, and dancers are trained, as the ballerina Natalia Makarova once put it, to “eat” dances—to ingest them and make them part of who they are. These are physical memories; when dancers know a dance, they know it in their muscles and bones. Recall is sensual and brings back not just the steps but also the gestures and feel of the movement, the “perfume,” as Danilova said, of the dance—and the older dancer. Thus ballet repertory is not recorded in books or libraries: it is held instead in the bodies of dancers. Most ballet companies even

appoint special “memorizers”—dancers whose prodigious recall sets them apart from their peers—to store its works: they are ballet’s scribes (and pedants) and they keep whole oeuvres in their limbs, synchronized (usually) to music that triggers the muscles and helps to bring back the dance. But even dancers with superlative memories are mortal, and with each passing generation, ballet loses a piece of its past.

As a result, the ballet repertory is notoriously thin. The “classics” are few and the canon is small. We have only a handful of past ballets, most of which originated in nineteenth-century France or late Imperial Russia. The rest are relatively new: twentieth- and twenty-first-century works. There is some record of seventeenth-century court dances, but the notation system recording these dances died out in the eighteenth century and has never been fully replaced. These court dances are thus an isolated snapshot; the before and after are missing. The rest is spotty and full of holes. One might suppose that French ballet would be well preserved: the fundamental precepts of classical ballet were codified in seventeenth-century France and the art form has enjoyed an unbroken tradition there to the present day. But we have almost nothing. *La Sylphide* premiered in Paris in 1832, but that version was soon forgotten: the version we know today originated in Denmark in 1836. *Coppélia*, from 1870, is in fact the only nineteenth-century French ballet still widely performed in its (more or less) original form.

Introduction: Masters and Traditions from APOLLO'S ANGELS: A HISTORY OF BALLETT by Jennifer Homans, copyright © 2010 by Jennifer Homans. Used by permission of Random House, an imprint and division of Penguin Random House LLC. All rights reserved.

21. The passage most closely conveys the perspective of an experienced dancer who is primarily:
- A. recalling ballet lessons she had with particularly challenging teachers.
 - B. reflecting on the nature of ballet as an art form.
 - C. discussing how ballet as an art has changed in recent years.
 - D. documenting her quest to preserve ballet’s remaining written records.
22. Based on the passage, Balanchine compared ballets to flowers and butterflies primarily to highlight the idea that:
- F. every ballet is unique and fleeting.
 - G. ballets must be danced lightly and delicately.
 - H. ballets are natural and beautiful.
 - J. every ballet requires investments of energy and time before “growing” into its final form.

23. Based on the passage, which of the following statements best summarizes the “paradoxical injunction” mentioned in the first paragraph?
- A. Ballet is known for its rigid constraints, yet dancers are told to improvise steps when performing.
 - B. Dancers are not taught ballet’s history, yet they are expected to perform traditional ballets.
 - C. Ballet is marked by its connection to history, yet dancers are told to focus on the present.
 - D. Dancers are encouraged to choreograph new ballets, yet only traditional ballets are produced onstage.
24. The author includes the detail about Danilova teaching variations from *The Sleeping Beauty* (lines 33–37) primarily to:
- F. indicate why Danilova is a well-respected ballet master.
 - G. support the idea that younger dancers believe older dancers possess a superior knowledge.
 - H. illustrate the types of exercises that make up a typical ballet class.
 - J. articulate Danilova’s unique process of imparting knowledge to younger dancers.
25. The passage states that the scribes of the ballet world are those dancers who:
- A. record contemporary ballet in books and libraries.
 - B. are exceedingly gifted teachers and scholars.
 - C. interview older dancers and compile their wisdom.
 - D. commit a ballet company’s works to memory.
26. The passage states that one way ballet differs from theater and music is that ballet:
- F. cannot be truly understood by young people.
 - G. requires physical discipline.
 - H. has no standardized notation.
 - J. is characterized by a conservative learning process.
27. As it is used in line 21, the word *fixed* most nearly means:
- A. altered.
 - B. conjoined.
 - C. repaired.
 - D. established.
28. The passage states that ballet as a profession demands which of the following traits from younger dancers?
- F. Obedience and respect
 - G. Passion and emotiveness
 - H. Innovation and creativity
 - J. Encouragement and amiableness
29. As it is presented in the passage, the “perfume” of a dance refers mainly to the:
- A. gestures and feel of the dance’s movement.
 - B. expressions and scents used by the older dancer.
 - C. guidance and correction from the older dancer.
 - D. actual steps in the dance’s choreography.
30. In the passage, the author indicates that one reason a person could reasonably assume that French ballet would be well preserved is that ballet:
- F. has been studied meticulously by French historians.
 - G. has been practiced continuously in France for centuries.
 - H. is performed more widely in France than in most countries.
 - J. is considered by most French citizens to be part of their national identity.

Passage IV

NATURAL SCIENCE: Passage A is from the article “Just Add Water” by Jan Zalasiewicz and Mark Williams. Passage B is from the article “Plate Tectonics Spotted on Europa” by Thomas Sumner.

Passage A by Jan Zalasiewicz and Mark Williams

A look at our neighbours Mars and Venus shows how lucky Earth has been. They too had surface water in the early days, perhaps even large oceans. On frozen Mars today we see ancient shorelines more than 3 billion years old, and detect clays formed in water. Soon, though, Mars lost most of its atmosphere and protective magnetic field, and its water vapour leaked away. Venus is an inferno surrounded by suffocating clouds of sulphuric acid now, but probe measurements show it too once had abundant liquid water, until rising levels of water vapour and carbon dioxide led to a runaway greenhouse effect that boiled it off.

What made Earth different? The key is probably plate tectonics. The movement of segments of Earth’s uppermost layer is unique, we think, among the rocky planets of the solar system. They crash against each other, buckling, rising or driving down into the planet’s hot mantle. There is some evidence such tectonics tried to start up on Mars, but if so it didn’t last long. On Earth, it has created natural depressions: ocean basins, underlain by dense newly forming crust, that hold deeper waters; and shallow seas on the lighter, more ancient crust of the continents. The bottom of these containers is cracked at the subduction zones where water-soaked plates slide down into the mantle. That water is mostly wrung back out to emerge as volcanic steam in mountain ranges.

This constant cycling of water, and the unlikely coexistence of wet and dry surfaces is, it turns out, crucial. Water evaporating from the oceans condenses as rain and chemically attacks the land, modulating atmospheric composition and global temperature. The atmosphere thus formed has a lid—a “cold trap” made by the chill of the stratosphere—that freezes water vapour out and stops it escaping into space. Below this lid, almost uncannily, all three phases of water—solid, liquid and gas—coexist almost all of the time: the only planetary surface known where this has been sustained for any long period.

To complete this remarkable planetary machine, plate tectonics itself needs water to function: water lubricates descending tectonic plates and softens mantle minerals so they melt more easily. Geochemist Francis Albarède of the Ecole Normale Supérieure in Lyon, France, thinks that water’s arrival from outer space kick-started the plate-tectonic motor 3 billion years ago.

Passage B by Thomas Sumner

Plate tectonics churns the icy exterior of Jupiter’s moon Europa, researchers reported in 2014. The finding marks the first evidence of plate tectonics beyond Earth.

“Earth is not unique—we’ve found another body in the solar system with plate tectonics,” says planetary scientist Simon Kattenhorn of the University of Idaho in Moscow. “This tells us that this process can happen on more than just rocky planets like Earth.”

Previous observations have seen surface reshaping, such as volcanic activity, on other planetary bodies including Saturn’s moon Titan. However, Kattenhorn says, Europa is the first found with a patchwork of drifting tectonic plates.

The rising and sinking ice slabs on Europa’s surface may provide a mechanism for nutrients to move from the moon’s surface to its subsurface ocean, Kattenhorn argues. Such transport would bolster the likelihood that this ocean hosts life. Astrobiologist Britney Schmidt of Georgia Tech in Atlanta says the mechanism is “very exciting for Europa’s chances for supporting life.”

Though the moon formed over 4 billion years ago, at the same time as the rest of the solar system, Europa’s icy surface is surprisingly young. Based on the moon’s small number of impact craters, scientists estimate Europa’s surface to be just 40 million to 90 million years old. Dark bands crisscross the moon where warm, fresh ice wells up to the frigid surface, but a mystery remained: Where is the old material?

Two years ago, Kattenhorn and coauthor Louise Prockter of Johns Hopkins University spotted something odd as they scoured a Louisiana-sized portion of Europa mapped by NASA’s Galileo spacecraft in 1998. In the moon’s northern hemisphere, a 20,000-square-kilometer hunk of landscape was missing. Like a torn photograph placed so that the pieces overlap, Europa’s crisscrossing surface fractures didn’t properly line up.

The researchers propose that this discrepancy marks where two massive ice slabs smashed together, with one sinking under the other and blending into the moon’s warmer interior ice. The action resembles a subduction zone on Earth, where one slab of crust—or tectonic plate—slides beneath another.

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Passage B: Copyright © 2014. Reprinted with permission of Science News.

Questions 31–34 ask about Passage A.

31. Which statement best summarizes the discussion of water in the last paragraph of Passage A (lines 40–47)?
- A. Water is what makes Earth remarkable among all the planets.
 - B. After water created natural depressions on Earth, plates could more easily interact with one another.
 - C. Notable geochemists confirm that water caused tectonic plates, and it melts the plates as they descend.
 - D. Water may have been the impetus for the tectonic process, and it helps the plates move more easily.
32. In Passage A, the authors mention which of the following as evidence that Mars once had surface water?
- F. Oceans
 - G. Clay
 - H. Water vapor in the atmosphere
 - J. Mars’s magnetic field
33. According to Passage A, Venus lost its liquid water due to:
- A. loss of its magnetic field.
 - B. unchecked infernos on its surface.
 - C. clouds of sulphuric acid in its atmosphere.
 - D. rising levels of water vapor and carbon dioxide.
34. According to Passage A, one main function of a “cold trap” (line 33) is to:
- F. keep water vapor within Earth’s atmosphere.
 - G. chill the stratosphere by freezing water vapor into ice.
 - H. construct a lid that chemically attacks the land.
 - J. stop water vapor in space from entering Earth’s atmosphere.

Questions 35–37 ask about Passage B.

35. In Passage B, the author mentions a torn photograph most likely to:
- A. help illustrate Europa’s jagged landscape before plate tectonics emerged there.
 - B. clarify that Kattenhorn and Prockter needed to tear the images they were studying in order to replicate Europa’s surface fractures.
 - C. help portray the fractures on Europa’s surface that intrigued Kattenhorn and Prockter.
 - D. reveal that the images NASA’s *Galileo* took of Europa’s surface fractures were somewhat flawed.

36. According to Passage B, scientists base their belief that Europa’s surface is relatively young on its:
- F. subsurface ocean.
 - G. small number of impact craters.
 - H. patchwork of drifting tectonic plates.
 - J. dark crisscrossing bands and icy surface.
37. As it is used in line 80, the word *scoured* most nearly means:
- A. dredged up.
 - B. rummaged in.
 - C. carefully cleaned.
 - D. thoroughly examined.

Questions 38–40 ask about both passages.

38. Based on the passages, Earth can be considered unique because it is the only known body in the solar system:
- F. with tectonic plates that drift across its uppermost layer.
 - G. where tectonic plates can transport nutrients below its surface.
 - H. where water, ice, and water vapor share a sustained coexistence.
 - J. that had surface water three billion years ago.
39. The functions of the first paragraph of Passage A and the third paragraph of Passage B (lines 57–61) are similar in that both paragraphs:
- A. use other planetary bodies to highlight the uniqueness of Earth or Europa.
 - B. introduce the discovery of plate tectonics on Earth or Europa.
 - C. contrast previous discoveries of volcanic activity with newer discoveries of tectonic plates.
 - D. explain how various planetary bodies lost their surface water.
40. It can reasonably be inferred from both passages that tectonic plates most greatly influence a planetary body’s ability to support life:
- F. when tectonic plates buckle during impact with volcanic plates.
 - G. if the tectonic plates consist of ice rather than rock.
 - H. when one tectonic plate slides beneath another one.
 - J. if the tectonic plates are less than ninety million years old.

END OF TEST 3

STOP! DO NOT TURN THE PAGE UNTIL TOLD TO DO SO.
DO NOT RETURN TO A PREVIOUS TEST.

Scoring Keys for Form D05

Use the scoring key for each test to score your answer document for the multiple-choice tests. Mark a "1" in the blank for each question you answered correctly. Add up the numbers in each reporting category and enter the total number correct for each reporting category in the blanks provided. Also enter the total number correct for each test in the blanks provided. The total number correct for each test is the sum of the number correct in each reporting category.

Test 1: English—Scoring Key

Key	Reporting Category*		
	POW	KLA	CSE
1. D			
2. H			
3. B			
4. F			
5. D			
6. H			
7. A			
8. G			
9. D			
10. G			
11. B			
12. J			
13. A			
14. H			
15. C			
16. H			
17. D			
18. G			
19. D			
20. F			
21. C			
22. F			
23. D			
24. F			
25. B			
26. G			
27. D			
28. J			
29. C			
30. F			
31. C			
32. G			
33. D			
34. H			
35. B			
36. H			
37. C			
38. F			

Key	Reporting Category*		
	POW	KLA	CSE
39. B			
40. F			
41. B			
42. J			
43. D			
44. H			
45. A			
46. G			
47. D			
48. G			
49. A			
50. J			
51. D			
52. H			
53. A			
54. H			
55. C			
56. G			
57. C			
58. J			
59. A			
60. J			
61. A			
62. F			
63. D			
64. H			
65. B			
66. J			
67. C			
68. F			
69. A			
70. J			
71. B			
72. G			
73. D			
74. H			
75. C			

***Reporting Categories**

POW = Production of Writing

KLA = Knowledge of Language

CSE = Conventions of Standard English

Number Correct (Raw Score) for:	
Production of Writing (POW)	_____ (24)
Knowledge of Language (KLA)	_____ (11)
Conventions of Standard English (CSE)	_____ (40)
Total Number Correct for English Test (POW + KLA + CSE)	_____ (75)

Test 3: Reading—Scoring Key

Key	Reporting Category*		
	KID	CS	IKI
1. C		—	
2. J	—		
3. C	—		
4. F	—		
5. B	—		
6. H	—		
7. A		—	
8. G	—		
9. B	—		
10. J	—		
11. B		—	
12. G	—		
13. A	—		
14. H			—
15. D	—		
16. H	—		
17. D		—	
18. F		—	
19. B	—		
20. H	—		

Key	Reporting Category*		
	KID	CS	IKI
21. B		—	
22. F		—	
23. C	—		
24. G		—	
25. D	—		
26. H	—		
27. D		—	
28. F	—		
29. A	—		
30. G	—		
31. D	—		
32. G			—
33. D	—		
34. F	—		
35. C		—	
36. G	—		
37. D		—	
38. H			—
39. A			—
40. H			—

***Reporting Categories**

KID = Key Ideas & Details

CS = Craft & Structure

IKI = Integration of Knowledge & Ideas

Number Correct (Raw Score) for:	
Key Ideas & Details (KID)	_____ (24)
Craft & Structure (CS)	_____ (11)
Integration of Knowledge & Ideas (IKI)	_____ (5)
Total Number Correct for Reading Test (KID + CS + IKI)	_____ (40)

Test 4: Science—Scoring Key

Key	Reporting Category*		
	IOD	SIN	EMI
1. A	—		
2. H	—		
3. D	—		
4. H	—		
5. B	—		
6. G	—		
7. D	—		
8. H	—		
9. A	—		
10. H	—		
11. A		—	
12. F	—	—	
13. D		—	
14. G		—	
15. C		—	
16. G		—	
17. A	—		
18. J	—		
19. B			—
20. J	—		

Key	Reporting Category*		
	IOD	SIN	EMI
21. C		—	
22. G		—	
23. C		—	
24. F	—		
25. C	—		
26. G			—
27. B			—
28. G			—
29. A			—
30. J			—
31. B	—		
32. F			—
33. C			—
34. F			—
35. A	—		
36. G			—
37. A	—		
38. J		—	
39. A		—	
40. J	—		

***Reporting Categories**

IOD = Interpretation of Data

SIN = Scientific Investigation

EMI = Evaluation of Models, Inferences & Experimental Results

Number Correct (Raw Score) for:	
Interpretation of Data (IOD)	_____ (20)
Scientific Investigation (SIN)	_____ (10)
Evaluation of Models, Inferences & Experimental Results (EMI)	_____ (10)
Total Number Correct for Science Test (IOD + SIN + EMI)	_____ (40)

Explanation of Procedures Used to Obtain Scale Scores from Raw Scores

On each of the four tests on which you marked any responses, the total number of correct responses yields a raw score. Use the table below to convert your raw scores to scale scores. For each test, locate and circle your raw score or the range of raw scores that includes it in the table below. Then, read across to either outside column of the table and circle the scale score that corresponds to that raw score. As you determine your scale scores, enter them in the blanks provided on the right. The highest possible scale score for each test is 36. The lowest possible scale score for any test on which you marked any responses is 1.

Next, compute the Composite score by averaging the four scale scores. To do this, add your four scale scores and divide the sum by 4. If the resulting number ends in a fraction, round it off to the nearest whole number. (Round down any fraction less than one-half; round up any fraction that is one-half or more.) Enter this number in the blank. This is your Composite score. The highest possible Composite score is 36. The lowest possible Composite score is 1.

ACT Test D05	Your Scale Score
English	_____
Mathematics	_____
Reading	_____
Science	_____
Sum of scores _____	
Composite score (sum ÷ 4) _____	

NOTE: If you left a test completely blank and marked no items, do not list a scale score for that test. If any test was completely blank, do not calculate a Composite score.

Scale Score	Raw Scores				Scale Score
	Test 1 English	Test 2 Mathematics	Test 3 Reading	Test 4 Science	
36	74-75	59-60	39-40	39-40	36
35	71-73	57-58	38	38	35
34	70	56	37	37	34
33	69	54-55	36	36	33
32	68	53	35	—	32
31	67	51-52	34	35	31
30	66	49-50	33	34	30
29	65	48	32	33	29
28	64	45-47	—	32	28
27	63	43-44	31	31	27
26	62	40-42	30	30	26
25	60-61	37-39	29	28-29	25
24	58-59	35-36	28	26-27	24
23	55-57	33-34	27	24-25	23
22	53-54	31-32	25-26	23	22
21	50-52	30	24	21-22	21
20	47-49	28-29	23	19-20	20
19	44-46	26-27	22	18	19
18	42-43	24-25	20-21	16-17	18
17	39-41	21-23	19	15	17
16	37-38	17-20	18	13-14	16
15	33-36	14-16	17	12	15
14	29-32	11-13	16	11	14
13	27-28	9-10	14-15	10	13
12	24-26	7-8	12-13	9	12
11	21-23	6	11	7-8	11
10	17-20	5	9-10	6	10
9	14-16	4	8	5	9
8	12-13	—	7	4	8
7	10-11	3	6	—	7
6	8-9	2	5	3	6
5	6-7	—	4	2	5
4	5	1	3	—	4
3	3-4	—	2	1	3
2	2	—	1	—	2
1	0-1	0	0	0	1