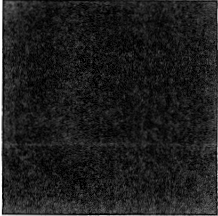


English/Reading  
Version

**Form D03**

(December 2020)



**ACT**<sup>®</sup>

2020 2021

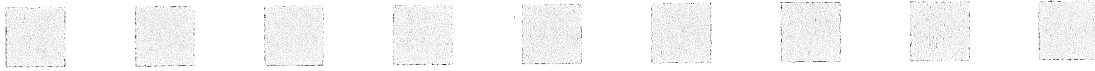
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In response to your request for Test Information Release materials, this booklet contains the test questions, scoring keys, and conversion tables used in determining your ACT scores. Enclosed with this booklet is a report that lists each of your answers,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

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## 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

#### Changing the Face of Journalism

“The nation and its news media are going in opposite directions, and the public is paying the price,” in 2013, Dori Maynard wrote this. She was following up on her point that although people of

color make up nearly 40 percent of the US population,

while only about 12 percent of full-time daily news

journalists are people of color. Her who’s an award-winning African American journalist, Maynard

became a Nieman fellow at Harvard University in 1993.

For much of her journalism career, she was involved with the Maynard Institute, a journalism-education institute in Oakland, California. (The institute was founded in 1977 by her father, Robert C. Maynard,

1. A. NO CHANGE  
B. in 2013, that statement was written by Dori Maynard.  
C. this is something Dori Maynard wrote in 2013.  
D. Dori Maynard wrote in 2013.
2. F. NO CHANGE  
G. does make  
H. is making  
J. makes
3. A. NO CHANGE  
B. and  
C. but  
D. DELETE the underlined portion.
4. F. NO CHANGE  
G. Herself  
H. Hers  
J. Her
5. Given that all the choices are accurate, which one most clearly introduces the focus of the essay?  
A. NO CHANGE  
B. advocated diversity within newsrooms for the sake of fairer representation of all communities.  
C. reported news across the United States, from California to Michigan to Massachusetts.  
D. was a member of the Society of Professional Journalists.

former editor of the *Oakland Tribune*.) Conversely,  
<sup>6</sup>  
 the organization is dedicated to recruiting and training  
 people of color to become journalists. By the time  
 Dori Maynard became president of the institute in 2001,  
 she was already passionately committed to this mission.

Diversity among journalists in the United States  
 must increase, Maynard believed, if the industry is  
<sup>7</sup>  
 going to meet its' ethical obligation to provide a wide  
<sup>8</sup>  
 audience credible and accurate news. She argued that  
 a reporter's cultural background inevitably influences  
 his or her perspective on current events. More diversity  
 in newsrooms will naturally lead to more complete,  
nuanced, and sensitive news coverage of all communities,  
<sup>9</sup>

specifically communities of color expressly. This, in turn,  
<sup>10</sup>  
 will better our society as a whole; we'll gain a richer  
 understanding of each other's lives, she explained.

Under Dori Maynard's leadership, the Maynard  
 Institute trained hundreds of minority reporters. The  
 institute also has helped them get hired and heard.

Many former trainees now reports for influential  
<sup>11</sup>

newspapers such as the *New York Times* and the  
<sup>12</sup>

*Washington Post.* Dori Maynard helped show the  
<sup>13</sup>  
 journalism industry that presenting the culturally

6. F. NO CHANGE  
 G. Among other objectives,  
 H. Besides that objective,  
 J. In comparison,
7. A. NO CHANGE  
 B. as soon as  
 C. whereas  
 D. until
8. F. NO CHANGE  
 G. their  
 H. its  
 J. it's
9. A. NO CHANGE  
 B. with a level of nuance,  
 C. a nuanced feel,  
 D. having nuance,
10. F. NO CHANGE  
 G. in terms of news coverage.  
 H. in particular.  
 J. DELETE the underlined portion and end the sentence with a period.
11. A. NO CHANGE  
 B. works as a reporter  
 C. is reporting  
 D. report
12. F. NO CHANGE  
 G. newspapers, for example:  
 H. newspapers for example:  
 J. newspapers: such as
13. A. NO CHANGE  
 B. Appointed president of the Maynard Institute in 2001, Dori Maynard  
 C. Having been leader of the Maynard Institute, Dori Maynard  
 D. Dori Maynard, an award-winning journalist,



diverse voices of the United States through inclusive news stories written by people of color is possible.

14

14. The writer wants to conclude the essay with a strong, emphatic statement that asserts the far-reaching significance of Dori Maynard's work with the Maynard Institute. Which choice best accomplishes that goal?
- F. NO CHANGE
  - G. is vital for social justice.
  - H. will likely be noticed.
  - J. makes sense.

Question 15 asks about the preceding passage as a whole.

15. Suppose the writer's primary purpose had been to present highlights of Dori Maynard's work as a journalist reporting daily news. Would this essay accomplish that purpose?
- A. Yes, because it suggests that fair representation of diversity was always one of Maynard's priorities as a journalist.
  - B. Yes, because it provides details about Maynard's most influential daily news stories.
  - C. No, because it concentrates instead on Maynard's efforts to bring diversity to the journalism industry.
  - D. No, because it focuses instead on why journalism is important to the Maynard family.

## PASSAGE II

### To Sew on Savile Row

Bespoke tailors create men's suits exactly to a customer's specifications, aiming for refined elegance and technical flawlessness. Regardless, a focus on bespoke

16

tailoring has made Savile Row a small, street in London, the world's most distinguished location for menswear for

17

over two hundred years. In 2008, Savile Row Academy,

located within the bespoke suit shop called Maurice

Sedwell, at 19 Savile Row, was established to celebrate

18

this time-honored craft.

16. F. NO CHANGE  
G. Similarly, a  
H. Besides, a  
J. A

17. A. NO CHANGE  
B. Row, a small street in London,  
C. Row, a small street in London  
D. Row a small street in London

18. Which choice provides the clearest foundation for the suggestion made later in the essay that the tradition of bespoke tailoring on Savile Row has diminished?
- F. NO CHANGE
  - G. show off
  - H. preserve
  - J. embody



Customers are fitted on the main floor of the shop.

In the well-lit basement, students of various ages and backgrounds master the dozens of skills needed to make<sup>19</sup> a classic three-piece bespoke suit. Traditionally, a bespoke suit is created beginning from start to completion<sup>20</sup> by one tailor, who rarely uses a sewing machine. The students' primary tools, therefore, are tailor's chalk, shears, needles, and a thimble. During the two-year professional training program, students learn to take measurements, draft patterns; cut cloth; hand sew coats,<sup>21</sup> vests, and trousers; create pockets; and stitch finishing details. Creating one suit requires well over a hundred hours of concentrated work, even for an expert. 22

[1] From the size of the buttons on the coat to the angle of the pleats on the trousers and<sup>23</sup> nearly every feature

of a traditional bespoke suit is<sup>24</sup> chosen by the customer.

[2] Still, Andrew Ramroop, owner of the Sedwell shop and founder of the Academy, encourages his students,<sup>25</sup> to develop their own style within those constraints.

19. A. NO CHANGE  
 B. skills, needed to make  
 C. skills needed, to make  
 D. skills needed to make,
20. F. NO CHANGE  
 G. by a single artisan from the first to the final steps  
 H. by a trained individual from beginning to end  
 J. from start to finish
21. A. NO CHANGE  
 B. measurements; draft patterns; cut cloth; hand sew coats,  
 C. measurements; draft patterns; cut cloth; hand sew coats;  
 D. measurements draft patterns; cut cloth; hand sew coats,
22. If the writer were to delete the preceding sentence, the essay would primarily lose a:  
 F. statement suggesting that expert tailors require even more time to create a bespoke suit than do novice tailors.  
 G. detail that emphasizes the time and attention required for a tailor to create a bespoke suit.  
 H. description that illustrates exactly why a bespoke suit must be created slowly.  
 J. comment implying that most tailors aim to create a bespoke suit in under a hundred hours.
23. A. NO CHANGE  
 B. trousers, in that  
 C. trousers,  
 D. trousers;
24. F. NO CHANGE  
 G. have been  
 H. were  
 J. are
25. A. NO CHANGE  
 B. Academy, encourages his students  
 C. Academy encourages his students,  
 D. Academy encourages his students



[3] Ramroop is known for his inventive use of color, especially contrast stitching in pockets. [4] Adhering to the traditions of the craft is a must, he explains, but your signature style is what will bring your customers

26

back. 27

While mass-manufactured suits have become standard in many suit shops on Savile Row; however, several

28

Academy graduates have found jobs pleasantly working in the shops on the street that remain committed to classic design and unmatched craftsmanship. Many others have taken their shears and needles to fine tailoring houses

29

around the world.

30

26. F. NO CHANGE  
 G. approach to tailoring (such as a fondness for contrast stitching in pockets, as I have previously mentioned)  
 H. expression, your individual approach that customers will visit you again to experience,  
 J. manner that is unique to you alone
27. For the sake of the logic and cohesion of this paragraph, Sentence 2 should be placed:  
 A. where it is now.  
 B. before Sentence 1.  
 C. after Sentence 3.  
 D. after Sentence 4.
28. F. NO CHANGE  
 G. Row, several  
 H. Row. Several  
 J. Row; several
29. Given that all the choices are accurate, which one most strongly reiterates a defining characteristic of the craft of bespoke tailoring as the craft is presented in the essay as a whole?  
 A. NO CHANGE  
 B. hand stitching  
 C. producing clothes  
 D. sewing
30. F. NO CHANGE  
 G. that aren't on Savile Row but rather are on other streets, elsewhere.  
 H. located all over the globe, but not on Savile Row.  
 J. DELETE the underlined portion and end the sentence with a period.

### PASSAGE III

#### Uncovering the World's Largest Cave

[1]

Deep below the mountains of central Vietnam lies what could be described as: another world.

31

31. A. NO CHANGE  
 B. as—  
 C. as  
 D. as,



Located in Phong Nha-Ke Bang National Park, the  
enormous Hang Son Doong (“Mountain River Cave”)  
32

is believed to be the largest cave in the world. 33 Son  
 Doong is part of a system of 150 caves that snake beneath

the ground throughout the region. At roughly five miles  
34

long, 300 feet wide, and 660 feet tall, Son Doong is  
35  
 large enough to hold an entire city block of forty-story  
 buildings.

[2]

Even more impressive than the cave’s size,  
 perhaps, such as what grows within it. [A] Portions  
36  
 of Son Doong contain what many envision when

they think of caves, which dark chambers ornamented  
37  
 with gigantic calcite formations and populated by

colorless creatures that are very unique looking.  
38  
 Other parts of the cave, however, are dramatically

different, verdant ferns, palm trees, bamboo, liana  
39  
 vines, and stinging nettles flourish here as well.

32. F. NO CHANGE  
 G. decidedly prodigiously proportioned  
 H. massive and immense  
 J. gigantically huge
33. At this point, the writer is considering adding the following accurate sentence to the essay:  
 Phong Nha-Ke Bang National Park was named a UNESCO World Heritage Site in 2003.  
 Should the writer add this sentence here?  
 A. Yes, because the paragraph focuses mainly on the history of discoveries in Phong Nha-Ke Bang National Park.  
 B. Yes, because the essay emphasizes the need for worldwide recognition of national parks.  
 C. No, because it does not explain how a park is designated a UNESCO World Heritage Site.  
 D. No, because it would interrupt the description of Hang Son Doong’s size and location.
34. F. NO CHANGE  
 G. This marvel is  
 H. The cave is  
 J. It’s
35. Which choice best maintains the stylistic pattern established in the sentence?  
 A. NO CHANGE  
 B. a height of 660 feet,  
 C. 660 feet in height,  
 D. tall at 660 feet,
36. F. NO CHANGE  
 G. it’s  
 H. is  
 J. DELETE the underlined portion.
37. A. NO CHANGE  
 B. caves:  
 C. caves;  
 D. caves
38. Which choice adds the most specific information to the sentence’s description of the organisms inside Son Doong?  
 F. NO CHANGE  
 G. animals that can be found in various sections of the cave.  
 H. things often found in sunless environments.  
 J. fish, millipedes, and wood lice.
39. A. NO CHANGE  
 B. different, for instance,  
 C. different;  
 D. different and



In fact, researchers have found that the dense subterranean jungle of Son Doong essentially have mirrored the variety of plants and animals in the forest directly aboveground.

[3]

While the abundance of vegetation in Son Doong is possible because of the way the cave formed. Between two and five million years ago, the Rao Thuong River chiseled through the limestone under the range now known as the Annamite Mountains, near Vietnam's border with Laos. At the top of the cave, colossal "skylights," measuring up to 300 feet across,

that formed when weak portions of the cave's ceiling collapsed. [B] The gaps allow sunlight to pass through and nourish the life below. [C]

[4]

Exploring Son Doong is a once-in-a-lifetime experience, but it isn't easy. Simply hiking there from the nearest village takes more than a day. [D] Inside the cave, formidable obstacles, such as a 200-foot-high wall covered in mud, make traversing it a major challenge. Still, year after year, Son Doong draws people from around the globe who want to experience what was once a hidden underground world.

40. F. NO CHANGE  
G. tend to mirror  
H. mirrors  
J. mirror

41. A. NO CHANGE  
B. Whether the  
C. Though the  
D. The

42. If the writer were to delete the underlined portion (adjusting the punctuation as needed), the essay would primarily lose a detail that:  
F. explains the differences between national parks in Vietnam and in Laos.  
G. suggests that Son Doong extends beyond the border of Vietnam and into Laos.  
H. provides additional information about Son Doong's location within Vietnam.  
J. gives a visual description of the Annamite Mountains.

43. A. NO CHANGE  
B. those that  
C. which  
D. DELETE the underlined portion.

44. F. NO CHANGE  
G. is likely to make  
H. tends to make  
J. makes

Question 45 asks about the preceding passage as a whole.

45. The writer is considering adding the following sentence to the essay:  
Aboveground, thick stands of bamboo and other vegetation make approaching the cave's entrance extremely difficult.  
If the writer were to add the sentence, it would most logically be placed at:  
A. Point A in Paragraph 2.  
B. Point B in Paragraph 3.  
C. Point C in Paragraph 3.  
D. Point D in Paragraph 4.





## PASSAGE IV

**The Best Map of the World in the World**

[A] More fictional than factual, most maps made in medieval Europe combined a smattering of accurate information with a slew of inaccurate information, guesses, and outright inventions. [B] In 1139, however, when King Roger II of Sicily wanted a new map of the known world, since he desired accuracy foremost. [C] To that end, he engaged Moroccan-born scholar Muhammad al-Idrisi.<sup>46</sup> [D] Al-Idrisi adopted a systematic approach to the project, combining comparative analysis, eyewitness accounts, and scientific measurements. 47

Al-Idrisi had been educated in Córdoba, Spain.<sup>48</sup>

He also scrutinized accounts written by long-distance travelers. By comparing sources, al-Idrisi could judge

their accuracy. If multiple sources agreed on things—the route of a river, for instance—it was likely true.<sup>49</sup>

If sources disagreed, likewise, al-Idrisi sought the

truth, he dispatched a research expedition to the area in question.<sup>51</sup>

46. F. NO CHANGE  
 G. in which he desired  
 H. he desired  
 J. desiring
47. The writer is considering adding the following sentence to this paragraph:  
 Generally, people accepted such maps as accurate, not realizing how flawed they were.  
 If the writer were to add this sentence, it would most logically be placed at:  
 A. Point A.  
 B. Point B.  
 C. Point C.  
 D. Point D.
48. Given that all the choices are true, which one most effectively introduces this paragraph?  
 F. NO CHANGE  
 G. was just one of many illustrious and cosmopolitan scholars in King Roger's court.  
 H. started work on the map when he was forty years old.  
 J. studied as many existing maps as he could.
49. A. NO CHANGE  
 B. something—  
 C. those—  
 D. them—
50. F. NO CHANGE  
 G. on the other hand,  
 H. regardless,  
 J. otherwise,
51. A. NO CHANGE  
 B. truth and he dispatched  
 C. truth by dispatching  
 D. truth, dispatched

Al-Idrisi brought a similarly logical approach

for the positioning to locations on his map. Most

52

mapmakers at the time arranged cities, mountains,

53

and other features, on their maps quite haphazardly.

54

But al-Idrisi, informed by the work of the best Arab

and Greek scientists, lay out the sites on his map using  
astronomical coordinates.

55

After fifteen years of the daily grind, al-Idrisi

56

completed his project. The final products included: a  
two-meter-wide silver disk engraved with a world map,  
an atlas containing seventy detailed regional maps, and a  
lengthy descriptive text. The maps were of a quality and  
accuracy unparalleled at the time. They noted the source  
of the Nile River—in Africa’s equatorial highlands—and

58

used a sophisticated method of depicting the earth’s round  
shape on a flat map. Unfortunately, the maps never  
circulated widely. Moreover, the text wasn’t translated  
from Arabic for hundreds of years. It would be the  
twentieth century before al-Idrisi’s work received the  
appreciation it deserved.

59

52. F. NO CHANGE  
G. by the positioning on  
H. to the positioning of  
J. in the positioning at

53. A. NO CHANGE  
B. collected  
C. devised  
D. posed

54. F. NO CHANGE  
G. (other features on their maps)  
H. other features on their maps,  
J. other features on their maps

55. A. NO CHANGE  
B. lay out the sights  
C. laid out the sites  
D. laid out the cites

56. F. NO CHANGE  
G. ongoing expenditure of mental effort,  
H. plugging away,  
J. labor,

57. A. NO CHANGE  
B. products, which included  
C. products, including  
D. products included

58. The writer wants to emphasize that the inclusion of the source of the Nile River on al-Idrisi’s maps represented a notable achievement. Which choice most effectively accomplishes this goal?

- F. NO CHANGE  
G. regarded as the longest river in the world—  
H. near what’s now known as Lake Victoria—  
J. a first for a Europe-centered map—

59. Which of the following alternatives to the underlined portion would NOT be acceptable?

- A. method for the depiction of  
B. method in order to depict  
C. method, it depicted  
D. method to depict



Question 60 asks about the preceding passage as a whole.

60. Suppose the writer's primary purpose had been to explore the degree of influence al-Idrisi's maps and methods had on other mapmakers. Would this essay accomplish that purpose?
- F. Yes, because the essay explains that the accuracy of al-Idrisi's maps established a foundation for other mapmakers to build upon.
  - G. Yes, because the essay pinpoints which aspects of al-Idrisi's work were most frequently imitated by other mapmakers.
  - H. No, because the essay instead focuses on how al-Idrisi created his maps and why they were superior to other maps.
  - J. No, because the essay instead mainly shows how al-Idrisi's education and travels helped him create his maps.

PASSAGE V

More than a Silver Lining

[1]

Iridescent clouds—in which patches, bands, or waves of color appears—are arresting phenomena.  
61

Aptly nicknamed “rainbow clouds,” flaunting displays  
62

that range from pastel suffusions to vivid, fiery streaks.  
63  
But the conditions that iridescence requires are far

more allusive than those that produce rainbows,  
64  
making iridescent clouds comparatively rare.

- 61. A. NO CHANGE  
B. appear—are  
C. appears—is  
D. appear—is
- 62. F. NO CHANGE  
G. clouds” and flaunting  
H. clouds,” they flaunt  
J. clouds” with
- 63. A. NO CHANGE  
B. differ  
C. rank  
D. trek
- 64. F. NO CHANGE  
G. allusive then  
H. elusive then  
J. elusive than



[2]

[A] Think of every cloud as a vast collection of wet or icy particles. For iridescence to occur, many of these particles must be roughly uniform in size and shape. [B] They must also be minute: smaller than most cloud particles. Finally, a portion

65

of the cloud (typically along the edges) must be nearly transparent. Together, these traits cause sunlight passing through the cloud to diffract consistently.

66

[3]

Its consistency that allows people to see individual colors. [C] Visible sunlight is actually

67

multiple wavelengths of light, each with its own color. Sunlight usually appears as “white” light because all

68

the wavelengths are traveling at the same angle, and the eye can’t discern them individually. But when sunlight collides with a cloud particle, the component

69

wavelengths are deflected at different angles, an event known as diffraction. [D] When the diffraction is consistent

70

(when all the red light waves deflect at one angle, the blues at another, and so on), the eye can detect individual colors.

71

71

65. Which choice most specifically indicates how minute the particles are?
- A. NO CHANGE  
B. they are tinier than you can even imagine.  
C. about 1/100th the width of a human hair.  
D. unbelievably minute, in fact.
66. F. NO CHANGE  
G. cloud (typically, along the edges),  
H. cloud, (typically along the edges)  
J. cloud (typically along the edges),
67. A. NO CHANGE  
B. It’s this  
C. It is its’  
D. Its this
68. F. NO CHANGE  
G. light and each with  
H. light; each with  
J. light, each has
69. A. NO CHANGE  
B. wavelengths, which are traveling  
C. wavelengths, which travel  
D. wavelengths that travel
70. Which of the following alternatives to the underlined portion would NOT be acceptable?
- F. angles, which is an event  
G. angles—an event  
H. angles, which is  
J. angles, this is
71. If the writer were to delete the underlined portion (adjusting the punctuation as needed), the essay would primarily lose:
- A. an explanation for why red and blue light waves deflect at different angles.  
B. an example that helps clarify what happens when diffraction is consistent.  
C. an indication that only blue and red light waves are visible in iridescent clouds.  
D. details that specify why iridescent clouds are rare.

**1****1**

[4]

Diffraction happens in all clouds, but most cloud particles are too large and irregular to diffract sunlight consistently. One particle might deflect red waves at the same angle an adjacent particle deflects green. Or, in really close-knit clouds, each light wave is likely to collide with a series of particles, deflecting at a different angle every time. In both cases, the different light waves cross paths, and the cloud appears white.

[5]

In iridescent clouds, for example, deflection angles don't conflict. As sunlight passes through the cloud, patches, bands, or waves of color become visible.

72. Which choice most closely maintains the tone established in the essay?

- F. NO CHANGE
- G. more crammed
- H. jam-packed
- J. denser

73. A. NO CHANGE

- B. consequently,
- C. furthermore,
- D. however,

74. Given that all of the choices are accurate, which one best concludes the essay by reiterating both the reason for iridescence in clouds and its visual effect?

- F. NO CHANGE
- G. every particle deflects distinct light waves at consistent angles, and breathtaking colors emerge.
- H. iridescence will be nearly impossible unless light waves can avoid colliding with multiple particles.
- J. this rare phenomenon can be enjoyed.

Question 75 asks about the preceding passage as a whole.

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

Iridescence happens only in clouds that have three specific traits.

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

- A. Point A in Paragraph 2.
- B. Point B in Paragraph 2.
- C. Point C in Paragraph 3.
- D. Point D in Paragraph 3.

**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 essay “In-Betweens” by Diana Abu-Jaber.

The narrator moves to Jordan with her Jordanian father, American mother, and two younger sisters.

One night after my sisters and I are in bed and the baby cats have ceased their crying, my parents come to our room, whispering and nudging each other, their smiles sly, as if they shared a private joke. They shake us out of sleep and say, “C’mon, we’re going to do something!”

We yawn, slide out of the warm caves of our beds; our parents are gesturing us out the front door, their laughter lowered and mesmerizing. Then we are running across the stone courtyard—my sisters and I barefooted in cotton pajamas, the stones waxy beneath our feet. The neighbors and the street are all asleep, the buildings shut up, rose-tinted under a brassy, round moon. In one corner of the courtyard, tilted under the staircase to the upper floors, is the scooter, its red gleam muted now, private and soft. For a moment I think of my grandmother back in New Jersey, who wears a lipstick in the same fluid tones: red shot through with an undercurrent of blue. I look back at it as my parents open the car.

We drive through parts of the city that I’ve never seen before, where the lights glow like melted butter and the girls on the sidewalks are wearing brimmed hats and high heels. Men smile and turn to watch our car passing: I watch back, hands pressed to the window. Then we race beyond the glowing streets—they dwindle to a star—and the road ahead of us is long and dusty blue and smells like a warm, blue must, like the heat of a sheep’s back.

When we finally get out of the car, there’s a gravel lot, an expanse of folding chairs, patios, sparkly restaurants wedged in a long crescent along a flat blackness like gleaming enamel. Dad holds his hand out toward the gleam. “And what did I promise you kids?” he asks, though I recall no promises related to anything like this. “It’s the Dead Sea!”

We’ve come, as usual, with no preparation, so my parents let us run into the water in our underpants—like

the Jordanian kids around us. The salt water is satiny, so soft and dense it seems to bend beneath our arms. My father, who is generally afraid of the water, comes out and shows us how you can sit in the sea. He lazes back in it, and my sister tows him around by his hair while he makes boat sounds.

One of the restaurants on the lip of the water has a string of red lights that drop their reflections in the moonlit water; they make me think of the lonely red scooter. After a while, I straggle out of the water, yanking up my soggy underpants with their sprung elastic waistband. Mom is stretched out on a canvas chaise longue, holding a drink with a little parasol on the side. She wraps me shivering into a beach towel and makes room for me beside her on the lounge.

I blink out of my towel cave at this new place around us, then touch my mother’s ribs through her cotton shirt. “Mom, how long do you have to be best friends with someone if you’re best friends?”

She flitters at my bangs; they’re drying stiff with salt. “Well, honey, I don’t think there’s any rules about that. I guess you can be best friends with someone your whole life if you’re lucky.”

“Are you and Dad best friends?”

It’s hard to make out her expression under the cherry lights. She seems to be thinking about it, staring out to where Dad is still drifting around, piping and tooting like a tugboat.

“You have to do whatever your best friend says, right?”

Now I can see her face—amused and wary. “Why do you say that?”

“Dad said to come to Jordan, right?”

There is even less sound now than before, if that is possible, just a slip of waves on the shore, a sighing wash like the sound of someone saying *hush, hush*, or the rustle of the palm fronds arching over the sand. “Your father . . . needed us to come here, he needed to see—what it felt like.”

“What does it feel like?” I ask quietly, not quite knowing what I’m asking, just following the path of the questions.

“I don’t think—” she starts, then stops. My father is climbing out of the dark wash of the sea. “I don’t think it feels the way he remembers it.”

I put my hands on her waist—something that feels a little like a spark of alarm bounces through me. “Does he know that? That it doesn’t feel the same?”

She looks over her shoulder, my father’s shadow falling toward us in a long, cool slip as he walks beneath the neon lights. “He’s still finding out.”

The medicinal waters of the Dead Sea roll behind us, and the wild, heavy scent of honey, rocks, and thyme tempers the air. People come to dip themselves in these waters, to be cured of everything from skin ailments to spiritual wasting. I breathe it in deeply and sense a sort of dawning sweetness—of loss and nostalgia.

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1. The point of view from which the passage is told is best described as that of a first person narrator who:
  - A. relates the actions of several characters but reveals only her own inner thoughts.
  - B. focuses on interpreting the behavior of one of her sisters.
  - C. both relates the actions of and shares the inner thoughts of her mother, father, and sisters.
  - D. retells a story that has been told to her by someone else.
2. Which of the following statements best captures a main theme of the passage?
  - F. It isn’t hard to understand what makes someone a best friend.
  - G. A dramatic life change can be both exciting and difficult.
  - H. Trips that are taken spontaneously are the most enjoyable trips.
  - J. Older siblings can help younger siblings understand a new situation.
3. It can most reasonably be inferred that which of the following objects referred to in the passage has a special but unexplained significance to the narrator?
  - A. The canvas chaise longue
  - B. The cotton pajamas
  - C. The brassy, round moon
  - D. The red scooter
4. The narrator’s question “Mom, how long do you have to be best friends with someone if you’re best friends?” (lines 56–57) leads the two into a discussion about the:
  - F. dynamics of the relationship between the narrator’s mother and father.
  - G. narrator’s new best friend and how long their friendship might last.
  - H. characteristics of the narrator’s relationship with one of her sisters, who is her best friend.
  - J. narrator’s belief that a person should have several close friends, not just one best friend.
5. The narrator’s parents’ mood during the action portrayed in lines 1–9 can best be described as:
  - A. boastful and aggravated.
  - B. solemn and mystified.
  - C. mischievous and enthusiastic.
  - D. confused and stern.
6. The main function of the third paragraph (lines 21–29) is to:
  - F. present the narrator’s thoughts about the dusty streets she has traveled on several times before.
  - G. describe the narrator’s fascination with the street lights that glow hazily and brightly.
  - H. illustrate the narrator’s visual impression of the family’s journey through the city and out of it.
  - J. make clear the narrator’s admiration for the clothing the girls on the sidewalks wear.
7. In the passage, the phrase “a flat blackness like gleaming enamel” (lines 32–33) is used to describe which of the following places or areas?
  - A. A long, crescent-shaped stretch of developed land near the Dead Sea
  - B. The polished walkway along the Dead Sea
  - C. A gravel lot near the Dead Sea
  - D. The Dead Sea itself
8. The narrator feels something like “a spark of alarm” (line 85) when she puts her hands on her mother’s waist primarily because the narrator has just:
  - F. sensed her mother’s concern that the narrator’s sisters are unable to talk openly about the family’s move.
  - G. realized her father might be in a situation that’s difficult for him and troubling to her mother.
  - H. begun to understand that her mother never had a best friend as a child.
  - J. learned that her mother isn’t pleased with her questions.
9. It can most reasonably be inferred from the passage that, with regard to the narrator’s father’s feelings about having returned to Jordan, the narrator’s mother believes she is:
  - A. more aware of his feelings than he himself is yet.
  - B. more surprised by his feelings than the girls are.
  - C. less worried about his feelings than the girls are.
  - D. less aware of his feelings than he himself is yet.

10. According to the passage, it's uncommon for the narrator's family to be:
- F. away from the narrator's father's parents.
  - G. traveling by car instead of by train.
  - H. taking a long vacation together.
  - J. prepared for an outing.

## Passage II

**SOCIAL SCIENCE:** This passage is from the article "The Awful Reign of the Red Delicious" by Sarah Yager.

In the 1870s, Jesse Hiatt, an Iowa farmer, discovered a mutant seedling in his orchard of Yellow Bellflower apple trees. He chopped it down, but the next season, it sprang back through the dirt. He chopped it down again. It sprang back again. "If thee must grow," he told the intrepid sprout, "thee may."

A decade later, Hiatt's tree bore its first fruit. The apples were elongated globes with red-and-gold striped skin, crisp flesh, and a five-pointed calyx. In 1893, when Stark Brothers' Nursery of Louisiana, Missouri, held a contest to find a replacement for the Ben Davis—then the most widely planted apple in the country, strapping and good-looking but bland—Hiatt submitted his new variety, which he called the Hawkeye. "My, that's delicious," Clarence Stark, the company's president, reportedly said after his first bite.

But not for the first time in apple lore, one sweet taste precipitated a fall. Stark Brothers' soon secured the rights to the Hawkeye, changed its name to the Stark Delicious (only after the branding of the Golden Delicious, in 1914, did it become the Red Delicious), and began an ambitious marketing campaign. Over the next two decades, the nursery spent \$750,000 to promote the new apple, dispatching traveling salesmen to farms across the country and exhibiting the Delicious at the 1904 World's Fair. After the completion of the Great Northern Railway, Clarence Stark sent trainloads of seedlings to newly established orchards in the Columbia River Valley, their leaves trembling as the engines rumbled West.

With its hardy rootstocks and juicy, curvaceous fruit, the Red Delicious quickly became a favorite of growers and consumers from coast to coast—and as its commercial success grew, so did its distance from Hiatt's Hawkeye. In 1923, a New Jersey orchardist wrote to the Starks to report that one limb of a tree he had purchased from the nursery was producing crimson apples while those on the other limbs remained green. A chance genetic mutation that made the apples redden earlier had also given them a deeper, more uniform color, and customers were lining up for a taste. Paul Stark, one of Clarence's sons, travelled up from Missouri and laid down \$6,000 for the limb. News of the deal spread, and soon *The Gettysburg Times* reported

that more than 500 horticulturalists from 30 states had gathered at the orchard to discuss the "freak bud" that produced "the marvel apple of the age." Their meeting marked the beginning of an era of fruit improvement, as growers began to seek out and cultivate similar mutations.

By the 1940s, the Red Delicious had become the country's most popular apple, with the broad shoulders and lipstick shine of a Golden Age Hollywood star. The cosmetic changes were a boon for industrial agriculturalists: Apples that turned rosy before they were fully ripe could be picked earlier and stored longer, and skins with more red pigment tended to be thicker, which extended shelf life and hid bruises. But as genes for beauty were favored over those for taste, the skins grew tough and bitter around mushy, sugar-soaked flesh. Still, by the 1980s, the Red Delicious made up 75 percent of the crop produced in Washington. By the time selective breeding had taken its toll, according to apple expert Tom Burford, a few big nurseries controlled the market, planting decisions were made from the remove of boardrooms, and consumers didn't have many varieties to choose from. The Red Delicious became "the largest compost-maker in the country," he said, as shoppers routinely bought the apples and threw them away.

Then in the 1990s, new varieties that American growers had originally developed for overseas markets began to edge into the domestic market. Shoppers had been "eating with their eyes and not their mouths," Burford said. And now their taste buds had been awakened. A sudden shift in consumer preferences, paired with growing competition from orchards in China, took the industry by surprise. Between 1997 and 2000, U.S. apple growers lost nearly \$800 million in surplus crop. They had "made the apples redder and redder, and prettier and prettier, and they just about bred themselves out of existence," a marketing director for one Northwestern fruit company told *The New York Times*.

Since then, Red Delicious production has declined by 40 percent. While the apple is still by far the most common in the U.S.—growers produced 54 million bushels of Red Delicious in 2011, compared to just 33 million bushels of its closest competitor, the Gala—the industry is adjusting to a changing market.

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11. The main purpose of the passage is to:
- A. explore the apple varieties that were the ancestors of the Red Delicious.
  - B. relate the history of the Red Delicious.
  - C. consider contemporary opinions of the Red Delicious.
  - D. explain how experts improved the Red Delicious.



12. Which of the following statements best represents the passage's central claim about the Red Delicious?
- F. Though genetic changes helped the Red Delicious achieve popularity, they eventually contributed to its decreasing popularity.
  - G. Due to the ease of fostering genetic changes in the Red Delicious, it became the apple of choice for growers.
  - H. Despite intense competition, the superior taste of the Red Delicious led to its domination of the market.
  - J. Because the Red Delicious increased the size of the apple market, the development of new apple varieties intensified.
13. Which of the following events referred to in the passage occurred first chronologically?
- A. Stark Brothers' Nursery paid \$6,000 for one limb in a New Jersey orchard.
  - B. Stark Brothers' Nursery held a contest to find a new apple variety.
  - C. The Red Delicious accounted for 75 percent of Washington's apple crop.
  - D. The Red Delicious was featured at the World's Fair.
14. Based on the passage, the phrase "selective breeding had taken its toll" (line 63) most specifically refers to:
- F. the financial cost of the genetic development of the Red Delicious.
  - G. Burford's opinion that the Red Delicious was hurting overall sales of apples.
  - H. the market share lost by the Red Delicious to new apple varieties.
  - J. the deterioration of the taste and texture of the Red Delicious.
15. Which of the following statements best summarizes the sixth paragraph (lines 70–82)?
- A. In the 1990s, consumer preference for Red Delicious continued to increase, leading to an \$800 million surplus for US apple growers.
  - B. In the 1990s, consumer preference for fruit other than apples caused US and Chinese apple growers to lose money.
  - C. In the 1990s, consumer preference for new apple varieties and increased competition from overseas led to financial losses for US apple growers.
  - D. In the 1990s, consumer preference for redder apples and the planting of too many Red Delicious trees led to financial losses for US apple growers.
16. In the first paragraph, the seedling in Hiatt's orchard is portrayed as:
- F. persistent.
  - G. scruffy.
  - H. hostile.
  - J. ordinary.
17. As it is used in line 18, the word *secured* most nearly means:
- A. fastened.
  - B. acquired.
  - C. guaranteed.
  - D. fortified.
18. According to the passage, which of the following methods did the Stark Brothers' Nursery use to bring the Stark Delicious to the attention of apple growers?
- F. Tasting contests
  - G. Competitive pricing
  - H. Newspaper advertising
  - J. Traveling salesmen
19. The passage claims that which of the following features helps extend the shelf life of apples?
- A. Thick skin
  - B. Shiny skin
  - C. Firm flesh
  - D. Sweet flesh
20. In the context of the passage, the information between the dashes in lines 85–87 mainly serves to:
- F. show that Red Delicious production stabilized in 2011.
  - G. contrast the decline in Red Delicious production with the increase in Gala production.
  - H. specify the size of the US apple harvest.
  - J. illustrate the continued domination of the market by the Red Delicious.

## Passage III

**HUMANITIES:** This passage is from the article “Photography Changes the Movies We Choose to See” by Preminda Jacob.

For nearly five decades, huge photo-realistic billboards of film stars towered over the streets of Chennai, a major hub of the vibrant and prolific Indian film industry. Expertly hand-painted on canvas banners and plywood cutouts, these eye-catching advertisements extracted dreamlike images of wealth, beauty, and revenge from films screened in darkened and air-conditioned theaters and displayed them in the sunlit glare of urban thoroughfares.

The selection of these photographic stills, plucked from films and enlarged to architectural proportions (one hundred feet in length for banners and forty feet in height for cutouts) was calculated to excite the public and nourish a “spectatorial consciousness,” what Roland Barthes, a French cultural critic who often wrote about photography, described as the experiential quality of still photographic images. Barthes recalled being transfixed by still images from movies, but then losing all memory of them while viewing the film they came from. Our perception of a moving cinematic image, he explained, is always determined by the frames that both precede and follow it. In contrast, a single and isolated film still that stands alone can be viewed indefinitely and more carefully.

While the artists who crafted Chennai’s cinematic billboards were probably unaware of Barthes’ theories, interviews I conducted with them reminded me how aware they were of distinctions between still and moving images. I recall one anecdote in particular. Mr. Vedachellam—a billboard artist and entrepreneur—explained to me that his film-industry clientele routinely attempted to circumvent censorship by protesting to the authorities that the provocative still photographs featured on billboards were simply taken from film footage already cleared by the censors. The police commissioner’s canny rejoinder to the publicity agents’ appeals, Mr. Vedachellam recalled, was to remind them that these questionable stills appeared on the cinema screen for only a few seconds so viewers would soon forget them, or may not even have quite “seen” them at all. Freezing and enlarging such images, he argued, was a different matter altogether. And displaying them prominently on major thoroughfares would likely result in costly traffic jams and additional accidents. The police routinely censored these images by pasting pieces of white paper over offending portions of the billboards.

In his work, Barthes made another, different point about distinctions between photographic and painted images. A photograph, he claimed, is indexical—it has a direct and detailed correspondence to the subject, whereas in a drawn or painted image, each mark or brushstroke potentially takes on more symbolic value. So, what happens when the conventions of three media coalesce? A photograph of Mr. Vedachellam at work records a complex nexus of photography, painting, and

the cinema. Each medium mimics some of the characteristics of the two others. Vedachellam’s painting style is photorealistic; he copies a photograph that is, itself, a composite of film stills. And these film stills reflect the influence of the melodramatic look of nineteenth-century European tableaux painting on the sets, costumes, and lighting of the first full-length feature films produced both in Hollywood and in India.

The hybridization of these media dates back to the work of India’s earliest photographers. From the 1850s to the present, local entrepreneurs operating photo studios have employed painters to enhance portrait photographs of their clients with drama and desirable accoutrements that were absent in the original photographs. The theatricality of Indian studio photographs, and the fantasies they fulfill, has in turn influenced the idealized ways celebrities are represented in the hand-painted cinema advertisements. Like their counterparts in the world of studio photography, banner artists also painted directly onto a photograph in the process of creating studies for their spectacular enlargements. Using black-and-white poster paints, they first painstakingly outlined every detail in the photograph. Next, a photographic negative of the outlined image was projected onto the canvas or plywood surface and a tracing was made. At every stage in the process artists grasped a film still in one hand while wielding a paintbrush with the other hand.

This method of transferring photographic stills onto canvas encouraged artists to further manipulate and idealize images of their celebrity subjects.

From the article “Photography Changes the Movies We Choose to See” by Preminda Jacob (©2012 by Preminda Jacob). Used with permission.

21. The main purpose of the passage is to:
  - A. argue that the Indian film industry relies heavily on billboard advertising to increase ticket sales.
  - B. compare the histories of the Indian and Hollywood film industries as seen through billboard advertisements.
  - C. demonstrate the effect that Chennai’s cinematic billboards have had on movie theaters and the local economy.
  - D. explore the way Chennai’s cinematic billboards represent the melding of film, photography, and painting.
22. In the passage, Chennai’s cinematic billboards are most nearly characterized as:
  - F. imposing and provocative.
  - G. solemn and forbidding.
  - H. minimalist yet cheerful.
  - J. subtle yet informative.

23. The main point of the second paragraph (lines 10–24) is that Barthes theorized that:
- A. a film still expanded to architectural proportions is more effective than a small still.
  - B. careful viewing of film stills is essential to understanding full-length films.
  - C. the experience of viewing a moving image is different from the experience of viewing a film still.
  - D. a film still is easier to remember when viewed in the context of the entire movie.
24. According to the passage, in India, the act of enhancing photographic images with paint was first practiced by:
- F. portrait painters working in the 1880s.
  - G. poster artists working in the 1950s.
  - H. assistants working for photojournalists in the 1960s.
  - J. painters working for studio photographers in the 1850s.
25. According to the passage, before a billboard artist traced a photographic image onto a canvas, he or she would first:
- A. make multiple copies of the photograph as backups.
  - B. convert any black-and-white photographs to color.
  - C. cut away unneeded portions of the photograph.
  - D. outline every detail in the photograph with poster paints.
26. In the passage, lines 4–9 primarily serve to:
- F. show that advertisers take different approaches to daytime and nighttime advertising.
  - G. establish the appearance, function, and appeal of Chennai’s cinematic billboards.
  - H. argue that the glare of sunlight is detrimental to the appreciation of advertising images.
  - J. explain why Chennai’s cinematic billboards tended to emphasize certain images.
27. As it is used in line 13, the word *calculated* most nearly means:
- A. intended.
  - B. estimated.
  - C. counted.
  - D. judged.
28. As he is presented in the passage, Barthes claimed that compared to a photograph, a drawn or painted image is potentially more:
- F. difficult for many viewers to appreciate.
  - G. useful for conveying the artist’s feelings.
  - H. likely to be considered an art object.
  - J. likely to have symbolic value.
29. In the context of discussing the artistic elements at work in Chennai’s billboards, the passage author most likely uses the term “complex nexus” (line 56) to suggest:
- A. a complicated history.
  - B. an enduring mystery.
  - C. a sophisticated connection.
  - D. a challenging problem.
30. Based on details in the fifth paragraph (lines 65–84), it can reasonably be inferred that one reason billboard artists enhanced or manipulated images from films was to:
- F. justify the cost of theater tickets.
  - G. fulfill viewers’ fantasies.
  - H. protest film censorship.
  - J. support the local art scene.

## Passage IV

**NATURAL SCIENCE:** Passage A is from the book *Animal Wise: The Thoughts and Emotions of Our Fellow Creatures* by Virginia Morell. Passage B is from the essay “Big Love: The Emotional Lives of Elephants” by Carl Safina.

## Passage A by Virginia Morell

One of the more striking discoveries in neuroscience in recent years is the finding that elephants, whales, great apes, and humans all possess a peculiar kind of brain cell. These neurons were first discovered in human brains in the nineteenth century and were named von Economo cells after the Romanian anatomist Constantin von Economo, who identified them. At first, these spindle-shaped neurons were touted as the cells that “make us human,” because they’re connected to our feelings of empathy, love, emotional suffering, and sociality. Then, in 1999, two other researchers, Patrick Hof and John Allman, spotted von Economo cells in the brains of all the great apes; others recently found them in monkeys. Allman has searched without luck for the cells in more than a hundred other species, from sloths to platypuses. So it was big news when, in 2007, he discovered spindle cells in the brains of whales, dolphins, and elephants. But it was a puzzling discovery, too. Why should such a disparate group of animals have these specialized cells?

From an evolutionary point of view, it’s not surprising that primates and humans have von Economo cells, since we are in the same lineage. But primates and humans haven’t shared an ancestor with whales or elephants since about the beginning of the mammalian lineage, some sixty million years ago. It seems that cetaceans and elephants evolved their spindle cells independently. What factors would produce such emotionally specialized brain cells?

Allman thinks part of the answer lies in the size of the animals’ brains—most species that have spindle cells also have notably large brains—and in the location of the cells. Von Economo cells are always found in two regions of the cortex associated with emotionally charged, visceral judgments, such as deciding whether a fellow animal is suffering. And part of the answer lies in the size of the spindle cells. They are unusually large, enabling them to act like high-speed circuits, fast-tracking information to and from other parts of the brain, while bypassing unnecessary connections. These are the kind of cells, Allman argues, that would be especially useful to an animal living in a complex society—a society in which making accurate, intuitive decisions about another’s actions (or facial or vocal expressions) is crucial for your family’s and your survival.

## Passage B by Carl Safina

*Anthropomorphism* is the attribution of human motivation, characteristics, or behavior to animals, inanimate objects, or natural phenomena.

In establishing the study of animal behavior as a science, it had originally been helpful to make *anthro-*

*pomorphism* a word that raised a red flag. But as lesser intellects followed the Nobel Prize-winning pioneers, *anthropomorphism* became a pirate flag. If the word was hoisted, an attack was imminent. You wouldn’t get your work published. And in the academic realm of publish or perish, jobs were at stake. Even the most informed, insightful, logical inferences about other animals’ motivations, emotions, and awareness could wreck your professional prospects.

But what *is* a “human” emotion? When someone says you can’t attribute human emotions to animals, they forget the key leveling detail: humans *are* animals. Human sensations *are* animal sensations. Inherited sensations, using inherited nervous systems.

All of the emotions we know of just happen to be emotions that humans feel. So, simply deciding that other animals can’t have any emotions that humans feel is a cheap way to get a monopoly on all of the world’s feelings and motivation. People who’ve systematically watched or known animals realize the absurdity of this. But many others still don’t. “The dilemma remains,” wrote author Cairtin Nicol recently, “how to get an accurate understanding of the animals’ nature and (if appropriate) emotions, without imposing on them assumptions born of a distinctly human understanding of the world.”

But tell me, what “distinctly human understanding” hampers our understanding of other animals’ emotions? Is it our sense of pleasure, pain, hunger, frustration, self-preservation, defense, parental protection? We never seem to doubt that an animal acting hungry feels hungry. What reason is there to disbelieve that an elephant who seems happy is happy? We can’t really claim scientific objectivity when we recognize hunger and thirst when animals are eating and drinking, exhaustion when they tire, but deny them joy and happiness as they’re playing with their children and their families. Yet the science of animal behavior has long operated with that bias—and that’s unscientific. In science, the simplest interpretation of evidence is often the best.

Passage A: Excerpt(s) from *ANIMAL WISE: THE THOUGHTS AND EMOTIONS OF OUR FELLOW CREATURES* by Virginia Morell, copyright © 2013 by Virginia Morell. Used by permission of Crown Books, an imprint of the Crown Publishing Group, a division of Penguin Random House LLC. All rights reserved.

Passage B: ©2015 by Carl Safina. Used by permission of Carl Safina in care of the Jean V. Naggar Literary Agency, Inc. (permissions@jvnla.com)

Questions 31–34 ask about Passage A.

31. Passage A most strongly suggests that in the nineteenth century, anatomists generally believed:
- our feelings of empathy, love, and sociality weren’t part of what makes us human.
  - von Economo cells existed only in the human brain.
  - the spindle-shaped neurons that von Economo identified shouldn’t be named for him.
  - it was crucial to search for von Economo cells in a variety of animals.

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32. It can most reasonably be inferred from Passage A that Allman's search for von Economo cells in which of the following animals occurred last chronologically?
- F. Sloths
  - G. Dolphins
  - H. Platypuses
  - J. Great apes
33. The main point of the second paragraph of Passage A (lines 21–29) is that:
- A. at the beginning of the mammalian lineage, primates and humans shared ancestors with whales and elephants.
  - B. primates and humans are in the same lineage.
  - C. some animals seem to have been able to develop von Economo cells independently from primates and humans.
  - D. von Economo cells can be described as “emotionally specialized brain cells.”
34. According to Passage A, Allman believes a clear correlation exists between a species having spindle cells and that species having:
- F. a close genetic link to whales.
  - G. several types of neurons.
  - H. a very large brain.
  - J. a cortex.

Questions 35–37 ask about Passage B.

35. Based on Passage B, how does the passage author feel about the trend in the academic study of animal behavior that is described in lines 49–57?
- A. He strongly disapproves.
  - B. He is ambivalent.
  - C. He reluctantly approves.
  - D. He enthusiastically approves.
36. Based on the last paragraph of Passage B, which of the following statements would be the clearest example of “the simplest interpretation of evidence” (line 88)?
- F. Parental protection is the most advanced and humanlike emotion that animals can feel.
  - G. When animals seem frustrated in a frustrating context, the animals are feeling frustration.
  - H. An animal that seems hungry might not necessarily be hungry.
  - J. Humans' own emotions interfere with the ability to assess emotion in animals.

37. The author of Passage B criticizes the conclusion that if humans feel a particular emotion, then animals:
- A. won't be able to recognize that emotion in humans.
  - B. will want to learn how to have that emotion.
  - C. can't have that emotion.
  - D. must have that emotion.

Questions 38–40 ask about both passages.

38. Which of the following statements best captures a key difference in the way the passages explore the link between human and animal emotions?
- F. Passage A focuses on neuroscience, whereas Passage B focuses on the observation of behavior.
  - G. Passage A focuses on nineteenth-century research, whereas Passage B focuses on current research.
  - H. Passage A focuses on survival drives, whereas Passage B focuses on familial bonds.
  - J. Passage A focuses on anecdotal evidence, whereas Passage B focuses on one extensive study.
39. Which of the following statements best captures one difference in the purposes of Passage A and Passage B?
- A. Passage A aims to bluntly correct readers' assumptions, while Passage B aims to confirm readers' assumptions.
  - B. Passage A aims to urge readers to action, while Passage B aims to encourage readers to stop acting carelessly.
  - C. Passage A aims to present two opposing viewpoints for readers to evaluate, while Passage B aims to entertain readers.
  - D. Passage A aims to inform readers about a recent finding, while Passage B aims to challenge readers with a bold argument.
40. The passages provide the clearest evidence that which of the following people performs work that is grounded in hands-on scientific research?
- F. The author of Passage A
  - G. The author of Passage B
  - H. Allman, as he is presented in Passage A
  - J. Nicol, as she is presented in Passage B

**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 D03

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

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

#### \*Reporting Categories

POW = Production of Writing

KLA = Knowledge of Language

CSE = Conventions of Standard English

Number Correct (Raw Score) for:	
Production of Writing (POW)	___ (23)
Knowledge of Language (KLA)	___ (12)
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. A			
2. G	___		
3. D	___		
4. F	___		
5. C	___		
6. H		___	
7. D		___	
8. G	___		
9. A	___		
10. J	___		
11. B		___	
12. F			___
13. B	___		
14. J	___		
15. C	___		
16. F	___		
17. B		___	
18. J	___		
19. A			___
20. J		___	

Key	Reporting Category*		
	KID	CS	IKI
21. D		___	
22. F	___		
23. C	___		
24. J	___		
25. D	___		
26. G		___	
27. A		___	
28. J			___
29. C		___	
30. G	___		
31. B	___		
32. G	___		
33. C	___		
34. H	___		
35. A		___	
36. G	___		
37. C	___		
38. F			___
39. D			___
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)	___ (23)
Craft & Structure (CS)	___ (11)
Integration of Knowledge & Ideas (IKI)	___ (6)
Total Number Correct for Reading Test (KID + CS + IKI)	___ (40)

**Test 4: Science—Scoring Key**

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

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

**\*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)	___ (18)
Scientific Investigation (SIN)	___ (11)
Evaluation of Models, Inferences & Experimental Results (EMI)	___ (11)
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 D03	Your Scale Score
English	_____
Mathematics	_____
Reading	_____
Science	_____
<b>Sum of scores</b>	_____
<b>Composite score (sum ÷ 4)</b>	_____

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	75	59-60	40	40	36
35	72-74	57-58	39	39	35
34	71	55-56	38	38	34
33	70	54	37	37	33
32	69	53	36	36	32
31	68	52	35	35	31
30	67	50-51	34	—	30
29	66	48-49	—	34	29
28	65	46-47	33	33	28
27	64	43-45	32	32	27
26	62-63	40-42	31	31	26
25	59-61	38-39	30	29-30	25
24	57-58	35-37	29	27-28	24
23	54-56	33-34	27-28	25-26	23
22	51-53	32	26	23-24	22
21	47-50	30-31	24-25	22	21
20	44-46	29	23	20-21	20
19	42-43	27-28	22	19	19
18	40-41	24-26	21	17-18	18
17	38-39	21-23	20	16	17
16	35-37	17-20	18-19	14-15	16
15	32-34	14-16	17	13	15
14	29-31	11-13	15-16	12	14
13	27-28	8-10	14	10-11	13
12	24-26	7	12-13	9	12
11	22-23	6	10-11	8	11
10	18-21	5	9	7	10
9	15-17	4	8	6	9
8	13-14	3	7	5	8
7	11-12	—	6	4	7
6	9-10	2	5	3	6
5	7-8	—	4	2	5
4	5-6	1	3	—	4
3	4	—	2	1	3
2	2-3	—	1	—	2
1	0-1	0	0	0	1