

# Reading Test

65 MINUTES, 52 QUESTIONS

Turn to Section 1 of your answer sheet to answer the questions in this section.

## DIRECTIONS

Each passage or pair of passages below is followed by a number of questions. After reading each passage or pair, choose the best answer to each question based on what is stated or implied in the passage or passages and in any accompanying graphics (such as a table or graph).

### Questions 1-10 are based on the following passage.

This passage is adapted from *Michael Ondaatje, The Cat's Table*. ©2011 by Michael Ondaatje. The novel's narrator reflects on his journey as a young boy traveling by ship from the former British colony Ceylon—now Sri Lanka—to England during the 1950s. Ramadhin and Cassius are friends he made during the journey.

His name was Mr. Fonseka and he was travelling to England to be a teacher. I would visit him every few days. He knew passages from all kinds of books he could recite by heart, and he sat at his desk all day wondering about them, thinking what he could say about them. I knew scarcely a thing about the world of literature, but he welcomed me with unusual and interesting stories, stopping abruptly in mid-tale and saying that someday I should find out what happened after that. "You will like it, I think. Perhaps he will find the eagle." Or, "They will escape the maze with the help of someone they are about to meet. . . ." Often, during the night, while stalking the ship with Ramadhin and Cassius, I'd attempt to add to the bare bones of an adventure Mr. Fonseka had left unfinished.

He was gracious, with his quietness. When he spoke, he was tentative and languid. Even then I understood his rareness by the pace of his gestures. He stood up only when it was essential, as if he were a sick cat. He was not used to public effort, even though he was now going to be a part of a public world as a teacher of literature and history in England.

I tried to coax him up on deck a few times, but his porthole and what he could see through it seemed enough nature for him. With his books, some bottled Kelani River<sup>1</sup> water, as well as a few family photographs, he had no need to leave his time capsule. I would visit that room if the day was dull, and he would at some point begin reading to me. It was

the anonymity of the stories and the poems that went deepest into me. And the curl of a rhyme was something new. I had not thought to believe he was actually quoting something written with care, in some far country, centuries earlier. He had lived in Colombo<sup>2</sup> all his life, and his manner and accent were a product of the island, but at the same time he had this wide-ranging knowledge of books. He'd sing a song from the Azores or recite lines from an Irish play.

I brought Cassius and Ramadhin to meet him. He had become curious about them, and he made me tell him of our adventures on the ship. He beguiled them as well, especially Ramadhin. Mr. Fonseka seemed to draw forth an assurance or a calming quality from the books he read. He'd gaze into an unimaginable distance (one could almost see the dates flying off the calendar) and quote lines written in stone or papyrus. I suppose he remembered these things to clarify his own opinion, like a man buttoning up his own sweater to give warmth just to himself. Mr. Fonseka would not be a wealthy man. And it would be a spare life he would be certain to lead as a schoolteacher. But he had a serenity that came with the choice of the life he wanted to live. And this serenity and certainty I have seen only among those who have the armour of books close by.

I am aware of the pathos and the irony that come with such a portrait. All those foxed Penguin editions of Orwell and Gissing and the translations of Lucretius with their purple borders that he was bringing with him. He must have believed it would be a humble but good life for an Asian living in England, where something like his Latin grammar could be a distinguishing sword.

<sup>1</sup>River in Sri Lanka

<sup>2</sup>Large city in Sri Lanka

I wonder what happened to him. Every few years, whenever I remember, I will look up any reference to Fonseca in a library. I do know that Ramadhin kept in touch with him during his early years in England. But I did not. Though I did realize that people like Mr. Fonseca came before us like innocent knights in a more dangerous time, and on the very same path we ourselves were taking now, and at every step there were no doubt the same lessons, not poems, to learn brutally by heart.

I think about Mr. Fonseca at those English schools wearing his buttoned sweater to protect himself from English weather, and wonder how long he stayed there, and if he did really stay “forever.” Or whether in the end he could no longer survive it, even though for him it was “the centre of culture,” and instead returned home on an Air Lanka flight that took only two-thirds of a day, to begin again, teaching in a place like Nugegoda. London returned. Were all those memorized paragraphs and stanzas of the European canon he brought back the equivalent of a bottle of river water?

1

Over the course of the passage, the narrator’s focus shifts from

- A) a description of the internal world of a character to an expression of sympathy for that character.
- B) a recollection of interactions with a character to speculation about that character’s life.
- C) the discussion of a character’s history to a recounting of an important turning point.
- D) the narration of a childhood experience to that event’s impact on the narrator’s life.

2

The narrator indicates that his acquaintance with Mr. Fonseca influenced him because Mr. Fonseca

- A) inspired him to become a writer.
- B) motivated him to pursue teaching.
- C) taught him to memorize stories.
- D) introduced him to literature.

3

The narrator’s use of “stalking” in line 12 has the main effect of

- A) conveying a sense of fear shared by the narrator and his friends.
- B) bringing a feeling of intrigue to an otherwise ordinary activity.
- C) characterizing the friendship between the narrator and his friends.
- D) portraying the narrator as overly dramatic.

4

The second paragraph (lines 15-20) mainly serves to

- A) illustrate how certain traits in a character can undermine a character’s goals.
- B) provide essential details about a character’s past that foreshadow the character’s future.
- C) reveal personal information about a character that explains the character’s internal conflict.
- D) demonstrate how a character’s external mannerisms reflect that character’s inner being.

5

The narrator indicates that he visited Mr. Fonseca’s cabin on the ship when the narrator

- A) felt there was nothing else more interesting to do.
- B) had concerns about Mr. Fonseca’s reclusive habits.
- C) wanted to borrow some of Mr. Fonseca’s books.
- D) had not remembered the ending to a story he enjoyed.

6

In the passage, the narrator finds it a significant contradiction in Mr. Fonseca's character that he

- A) recites works about the outdoors but rarely leaves his room.
- B) enjoys sharing stories but does not finish telling them.
- C) has read extensively about the world but has experienced very little of it.
- D) has chosen to pursue a career as a teacher but has shown small interest in it.

7

Which choice provides the best evidence for the answer to the previous question?

- A) lines 5-9 ("I knew . . . that")
- B) lines 18-20 ("He was . . . England")
- C) lines 21-23 ("I tried . . . for him")
- D) lines 31-33 ("He had . . . books")

8

In the passage, the narrator speculates that Mr. Fonseca likely believed that his knowledge of literary classics would

- A) enable him to better understand English people.
- B) earn him respect in his new country.
- C) bring him great financial success.
- D) be a gateway to many possible professions.

9

Which choice provides the best evidence for the answer to the previous question?

- A) Lines 43-47 ("I suppose . . . schoolteacher")
- B) Lines 47-50 ("But he . . . close by")
- C) Lines 54-57 ("He must . . . sword")
- D) Lines 75-77 ("Were . . . water")

10

When the narrator refers to "the equivalent of a bottle of river water" in line 75, he is suggesting that the literature Mr. Fonseca memorized will be a

- A) memento of a place left behind.
- B) necessary item for personal use.
- C) charm bringing good luck.
- D) reminder of past enjoyments.

**Questions 11-20 are based on the following passage and supplementary material.**

This passage is adapted from Daniella Kupor and Zakary L. Tormala, "Glowing Reviews Aren't Always the Most Persuasive." ©2018 by Harvard Business School Publishing.

Online reviews can play a big role in influencing people's purchase decisions, but what makes a review most persuasive one way or the other? Certainly bad reviews can dissuade customers, but it turns out that some good reviews  
Line 5 can too. Our research on persuasion and marketing is the first to find that a moderately positive review can be more persuasive than an extremely positive review. We found that a moderately positive review is even more persuasive when the default review selection is extremely positive. This is  
10 because reviews that deviate from a default review selection are perceived to be more thoughtful—and thus more accurate—than reviews that conform to the default.

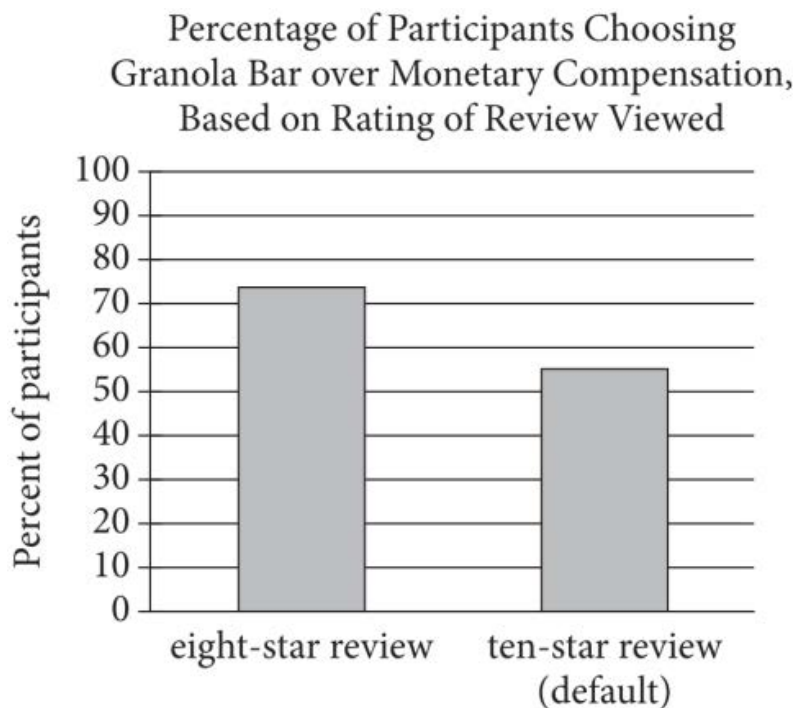
We first tested this phenomenon by showing participants a consumer review for a particular brand of granola bar. The  
15 review platform preselected a 10-star rating for the granola bars, but previous customers who wished to rate the granola bar as less than ten stars could change the rating. We had participants read a single review from a previous customer and we varied whether that review gave 10 stars (the  
20 preselected default) or eight stars (a lower but still positive rating that deviated from the default). When we offered participants the choice between a free granola bar or a commensurate amount of money, we found that people who viewed the eight-star review were more likely to choose the  
25 granola bar than were people who viewed the 10-star review.

We also found that the moderately positive reviews were not just seen as more persuasive, but as more helpful. In another study, we analyzed a retail platform that asks customers to rate products on a five-star scale, and on which  
30 a five-star rating is the most frequent (and thus is the perceived default). The platform allows consumers to indicate if they find a particular review to be helpful. Because previous research suggests that consumers rate reviews as more helpful when those reviews are more  
35 persuasive, we analyzed "helpful" votes as a proxy for the review's persuasiveness. These data revealed that consumers rated deviatory (non-five-star) reviews as more helpful than non-deviatory (five-star) reviews. Again, less positive reviews appear to be more persuasive than more positive  
40 reviews in the context of an extremely positive default.

In a follow-up study we found that extreme reviews regain their persuasiveness if they are long. We presented

consumers with real consumer reviews for pens, and varied the reviews' star ratings so that some deviated  
45 from a five-star default. In the first part of this study, consumers viewed brief reviews that included either a four-star or a five-star rating in the context of a 5-star default. Just as in our earlier studies, those consumers were more likely to purchase the pen when they viewed a  
50 four-star review. But when we gave them longer reviews with either four- or five-star ratings, the review's deviatory status no longer impacted consumers' desire to purchase the pen.

Consumers are largely unaware of how influenced  
55 they can be by moderate reviews. In another study, we found that when consumers want to persuade another shopper to make a similar purchase, they will often leave the highest possible rating even when they know that this highest rating is the default. In their attempts to  
60 increase their own persuasive influence, then, consumers may inadvertently decrease it by avoiding moderate endorsements, even when they themselves find such endorsements to be more persuasive.

**Figure 1****Figure 2**

**Participants' Perception of Accuracy and Thoughtfulness of Reviews of a Cleaning Services under Various Rating and Default-Rating Conditions**

	Ten-star default rating		Eight-star default rating	
	Ten-star review	Eight-star review	Ten-star review	Eight-star review
Mean perception of the review's accuracy (1="not at all"; 7="very much")	3.59	5.48	5.06	3.41
Mean perception of the review's thoughtfulness (1="not at all"; 7="very much")	3.26	5.41	5.10	3.08

Figures adapted from Daniella Kupor and Zakary Tormala, "When Moderation Fosters Persuasion: The Persuasive Power of Deviatory Reviews." ©2018 by Daniella Kupor and Zakary Tormala.

11

Which choice best describes the overall structure of the passage?

- A) Researchers present experimental results and then propose practical applications for them.
- B) Researchers question an accepted claim and then reveal the reasons for their doubts.
- C) Researchers describe surprising findings and then examine a variety of possible explanations for them.
- D) Researchers offer an explanation for an unexpected phenomenon and then present studies supporting the explanation.

12

According to the passage, the researchers were primarily interested in investigating which question?

- A) Are consumers likely to believe that extremely positive reviews are intentionally deceptive marketing tools?
- B) Why are moderately positive reviews just as likely to deter purchases as they are to encourage them?
- C) In what circumstances might positive reviews have effects similar to those of negative reviews?
- D) Do consumers find qualitative reviews with no numerical ratings less accurate than those with numerical ratings?

13

As used in line 12, “conform to” most nearly means

- A) adjust to.
- B) correspond to.
- C) reconcile with.
- D) combine with.

14

Which choice best supports the idea that when writing product reviews, review writers tend not to draw from their own experiences of using reviews to make purchasing decisions?

- A) lines 36-38 (“These . . . (five-star) reviews”)
- B) lines 38-40 (“Again . . . default”)
- C) lines 55-59 (“In another . . . default”)
- D) lines 59-63 (“In their . . . persuasive”)

15

The sentence in lines 41-42 (“In a . . . long”) mainly serves to

- A) introduce testing conditions that determined the limits of the authors’ earlier findings.
- B) concede the failure of a theory in its wider applications.
- C) reinforce the research goal originally proposed by the authors.
- D) suggest practical solutions to a common problem.

16

As used in line 52 “status” most nearly means

- A) legitimacy.
- B) nature.
- C) immobility.
- D) prestige.

17

Based on the passage, what would the effect on the data reflected in figure 1 be if participants in the first study discussed in the passage had been given long reviews to read but no other changes were made to the study?

- A) The ten-star review group's percentage would increase significantly over the percentage of the eight-star review group.
- B) The ten-star review group's percentage would increase to a level similar to the percentage of the eight-star review group.
- C) The eight-star review group's percentage would decrease to a percentage significantly below the percentage of the ten-star review group.
- D) Both the eight-star and the ten-star review groups' percentages would remain unchanged.

18

Which choice provides the best evidence for the answer to the previous question?

- A) lines 42-45 ("We presented . . . from a five-star default")
- B) lines 45-48 ("In the . . . of a 5-star default")
- C) lines 48-50 ("Just . . . review")
- D) lines 50-53 ("But when . . . pen")

19

According to figure 2, the mean perception of the review's accuracy was lower than the mean perception of the review's thoughtfulness in which condition?

- A) Ten-star reviews in the ten-star default category
- B) Eight-star reviews in the ten-star default category
- C) Ten-star reviews in the eight-star default category
- D) Eight-star reviews in the eight-star default category

20

Which statement do the data in figure 2 best support?

- A) Participants found rating systems with eight-star defaults to be highly accurate.
- B) Participants did not find ten-star reviews to be thoughtful or accurate.
- C) Participants trusted deviatory reviews only when the default rating was extremely high.
- D) Participants trusted deviatory reviews more than non-deviatory reviews regardless of the default rating.



**Questions 21-31 are based on the following passage and supplemental material.**

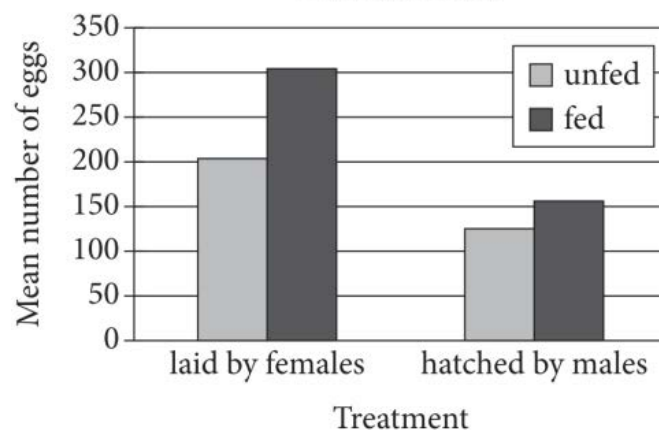
This passage and accompanying graph are adapted from Marian Y. L. Wong and Peter M. Buston, "Social Systems in Habitat-Specialist Reef Fishes: Key Concepts in Evolutionary Ecology." ©2013 by American Institute of Biological Sciences. Reproductive suppression occurs when some sexually mature members of a species are prevented from breeding.

*Paragobiodon xanthosomus* is an obligate coral-dwelling goby (Gobiidae) that resides in just one type of host coral, *Seriatopora hystrix*. Within groups, only the largest male and female breed monogamously with each other, and all other group members are nonbreeding subordinate females that are reproductively suppressed. To determine whether resource limitation was the cause of female reproductive suppression, University of Wollongong biologist Marian Y. L. Wong and her colleagues began by identifying three key resources that could affect female reproductive success. First, the reproductive success of females may be limited by a shortage of suitable breeding sites with which to successfully rear offspring, given that *P. xanthosomus* lays eggs in a nest site within the coral colony itself. Second, the reproductive success of females may be limited by the availability of food resources necessary to produce or feed offspring, given that female fecundity in fishes is often limited by the abundance of food. Third, because parental care is only provided by the breeding male, the reproductive success of females could be limited by paternal care if the males can successfully care for the eggs laid by only one female at a time.

To determine whether nest sites were limiting, Wong and colleagues experimentally removed the existing nest site used by breeding pairs within the coral. In all cases of removal, the pair simply picked another branch and laid their eggs, which suggests that nest sites were not limiting. To determine whether food was limiting, a field experiment was performed in which both males and females in natural pairs were fed by squirting high-protein marine fish pellets into their coral colony using a syringe. After a 3-week feeding period, egg clutches from each pair were collected as soon as they were laid, and clutch sizes were compared between fed and unfed pairs. As was predicted, the females that were fed laid significantly larger clutches than those that were unfed, which suggests that food was a limiting factor for female reproduction. In the same experiment, Wong and colleagues also determined whether paternal care was limiting by collecting egg clutches from fed and unfed pairs just prior to hatching (approximately 4–5 days after laying). Since *P. xanthosomus* males provide sole care of eggs, the size of a clutch at hatching essentially reflects the ability of males to

care for their eggs. Therefore, if the males in fed pairs did not hatch significantly larger clutches than did the males in unfed pairs, despite the females in the fed pairs laying larger clutches than those laid by the unfed pairs, this would suggest that males are unable to care for the eggs laid by more than one female under natural circumstances. Indeed, there was no difference in clutch sizes at hatching between the fed and unfed pairs, which indicates that male parental care is another limiting reproductive resource over which females may compete. In summary, a refined experimental assessment of the benefits of reproductive suppression and monogamy has demonstrated that resource limitation underlies reproductive suppression and female competition. Therefore, habitat-specialist reef fishes have provided an important new insight into mating system theory. Since these experiments, the role of resource limitation has been reported in a social mammal, and those results suggested that resource limitation could serve as a widespread explanation for reproductive suppression and the mating systems of social species in general.

**Mean Egg Clutch Size Laid by Females and Hatched by Males in Unfed and Fed *P. xanthosomus***



Difference in mean number of eggs hatched by males was not statistically significant.



21

The main purpose of the passage is to

- A) discuss the role of paternal care in reproductive suppression in *P. xanthosomus* gobies.
- B) examine the link between reproductive suppression in *P. xanthosomus* gobies and in social mammals.
- C) provide a cost-benefit analysis of reproductive suppression in *P. xanthosomus* gobies.
- D) investigate factors that contribute to reproductive suppression in *P. xanthosomus* gobies.

22

Which choice best describes the overall structure of the passage?

- A) The basis of a study by Wong and her colleagues is introduced, the process of the study and its findings are summarized, and a conclusion explaining the significance of the findings is put forth.
- B) The characteristics of a particular species are described, the findings of Wong and her colleagues about that species are provided, and a follow-up study of other species is recommended.
- C) Previous research on a topic is summarized, current research on the same topic by Wong and her colleagues is discussed, and the implications of their cumulative research are explained.
- D) A hypothesis by Wong and her colleagues regarding a certain species is offered, findings that challenge the hypothesis are discussed, and the merits of the findings are considered.

23

The passage suggests that the factor that most directly influences the rank of an individual adult within a particular group of *P. xanthosomus* is the

- A) ability of the individual to obtain resources.
- B) rank of the parents of the individual.
- C) relative size of the individual.
- D) size of the clutch the individual is able to lay.

24

Which choice provides the best evidence for the answer to the previous question?

- A) line 1-3 (“Paragobiodon . . . hystrix”)
- B) line 3-6 (“Within . . . suppressed”)
- C) line 6-11 (“To determine . . . success”)
- D) line 18-22 (“Third . . . time”)

25

As used in line 7, line 24, and line 9, “determine” most nearly means

- A) discover.
- B) dictate.
- C) choose.
- D) predict.

26

Based on the research as presented in the passage, which conclusion can most reasonably be made about the average clutch size of a breeding female *P. xanthosomus*?

- A) The average clutch size of a breeding female may increase if the number of nonbreeding subordinate females in her group increases.
- B) The average clutch size of a breeding female may increase if her breeding partner is replaced with a different male.
- C) The average clutch size of a breeding female may decrease if the natural food supply becomes scarce for a sufficient period of time.
- D) The average clutch size of a breeding female may decrease if the number of suitable nesting sites in her coral colony decreases.

27

Which choice provides the best evidence for the answer to the previous question?

- A) lines 26-28 (“In all . . . limiting”)
- B) lines 29-32 (“To determine . . . syringe”)
- C) lines 35-38 (“As was . . . reproduction”)
- D) lines 42-45 (“Since . . . eggs”)

28

As used in line 44, “reflects” most nearly means

- A) indicates.
- B) speculates.
- C) repeats.
- D) reverses.

29

The last sentence of the passage serves mainly to

- A) indicate further research questions about reproductive suppression in gobies left unanswered by the experiments described in the passage.
- B) suggest that the conclusions drawn from the experiments described in the passage have been corroborated by another study and are likely to apply to many species.
- C) provide a definition of mating system theory and show that the findings of the experiments described in the passage are consistent with that theory.
- D) detail studies that the researchers who ran the experiments described in the passage plan to conduct to examine reproductive suppression in social mammals.

30

According to the graph, the mean number of eggs laid by unfed females was closest to

- A) 50.
- B) 100.
- C) 150.
- D) 200.

31

Which statement about the mean number of eggs hatched by males of the species *P. xanthosomus* is best supported by the graph?

- A) The mean number of eggs hatched by fed males is approximately 150.
- B) The mean number of eggs hatched by unfed males is approximately 200.
- C) The mean number of eggs hatched by fed males exceeds the mean number of eggs laid by unfed females.
- D) The mean number of eggs hatched by fed males is roughly equivalent to the mean number of eggs laid by unfed females.

**Questions 32-42 are based on the following passage.**

This passage is adapted from a speech delivered in 1860 by Frederick Douglass, "A Plea for Free Speech in Boston." Douglass was a prominent African American abolitionist.

The world knows that last Monday a meeting assembled to discuss the question: "How Shall Slavery Be Abolished?" The world also knows that that meeting was  
 Line 5 invaded, insulted, captured, by a mob of gentlemen, and thereafter broken up and dispersed by the order of the mayor, who refused to protect it, though called upon to do so. If this had been a mere outbreak of passion and prejudice among the baser sort . . . hounded on by some wily politician to serve some immediate purpose,—a mere  
 10 exceptional affair,—it might be allowed to rest with what has already been said. But the leaders of the mob were gentlemen. They were men who pride themselves upon their respect for law and order.

These gentlemen brought their respect for the law  
 15 with them and proclaimed it loudly while in the very act of breaking the law. Theirs was the law of slavery. The law of free speech and the law for the protection of public meetings they trampled underfoot, while they greatly magnified the law of slavery. . . .

No right was deemed by the fathers of the  
 20 Government more sacred than the right of speech. It was in their eyes, as in the eyes of all thoughtful men, the great moral renovator of society and government. Daniel Webster called it a homebred right, a fireside privilege.  
 25 Liberty is meaningless where the right to utter one's thoughts and opinions has ceased to exist. That, of all rights, is the dread of tyrants. It is the right which they first of all strike down. They know its power. Thrones, dominions, principalities, and powers, founded in  
 30 injustice and wrong, are sure to tremble, if men are allowed to reason of righteousness, temperance, and of a judgment to come in their presence. Slavery cannot tolerate free speech. Five years of its exercise would banish the auction block and break every chain in the  
 35 South. They will have none of it there, for they have the power. But shall it be so here?

Even here in Boston, and among the friends of freedom, we hear two voices: one denouncing the mob that broke up our meeting on Monday as a base and  
 40 cowardly outrage; and another, deprecating and regretting the holding of such a meeting, by such men, at such a time. We are told that the meeting was ill-timed, and the parties to it unwise.

Why, what is the matter with us? Are we going to  
 45 palliate and excuse a palpable and flagrant outrage on the right of speech, by implying that only a particular description of persons should exercise that right? Are we, at such a time, when a great principle has been struck down, to quench the moral indignation which the deed  
 50 excites, by casting reflections upon those on whose persons the outrage has been committed? After all the arguments for liberty to which Boston has listened for more than a quarter of a century, has she yet to learn that the time to assert a right is the time when the right itself is  
 55 called in question, and that the men of all others to assert it are the men to whom the right has been denied?

It would be no vindication of the right of speech to prove that certain gentlemen of great distinction, eminent for their learning and ability, are allowed to freely express  
 60 their opinions on all subjects—including the subject of slavery. Such a vindication would need, itself, to be vindicated. It would add insult to injury. Not even an old-fashioned abolition meeting could vindicate that right in Boston just now. There can be no right of speech where  
 65 any man, however lifted up, or however humble, however young, or however old, is overawed by force, and compelled to suppress his honest sentiments.

Equally clear is the right to hear. To suppress free speech is a double wrong. It violates the rights of the  
 70 hearer as well as those of the speaker. It is just as criminal to rob a man of his right to speak and hear as it would be to rob him of his money. I have no doubt that Boston will vindicate this right. But in order to do so, there must be no concessions to the enemy. When a man is allowed to  
 75 speak because he is rich and powerful, it aggravates the crime of denying the right to the poor and humble.

The principle must rest upon its own proper basis. And until the right is accorded to the humblest as freely as to the most exalted citizen, the government of Boston  
 80 is but an empty name, and its freedom a mockery. A man's right to speak does not depend upon where he was born or upon his color. The simple quality of manhood is the solid basis of the right—and there let it rest forever.

32

A central claim of the passage is that free speech is a right that

- A) exists independently of the circumstances of one's birth.
- B) must be used to abolish social injustices such as slavery.
- C) is frequently not appreciated by the American public.
- D) is most often abused by people with power and means.

33

As used in line 10, "exceptional affair" most nearly means

- A) brilliant occasion.
- B) famous event.
- C) surprising occurrence.
- D) isolated incident.

34

Douglass indicates that the nation's original founders believed that

- A) the exercise of free speech should be limited to specific circumstances.
- B) they had successfully ensured free speech for all citizens.
- C) free speech provides a means by which democracy can improve itself.
- D) individuals were responsible for protecting their own right to free speech.

35

Douglass's use of the words "banish" and "break" (line 34) mainly serves to

- A) underscore the injustice of slavery as an institution that disallows free speech.
- B) emphasize the potency of free speech as a means of dismantling slavery.
- C) convey the ruthlessness of powerful individuals who suppress free speech.
- D) suggest the intensity of the struggle that will be required to safeguard free speech.

36

Douglass most strongly suggests that people who criticize the timing and wisdom of the meeting are

- A) moderately regretful about the situation, since they unknowingly aided the mob in suppressing free speech.
- B) highly hypocritical in their actions, since they had initially encouraged the meeting to discuss abolishing slavery.
- C) somewhat complicit in the mob's violation of free speech, since they suggest that the right of speech is conditional.
- D) keenly remorseful for the opinion they have expressed, since they recognize that they have caused a rift among abolitionists in Boston.

37

Which choice provides the best evidence for the answer to the previous question?

- A) lines 14-16 ("These . . . law")
- B) lines 28-32 ("Thrones . . . presence")
- C) lines 44-47 ("Are . . . right")
- D) lines 64-67 ("There . . . sentiments")

38

The passage most strongly suggests that Douglass's criticism of Boston's response to the invasion of the meeting is based partly on his assumption that its citizens

- A) should understand the importance of upholding a freedom when its existence is threatened.
- B) would sympathize more with the goals of the mob than with the goals of the people holding the meeting.
- C) believe that the right to free speech depends on one's social status.
- D) are uninformed about the exact nature of the events that occurred during the meeting.

39

Which choice provides the best evidence for the answer to the previous question?

- A) lines 37-42 ("Even . . . time")
- B) lines 51-56 ("After . . . denied")
- C) lines 61-62 ("Such . . . injury")
- D) lines 68-69 ("Equally . . . wrong")

40

The main purpose of the sentence in lines 62-64 ("Not . . . now") is to

- A) highlight the degree to which the ability to speak freely in Boston has suffered at the hands of the mob.
- B) indicate that political meetings in Boston require all speakers to exercise caution.
- C) suggest that expressions of outrage over slavery were more intense during abolition meetings of the past.
- D) convey nostalgia for a time when people of distinction regularly attended abolition meetings.

41

Douglass maintains that in order for individuals to exercise the right of free speech, it is necessary that they have a

- A) government that is willing to listen to their grievances.
- B) system of education that promotes equality for all citizens.
- C) legal system in which victims of crime can expect justice.
- D) public forum in which they do not feel threatened

42

The sentence in lines 70-72 ("It is . . . money") mainly serves to

- A) imply that the right of speech and the protection of wealth are both essential to the pursuit of happiness.
- B) highlight the illegality of violating free speech by juxtaposing the violation with an acknowledged crime.
- C) point out that when individuals are denied the right of free speech, they are also placed at financial risk.
- D) suggest that individuals should value the right of speech as much as they value the right to amass money.

**Questions 43-52 are based on the following passages.**

Passage 1 is adapted from Philip Ball, "Did Cracking Continent Trigger a Deep Freeze?" ©2004 by Springer Nature. Passage 2 is adapted from Annie Sneed, "A New Idea on How Earth Became a Giant Snowball." ©2017 by Scientific American, a division of Springer Nature America, Inc.

**Passage 1**

The theory that the Earth was once completely frozen emerged in the 1960s, when scientists realised that global freezing could happen if the polar ice sheets  
 Line grew above a certain threshold size. Because bright ice  
 5 reflects sunlight and heat back into space, growing ice sheets cause further cooling. This feedback loop could tip the climate system into a deep freeze.

The planet could eventually thaw as carbon dioxide from volcanoes poking through the ice warms it.

10 In the late 1980s, Joe Kirschvink nicknamed this state 'Snowball Earth'. Around the same time, geologists began to uncover hints in the geological record that this freeze-thaw process might have happened at least once in the distant past—at the end  
 15 of the Proterozoic eon, 600 to 800 million years ago.

But it was unclear what could have tipped the world into that state in the first place. Yannick Donnadieu in Gif sur Yvette, France, and co-workers provided an explanation.

20 Donnadieu and colleagues have run computer simulations of global climate change 750 million years ago during the break-up of Rodinia, a supercontinent in which nearly all of the present-day continents were welded together around the South Pole. As the vast  
 25 land mass fragmented into smaller pieces, driven by the engine of continental drift, they found that evaporation from smaller seas between the isolated continents increased the rainfall over land areas.

The increased rainfall in turn speeded the  
 30 weathering of any exposed rock. As rock is worn away by water, chemical reactions take place in which carbon dioxide from the air becomes bound up in carbonate minerals. The more rain there is, the more of this greenhouse gas is extracted from the air.

35 The team also note that the break-up of Rodinia was prompted in part by the eruption of great plains of volcanic rock. The fresh rock from a volcano is more reactive than old rock, and so it weathers more quickly, sucking up even more carbon dioxide.

40 In the researchers' computer models, the combined effects of higher rainfall and quick-weathering rock

reduced the levels of carbon dioxide below the threshold needed to trigger a Snowball Earth.

**Passage 2**

One of the most popular ideas [about what  
 45 sparked snowball Earths] focuses on weathering, a natural process that captures and stores carbon via the chemical breakdown of rocks. When the supercontinent Rodinia broke up around 750 million years ago, the new, smaller continents scattered to  
 50 locations around the equator where it was warm and wet—prime conditions for weathering. In addition, large volcanic regions would have emerged as the giant land mass fragmented, which would have been extremely vulnerable to weathering.

55 The problem: weathering works incredibly slowly—the process is constantly happening but it affects the global climate on a million-year time scale. Earth's climate system usually self-corrects in that amount of time. Plus, the greater volcanic activity would have  
 60 released carbon dioxide, making it even harder to push Earth into a snowball state. This supercontinent breakup scenario could have caused a runaway cooling effect only if weathering outpaced other feedbacks in the climate system, explains Francis  
 65 Macdonald.

Macdonald dated a volcanic region, called the Franklin Large Igneous Province (LIP). He discovered the Franklin LIP became active close to when the first snowball Earth event began around 717  
 70 million years ago. "I started thinking: How could these be so coincident? How might they be related?" he says.

Macdonald and Robin Wordsworth used a combination of geologic evidence and modeling to  
 75 test whether the Franklin LIP could be the culprit. In a new study, they show the Franklin LIP's volcanic activity could have caused extreme climate cooling. That is because of a unique combination of factors: First, the Franklin LIP formed in an area rich in  
 80 sulfur; as it erupted, large plumes of hot gas and dust would have lofted sulfur particles kilometers into the air. Sulfur particles block the incoming sun and also keep heat from escaping Earth, which can create either a warming or cooling effect, depending on the  
 85 location. That's why the next piece of physical evidence is key—geologic records show the Franklin LIP sat at the equator where Earth receives more solar energy than the amount of heat it radiates back out to space. According to the researchers' model, if enough



90 sulfur particles reached high enough into the atmosphere at this equatorial location, it would block enough of the sun's incoming energy to trigger runaway cooling.

43

The main purpose of the fourth paragraph of Passage 1 (lines 16-19) is to

- A) indicate the author's skepticism about the validity of a finding.
- B) present a hypothesis that is supported by the results of a study.
- C) dismiss recent criticism of a widely accepted explanation.
- D) identify a research question that a team of scientists investigated.

44

As used in line 30, "exposed" most nearly means

- A) unguarded.
- B) threatened.
- C) debunked.
- D) uncovered.

45

As used in line 37, "fresh" most nearly means

- A) pure.
- B) new.
- C) natural.
- D) vivid.

46

According to Passage 2, in addition to the presence of sulfur in the Franklin LIP, which factor would have determined whether a Snowball Earth was possible approximately 717 million years ago?

- A) The amount of rainfall occurring in the Franklin LIP
- B) The geographic positioning of the Franklin LIP
- C) The age of the rock formations in the Franklin LIP
- D) The duration of volcanic eruptions in the Franklin LIP

47

Based on Passage 2, which additional finding, if true, would most likely help validate Macdonald and Wordsworth's hypothesis?

- A) Several large volcanic regions extending beyond the Franklin LIP were also found to be rich in sulfur.
- B) The amount of sulfur emitted during volcanic eruptions in the Franklin LIP was less than the amount of carbon dioxide emitted.
- C) Volcanic eruptions in the Franklin LIP were powerful enough to propel sulfur particles to an altitude where they could redirect solar energy.
- D) Volcanic activity occurring in the Franklin LIP caused the breakup of Rodinia into several smaller landmasses.

48

Which choice provides the best evidence for the answer to the previous question?

- A) lines 67-70 (“He discovered . . . ago”)
- B) lines 75-77 (“In a . . . cooling”)
- C) lines 79-82 (“First . . . the air”)
- D) lines 89-93 (“According . . . cooling”)

49

Which choice best states the relationship between the two passages?

- A) Passage 2 provides an alternative explanation for a phenomenon discussed in Passage 1.
- B) Passage 2 considers additional evidence that supports a hypothesis presented in Passage 1.
- C) Passage 2 criticizes the methodology used in a study that is described in Passage 1.
- D) Passage 2 speculates on the long-term effects of a phenomenon that is detailed in Passage 1.

50

Based on the passages, Donnadieu and colleagues (Passage 1) and Macdonald and Wordsworth (Passage 2) would most likely agree with which claim regarding a Snowball Earth event at the end of the Proterozoic eon?

- A) The event likely occurred despite a predominantly warm and wet climate.
- B) The event likely developed partially as a result of the emergence of active volcanic regions.
- C) The event likely escalated as polar ice sheets absorbed more solar energy than was reflected back into the atmosphere.
- D) The event likely ended when the amount of carbon dioxide in the atmosphere exceeded the amount stored in carbonate minerals.

51

Based on Passage 2, it can most reasonably be inferred that the validity of the researchers' claim in the last paragraph of Passage 1 depends on which assumption about geologic conditions during the time of the breakup of Rodinia?

- A) The smaller continents that resulted from the breakup of Rodinia remained primarily near the South Pole.
- B) A decline in volcanic activity likely reduced the amount of carbon dioxide released into the atmosphere.
- C) The process of weathering released certain particles into the atmosphere that are known to have warming effects.
- D) The rate at which carbon dioxide was captured through weathering exceeded the rate at which it was released through volcanic activity.

52

Which choice from Passage 2 provides the best evidence for the answer to the previous question?

- A) lines 47-51 ("When . . . weathering")
- B) lines 55-57 ("The problem . . . scale")
- C) lines 61-65 ("This . . . Macdonald")
- D) lines 82-85 ("Sulfur . . . location")

**STOP**

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