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

PROSE FICTION: This passage is adapted from the novel *Homecoming: A Novel* by Bernhard Schlink (©2006 by Bernhard Schlink).

Once the supper table was cleared, the dishes washed, and the flowers in the garden watered, my grandparents would set to work on the *Novels for Your Reading Pleasure and Entertainment* series. They worked at the dining table, pulling the ceiling lamp down and reading and editing the manuscripts, the page proofs, and the bound galleys. Sometimes they did some writing as well: they insisted that each volume conelnde with a brief didactic essay, and when none was forthcoming they supplied it themselves. They wrote about the importance of toothbrushing, the battle against snoring, the principles of beekeeping, the history of the postal system. They also rewrote passages in the novels when they found them awkward, unbelievable, or immodest or when they felt they could make a better point. The publisher gave them a free hand.

When I was old enough to stay up after the blackbird had finished its song, I was allowed to sit with them. The light of the lamp just above the table, the dark of the room surrounding it—I loved it. I would read or learn a poem or write a letter to my mother or an entry in my summer diary. Whenever I interrupted my grandparents to ask a question, I got a friendly answer. I was afraid though to ask too many: I could sense their concentration. The remarks they exchanged were sparse, and my qnestions sounded garrulous. So I read, wrote, and studied in silence. From time to time I lifted my head cautiously, so as not to be noticed, and observed them: Grandfather, his dark eyes now riveted on the work before him, now gazing out, lost, into the distance, and Grandmother, who did everything with a light touch, reading with a smile and making corrections with a quick and easy band. Yet the work must have been much harder on her than on him: while he cared only for history books and had a neutral, objective relationship to the novels they dealt with, she loved literature, fiction as well as verse, and had a sure feeling for it; she must have suffered from having to spend so much time on such banal texts.

I was not allowed to read them. If I grew curious when they talked about one or another novel, I was told in no uncertain terms I was not to read it: there was a better novel or a better novella on the subject by Conrad Ferdinand Meyer or Gottfried Keller or another classic Swiss writer. Grandmother would then get up and bring me the better book.

When they gave me the extra copies of the bound galleys to take home as scrap paper, they made a point of reminding me not to read them. They would not have given them to me at all had paper not been so expensive at the time and my mother's income so low. Everything I did not have to hand in to the teacher I wrote on the back of the bound galleys: Latin, Greek, and English vocabulary words, first drafts of compositions, plot summaries, descriptions of famons paintings, world capitals, rivers and mountains, important dates, and notes to classmates a few desks away. I liked the thick pads of thick paper, and because I was a good boy I refrained from reading the printed sides of the pages for years.

During the first few summers my grandparents found the life I was leading with them too isolated, and tried to bring me into contact with children my own age. They knew their neighbors and by talking to a number of families arranged for me to be invited to birthday parties, outings, and visits to the local swimming pool. Since it took a lot of doing and they did it out of love, I did not dare resist, but I was always happy when the event was over and I could return to them. Friendships might have grown out of these contacts had we seen one another more often, but the Swiss children's summer holidays began soon after I arrived, and they would disperse, returning only shortly before my departure.

So I spent my summer holidays without playmates my own age; I spent them taking the same walks to the lake and hikes through a ravine, around a pond, and up a hill with a view of the lake and the Alps; I spent them going on the same excursions to the Rapperswil fortress, Ufenau Island, the cathedral, the museums. These hikes and excursions were as much a part of the summer as harvesting apples, berries, lettuce, and vegetables, hoeing beds, weeding, snipping wilted flowers, trimming hedges, mowing grass, tending the compost, keeping the watering can filled, and doing the watering. Just as these operations recurred naturally, so the recurrence of the other activities struck me as natural. The never-changing evenings at the table under the lamp thus belonged to the natural rhythm of summer.

1. It can most reasonably be inferred from the passage that the narrator felt that the summers with his grandparents were:

   A. stiflingly quiet.
   B. frustratingly busy.
   C. highly energizing.
   D. enjoyably routine.

2. It can most reasonably be inferred that the narrator's grandparents believed the *Novels for Your Reading Pleasure and Entertainment* series consisted of texts that:

   F. were essential leisure reading for educated people.
   G. were mediocre in quality.
   H. should have been taught in classrooms.
   J. used sophisticated language.

3. Details in the passage most strongly suggest that during the school year, the narrator lived with:

   A. his grandparents only.
   B. his mother but not his grandparents.
   C. his grandparents and mother in the same house.
   D. other students at a private boarding school.

4. The passage characterizes the narrator's grandparents' work on the *Novels for Your Reading Pleasure and Entertainment* series as:

   F. writing the novels and most of the essays.
   G. editing the novels and writing each of the essays.
   H. editing the novels and essays in addition to writing an occasional essay.
   J. reading the novels in order to write essays that analyzed them.

5. The narrator speculates that while his grandmother worked with the *Novels for Your Reading Pleasure and Entertainment* series, her feelings about the texts contrasted with:

   A. her written comments on the galleys.
   B. her passions about working in the garden.
   C. the smile that she wore on her face.
   D. the comments about the series that she directed to the narrator's grandfather.

6. The narrator's reaction to his grandparents' arrangements for him to spend time with other families can best be described as:

   F. annoyance, because he disliked the neighbors' children.
   G. relief, because he found the time with his grandparents to be isolating.
   H. happiness, because he struggled with making friends on his own.
   J. acceptance, because he felt he owed his grandparents for their efforts.

7. As it is used in line 10, the word *forthcoming* most nearly means:

   A. provided.
   B. willing.
   C. candid.
   D. likeable.

8. Which of the following statements best captures how the narrator portrays his grandparents' attitudes toward literature?

   F. His grandfather felt indifferent about literature, while his grandmother had an emotional connection to it.
   G. His grandfather was passionate about reading literature, while his grandmother preferred to edit and write it.
   H. Both of his grandparents believed that literature should be read in school under the guidance of a teacher.
   J. Both of his grandparents wanted to write their own literature because they considered most novels flawed.

9. The main point of the third paragraph (lines 40–46) is that the narrator's grandmother:

   A. limited her own reading to classic books by Swiss authors.
   B. insisted that the narrator read books other than the ones included in the *Novels for Your Reading Pleasure and Entertainment* series.
   C. turned toward books by Swiss authors as sources for her essays.
   D. referenced as many Swiss authors as possible in her work on the *Novels for Your Reading Pleasure and Entertainment* series.

10. The narrator indicates that he read the texts on the bound galleys:

    F. after his grandparents went to bed at night.
    G. whenever his grandparents asked him to help them edit.
    H. once the books were published.
    J. when he was years older.

Passage II

SOCIAL SCIENCE: Passage A is adapted from the article "The Other Humans: Neanderthals Revealed" by Stephen S. Hall (©2008 by The National Geographic Society). Passage B is adapted from the editorial "Fossils for All" by the editors of the journal *Scientific American* (©2009 by Scientific American, Inc.).

Passage A by Stephen S. Hall

One of the longest and most heated controversies in human evolution rages around the genetic relationship between Neanderthals and their European successors. Did the modern humans sweeping out of Africa beginning some 60,000 years ago completely replace the Neanderthals, or did they interbreed with them? In 1997 the latter hypothesis was dealt a powerful blow by geneticist Svante Pääbo—then at the University of Munich—who used an arm bone from the original Neanderthal man to deliver it. Pääbo and his colleagues were able to extract a tiny 378-letter snippet of mitochondrial DNA (a kind of short genetic appendix to the main text in each cell) from the 40,000-year-old specimen. When they read out the letters of the code, they found that the specimen's DNA differed from living humans to a degree suggesting that the Neanderthal and modern human lineages had begun to diverge long before the modern human migration out of Africa. Thus the two represent separate geographic and evolutionary branches splitting from a common ancestor. If there was any interbreeding when they encountered each other later, it was too rare to leave a trace of Neanderthal mitochondrial DNA in the cells of living people.

Pääbo's genetic bombshell seemed to confirm that Neanderthals were a separate species.

However, "During this time of the biological transition," says Erik Trinkaus, a paleoanthropologist at Washington University in St. Louis, "the basic behavior [of the two groups] is pretty much the same, and any differences are likely to have been subtle." Trinkaus believes they indeed may have mated occasionally. He sees evidence of admixture between Neanderthals and modern humans in certain fossils, such as a 24,500-year-old skeleton of a child discovered at the Portuguese site of Lagar Velho, and a 32,000-year-old skull from a cave called Muierii in Romania.

Katerina Harvati, a researcher at the Max Planck Institute in Leipzig, has used detailed 3-D measurements of Neanderthal and early modern human fossils to predict exactly what hybrids between the two would have looked like. None of the fossils examined so far matches her predictions.

The disagreement between Trinkaus and Harvati is hardly the first time that two respected paleoanthropologists have looked at the same set of bones and come up with mutually contradictory interpretations. Pondering—and debating—the meaning of fossil anatomy will always play a role in understanding Neanderthals.

Passage B by the editors of *Scientific American*

In June of 2009 the famed Lucy fossil arrived in New York City. The 3.2-million-year-old partial skeleton of *Australopithecus afarensis* could attract hundreds of thousands of visitors over the course of her four-month engagement—part of a six-year tour.

Before this tour, Lucy had never been on public display outside of Ethiopia. One might expect scholars of human evolution to be delighted by the opportunity to share the discipline's crown jewel with so many members of the science-interested public. But news reports announcing her New York debut included the same objections that aired when she first landed in the U.S.: namely, that the bones could sustain damage and that the tour takes a key specimen out of scientific circulation for too long. Indeed, some major museums turned the exhibit away in part for those reasons.

The objections reflect a larger problem of possessiveness in the field of human origins. Indeed, fossil hunters often block other scientists from studying their treasures, fearing assessments that could scoop or disagree with their own. In so doing, they are taking the science out of paleoanthropology.

Critics of such secrecy commonly point to the case of *Ardipithecus ramidus*, a 4.4-million-year-old human ancestor discovered by Tim White of the University of California, Berkeley. Fifteen years after White announced the first fossils of *A. ramidus* and touted the importance of this species for understanding human origins, access to the specimens remains highly restricted.

White, for his part, has said that he published only an initial report and that normal practice is to limit access until publication of a full assessment. And he has noted that the condition of a key specimen—a badly crushed skeleton—has slowed the release of the team's detailed report.

The scientists who unearth the remnants of humanity's past deserve first crack at describing and analyzing them. But there should be clear limits on this period of exclusivity. Otherwise, the self-correcting aspect of science is impeded: outside researchers can neither reproduce the discovery team's findings nor test new hypotheses.

Questions 11–13 ask about Passage A.

11. The main function of the question in lines 4–6 is to:

- **A.** reveal the date when Neanderthals and early modern humans became separate species, according to Hall.
- **B.** outline a debate that likely has been resolved through the findings of Trinkaus.
- **C.** suggest the reasons early modern humans eventually replaced Neanderthals.
- **D.** present what Hall believes is one of the most heated controversies in the field of human evolution.

3

12. As it is nsed in line 25, the term *genetic bombshell* most nearly refers to Pääbo and his team's:
    - F. innovative method of studying the mitochondrial DNA of Neanderthals.
    - G. finding that DNA from a Neanderthal specimen differs significantly from the DNA of living humans.
    - H. suggestion that there is only a trace of Neanderthal mitochondrial DNA in living humans.
    - J. discovery that given many samples, Neanderthal DNA sometimes resembles the DNA of living humans.

13. Harvati is described as using 3-D measurements of Neanderthal and early modern human fossils primarily to:
    - A. avoid having to use actual fossil specimens for her research, since they are often unavailable.
    - B. predict what a fossil specimen that is a hybrid of the two beings would look like.
    - C. determine whether the skeleton found in Lagar Velho is of a Neanderthal or an early modern human.
    - D. create sketches of Neanderthals and early modern humans for other researchers to use.

Questions 14–17 ask about Passage B.

14. Passage B indicates that, in terms of age, the Lucy fossil is:
    - F. the oldest fossil of a human ancestor that has been found as of 2009.
    - G. the oldest fossil of a human ancestor that has been found with the skull intact as of 2009.
    - H. not as old as the fossils that have been found of *A. ramidus*.
    - J. not as old as fossil remnants of a human ancestor that have been found in Romania.

15. Based on Passage B, which of the following is a reason some major museums declined to be part of the tour of the Lucy exhibit?
    - A. Frustration with scientists' possessiveness of the Lucy fossil in the past
    - B. Reluctance to share Lucy with the scientific community
    - C. Anticipation of large crowds to see Lucy that would be difficult to manage in museum spaces
    - D. Conviction that Lucy is more valuable being studied by scientists than being displayed on tour

16. As is it used in lines 87–88, the term *period of exclusivity* most nearly refers to the:
    - F. week when a scientist has to decide whether to keep a major fossil find private permanently.
    - G. first month after a fossil find, after which the discovery team is expected to file a report.
    - H. length of time a scientist may restrict access to new fossil specimens.
    - J. duration of time a scientist is allowed to study fossil specimens unearthed by other scientists.

17. The main purpose of the fifth paragraph of Passage B (lines 79–84) is to:
    - A. describe the condition of the first fossils of *A. ramidus*.
    - B. present what White has offered as justification for his actions.
    - C. provide a second example of possessiveness in the field of human origins.
    - D. outline paleoanthropologists' typical procedure for reporting on a major finding.

Questions 18–20 ask about both passages.

18. Which statement provides the most accurate comparison of the tone of each passage?
    - F. Hall is sentimental and fanciful, whereas the editors of *Scientific American* are cynical.
    - G. Hall is objective, whereas the editors of *Scientific American* are critical and concerned.
    - H. Hall is disappointed and angry, whereas the editors of *Scientific American* are forgiving.
    - J. Hall is sarcastic, whereas the editors of *Scientific American* are reflective and patient.

19. The authors of both passages would most likely agree that the discussion of human origins would best be furthered through scientists' willingness to:
    - A. share fossils of human ancestors and debate their meanings and significance with other experts.
    - B. memorize the oldest research on Neanderthals and early modern humans.
    - C. explore new technologies for creating 3-D measurements of the bones of *A. afarensis*.
    - D. encourage the general public to attend showings of fossils of human ancestors.

20. Compared to Passage A's discussion of the fossil of the original Neanderthal man, Passage B's discussion of the Lucy fossil can best be described as:
    - F. more focused on outlining the details of the structure and measurements of the fossil.
    - G. more focused on providing a survey of the work of scientists who have studied the fossil.
    - H. less focused on describing the fossil's direct role in educating the public about paleoanthropology.
    - J. less focused on explaining the fossil's direct role in research relating to human origins and genetics.

Passage III

HUMANITIES: This passage is adapted from the article "New Note: Esperanza Spalding's Music" by John Colapinto (©2010 by Condé Nast).

In 2008, the prodigiously gifted bassist, singer, and composer Esperanza Spalding released her major-label début, *Esperanza*, which she recorded as a twenty-three-year-old instructor at the Berklee College of Music, in Boston. While the music was indisputably jazz, it suggested an almost bewildering array of influences—fusion, funk, soul, rhythm and blues, Brazilian samba and Cuban *son*, pop balladry, chanted vocalese—with lyrics sung in Spalding's three languages: English, Portuguese, and Spanish. An ebullient mash-up of sounds, styles, and tongues, the record seemed like something new—jazz for the iPod age—and it rose quickly to No. 3 on the *Billboard* jazz chart, and stayed on the chart for sixty-two weeks. The freshness and the excitement of her approach have led, inevitably, to her being called the "new hope for jazz."

Spalding, born in 1984 in Portland, Oregon, to a single mother of African American, Asian, Native American, and Hispanic heritage, belongs to a growing movement of young musicians who have taken a less traditional approach to the music. For years, young jazz musicians adopted a near slavish devotion to sounding like players from jazz's golden age (anywhere between the nineteen-twenties and the arrival of the Beatles in America, in 1964), rejecting the pop, rock, and fusion experimentation that came in the nineteen-seventies and eighties. The members of the Young Lions movement, with Wynton Marsalis the most visible among them, fetishized staunchly noncommercial "pure" jazz.

Attendance at jazz concerts has been declining for years; a hit jazz album today might sell forty thousand copies worldwide. *Esperanza* has so far sold more than a hundred thousand. This is, in part, because Spalding hews closer to dance rhythms than many of her contemporaries do. (Jazz has become increasingly complicated, piling on odd meters and abstruse melodies.) It is also because she sings; for audiences put off by the cerebral rigors of instrumental improvisation, her pliant alto voice gives them something to hang on to. But her original songs sacrifice none of the melodic sophistication and harmonic interest of jazz; and she is as technically adept, and as serious a student of the music's history, as the most dutiful of the Young Lions.

Spalding is passionate about bringing fresh influences, voices, and idioms to the music, to prevent jazz from becoming merely "a museum piece," as she put it. In the course of a year, she plays a hundred and fifty concert dates around the world. In 2009, she played at the Nobel Peace Prize ceremony, in Oslo, Norway. The schedule sharply limits the time she has for writing new material and practicing. She moved to Texas last fall in part because it offers seclusion for working and writing.

In mid-January, Spalding spent a few days in a state-of-the-art recording facility in New Jersey, overseeing the recording of the string arrangements for her new album, *Chamber Music Society*. Present at the sessions was Gil Goldstein, a jazz accordion player and Grammy-winning arranger and producer. Hired as an arranger for the project, Goldstein had tweaked Spalding's string parts for the number "Apple Blossom." Although the two had worked smoothly through most of the session, Spalding balked at the changes to the song.

"Your string parts are too busy," Spalding told him, as they sat on a sofa in the studio's control room.

"Busy?" Goldstein echoed, laughing. "No way!"

"It's so delicate—I don't want it to get too dense."

Spalding insisted on reverting to her earlier, simpler arrangement. Goldstein assented, then went into the soundproofed studio and began conducting the trio of violin, cello, and viola. But Spalding was not hearing what she wanted. She took the baton from Goldstein, who surrendered it without complaint. (He later told me that he likes it when a musician knows what he or she wants, and that it makes for a better recording.) She put on headphones and, following the sheet music spread out in front of her on the conductor's podium, guided the musicians through the session. At one point, she demanded a retake when she wanted the violinist to play a certain note with an upward bow motion, rather than a downstroke. Later, she asked the violinist to play a series of notes by plucking the strings. She was unsatisfied with the sound.

"Maybe make that plucking more like bells—*ting, ting, ting*," she said.

The violinist mimicked the motion she had mimed at the podium and brought out a bell-like sound.

"Yes!" Spalding said.

21. In general, the author presents Spalding as:

- **A.** an accomplished, versatile musician who is taking jazz in an exciting new direction.
- **B.** a young and inspiring musician whose explorations in jazz may one day propel her out of her current obscurity.
- **C.** an overlooked but potentially influential musician who is discouraged by the decline of jazz.
- **D.** a creative person who stays within the limits of one musical genre, achieving spectacular results as a result of her focused efforts.

22. Lines 53–56 mark a shift in the passage from:

F. a discussion of the impact Spalding has had on others to a discussion of the impact others have had on her.
G. an overview of Spalding's career, philosophy, and experience to a description of an event that supports the claims made in the overview.
H. a description of Spalding as a performer to a description of her as a student.
J. a description of events in Spalding's recent past to a description of a defining moment early in her career.

23. It is reasonable to infer that the sheet music referred to in line 76 was composed by:

A. one of Spalding's teachers at Berklee.
B. Spalding.
C. Marsalis.
D. one of Spalding's protégés.

24. As presented in lines 68–88, Spalding's manner of working with musicians can best be described as:

F. repetitive, contradictory, and impatient.
G. mild mannered, imaginative, and accepting.
H. humorous, self-effacing, and energetic.
J. persistent, precise, and ultimately affirming.

25. According to the passage, how well has Spalding's first major-label jazz recording fared in the marketplace?

A. Its sales have more than doubled those of a standard hit jazz album of the time.
B. It has drawn some attention in the United States but made a huge splash in Europe.
C. Its poor sales have contributed to Spalding's decision to develop a jazz style that better reflects her passion.
D. Its sales were slow at first but picked up rapidly after Goldstein began promoting Spalding.

26. The passage states that which of the following approaches to jazz sets Spalding apart from many of her contemporaries?

F. She looks to Marsalis as her mentor at a time when her jazz contemporaries look to Goldstein.
G. She considers studying jazz history to be a liability.
H. She prefers composing over performing.
J. She incorporates dance rhythms in her work.

27. As it is used in line 37, the expression *put off* most nearly means:

A. postponed.
B. repelled.
C. released.
D. misplaced.

28. As it is used in line 46, the phrase "a museum piece" is intended as a form of:

F. praise.
G. encouragement.
H. criticism.
J. inquiry.

29. According to the passage, how many concert dates does Spalding perform a year?

A. A handful
B. Between twenty and fifty
C. Between fifty-one and one hundred
D. One hundred and fifty

30. What was the source of Spalding's irritation during the recording session described in the passage?

F. Goldstein had complicated a section of Spalding's "Apple Blossom" that Spalding wanted to keep simple.
G. Goldstein had dropped the string section from the musical score of *Chamber Music Society*.
H. The musicians had misunderstood which part of Spalding's score was left open for improvisation.
J. Goldstein had wanted to feature strings in a section of "Apple Blossom" that Spalding had written for bells.

Passage IV

NATURAL SCIENCE: This passage is adapted from the article "Silence of the Pikas" by Wendee Holtcamp (©2010 by Wendee Holtcamp).

Pikas, a diminutive alpine-dwelling rabbit relative, are unique among alpine mammals in that they gather up vegetation throughout summer—including flowers, grasses, leaves, evergreen needles, and even pine cones—and live off the hay pile throughout winter, rather than hibernating or moving downslope. But increasingly warm temperatures may drive them to the brink: the high-energy mammals can overheat and die at temperatnres as mild as 25 degrees Celsius if they can't regulate their body temperature by moving into the cooler microclimate under the talus. And since they already live near the tops of mountains, when a particular talus field's microclimate becomes inhospitable, they simply have nowhere to go.

Sometimes called cony, mouse hare, rock rabbit, or whistling hare, the pika has a narrow niche. They live only in talus fields, and these must lie adjacent to alpine meadows or other vegetation so they have access to plants for food and hay farming. The talus rock fields mnst have boulders of a certain size; scree, a similar habitat with smaller rocks, won't do. Rocks provide safe haven from pikas' main predator, weasels. But perhaps more important, the interstices between the rocks provide both a cool, moist microclimate where pikas cool down during hot summer days and also the perfect sanctuary in which to settle during the long winter's night. They don't huddle together like many other mammals, as far as scientists can tell, but remain fiercely territorial and solitary throughout the winter, guarding their hay piles with their lives. As a snowpack settles over the land, it insulates the Earth and maintains a certain undergronnd temperature at which pikas can snrvive, just below freezing. With warming temperatures reducing snowpack in many mountainous areas, in a strange twist of fate, global warming can cause pikas to freeze.

Biologists have dubbed mountaintop habitat patches "sky islands" because the valleys in between are as uninhabitable as the sea for nonmobile alpine species. This creates an ideal scenario to test the predictions of one of ecology's key theories: island biogeography. Individual pikas have a relatively limited distance they can disperse, around two kilometers, so they can't just shift from one mountain to another. At the population level, they're stnck on a particular mountain range. In the 1990s, biologist Erik Beever and colleagues surveyed pikas throughout the hydrographic Great Basin—a heart-shaped 500,000 square kilometer intermontane plateau dotted with 314 mountain ranges, incorporating parts of California, Nevada, Utah, Oregon, Idaho and Arizona—and were unable to find pikas in 6 of 25 mountain ranges that they had occupied in the late 20th century. Was the cause of pika extirpations (disappearances) climatic, anthropogenic, or biogeographical?

Island biogeography theory says that "species are predicted to remain on large islands and islands that are not very isolated from mainland [habitat]," explains Beever, who did much of his work while a graduate student under Mary Peacock, at the University of Nevada–Reno. He and colleagues fonnd pika populations persisted in mountain ranges with more talus habitat available—supporting one prediction of island biogeography theory—but pikas were not more likely to persist at sites closer to the Rocky Mountain or Sierra Nevada "mainland" ranges.

"Here isolation doesn't have anything to do with whether they're lost or not," Beever says. Not only that, "the sheer size of a mountain range in this case isn't very predictive of patterns of loss. [And] if we count the amount of habitat, that's less important than these climatic influences." Ultimately, the factors most strongly associated with pika disappearance were climatic; specifically, warmer and drier sites, which tended to be lower down the mountains. In another study published in *Ecological Applications*, Beever, University of Colorado researcher Chris Ray, and other colleagues revealed that acute cold stress and chronic heat stress (in other words, cold snaps and overall hotter summers) affect pika more than individual very hot days.

"The problem with global warming is that if [pikas] lose [their] snowpack, which provides insulation in winter, they freeze to death, and if the ambient air temperature heats np too much in summer, then they [overheat]. That's the challenge," Peacock says, who has studied pika population genetics. "They're already at the top of the mountain. If you heat it up snbstantially, there's no place for them to go."

31. The primary purpose of the passage is to discuss the:

- **A.** methods scientists use to track the nnmbers of pikas in several regions.
- **B.** role pika social behavior plays in their ability to adapt to changing conditions.
- **C.** causes of pika disappearances and scientists' proposed solutions to the disappearances.
- **D.** habitat and conditions in which pikas flourish and the causes of their disappearances.

32. In lines 53–55, the author poses a question about the cause of pika disappearances that she:

- **F.** answers in the paragraphs that follow.
- **G.** uses to emphasize the extent of pika disappearances.
- **H.** asks to highlight flaws in Beever's research.
- **J.** poses to establish the three main results of pika disappearances.

33. According to the passage, one of Beever's findings that supports island biogeography theory is:
    - A. pika populations thrived in most of the mountain ranges that pikas had occupied in the twentieth century.
    - B. pika populations endured in mountain ranges with more talus habitat available.
    - C. the size of a mountain range correlated with the size of a pika population.
    - D. isolated pika populations were more likely to survive in varied habitats.

34. According to the passage, the study published in *Ecological Applications* indicates that a pika population is most stressed by a summer with:
    - F. a higher than average amount of rainfall.
    - G. several individual very hot days.
    - H. overall hotter temperatures.
    - J. slightly cooler temperatures.

35. It can most reasonably be inferred from the passage that one reason pikas easily overheat is that they:
    - A. become overwhelmed by a thick snowpack.
    - B. are a high-energy mammal.
    - C. huddle together in interstices.
    - D. insulate themselves inside hay piles.

36. The passage indicates that compared to a talus field, scree habitats have:
    - F. more food.
    - G. fewer predators.
    - H. smaller rocks.
    - J. better access to interstices.

37. The passage indicates that the perfect sanctuary for a pika on a long winter night is located:
    - A. on a hay pile near an alpine talus field.
    - B. in an alpine meadow near a talus field.
    - C. on the top of a mountain adjacent to a talus field.
    - D. in the interstices between rocks in an alpine talus field.

38. In the passage, the behavior of pikas during winter is characterized in part as:
    - F. fiercely territorial.
    - G. relatively relaxed.
    - H. predatory.
    - J. social.

39. The passage states that biologists dub mountaintop habitat patches "sky islands" because:
    - A. any species that survive on mountaintops are completely cut off from the rest of the mountain.
    - B. the mountaintops' altitude makes them a haven for most species.
    - C. the valleys between mountaintops are as uninhabitable as the sea would be for nonmobile alpine species.
    - D. like the sea, mountaintops are only habitable to mobile species.

40. It can most reasonably be inferred from the passage that as compared to pika populations on the top of a mountain, those at lower mountain elevations are more likely to:
    - F. disappear.
    - G. thrive.
    - H. remain unchanged.
    - J. migrate to another mountain range.

END OF TEST 3

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

DO NOT RETURN TO A PREVIOUS TEST.