

GRADE 6 Reading

Administered April 2013

RELEASED

READING

Read the selection and choose the best answer to each question. Then fill in the answer on your answer document.



Sailing to New Horizons

- 1 You might take a car, a bus, or a bike to school. But in Bangladesh, instead of waiting for a school bus to come down their street, many students wait for a school boat to come down the river. That's right these students attend school on a boat!
- 2 Bangladesh is very close to sea level. For this reason the land is flooded for five months of every year. The flooding creates many problems. For the nearly 160 million people living there, the <u>periodic</u> flooding means that they are often unable to access roads, electricity, or telephones.
- 3 Growing up in Bangladesh, Mohammed Rezwan was often frustrated by these disruptions. Though the floods sometimes hindered his education, Rezwan eventually finished school and became an architect. He did not want to design houses, though. He had a better idea. In 1998 he founded an organization called Shidhulai Swanirvar Sangstha. The name means "self-reliance." The purpose of the organization is to help the people of Bangladesh receive an education and also to bring technology and an improved quality of life to poor people in remote areas of the country.
- In 2002, Rezwan began transforming boats into schools. The boats he used were long and narrow, with flat bottoms so that they could float in shallow water. The decks were covered by waterproof roofs to protect the inside of the classroom from the rain. Underneath the roofs were desks, books, bookshelves, and computers. Each boat was built to accommodate between 30 and 35 students. The boats had everything you might find in a regular classroom. The only difference was that they floated on a river.



- 5 These boats have been a great success. Today Rezwan and his organization operate 88 boats that navigate hundreds of rivers in northern Bangladesh. About half the boats are used as schools, and the other half are used as temporary houses during the flood season. In addition to the schools and the temporary housing, there are also a floating technology and training center, a library that allows students to check out books, and a health-care center. The school boats travel along the rivers and pick up students for classes that include computer technology, agriculture, and human rights. After one session finishes, the boat drops the students off at home and picks up more students. Teachers on the boats usually conduct three or four sessions every day.
- 6 At night the boats provide additional learning opportunities for students and community members. Adults attend evening literacy courses. Students study using solar lamps that are charged during the day at stations near the river. Special equipment on the boats also projects lessons onto big screens made from sailcloth. People can come down to the riverbank to watch Web tutorials, documentaries, and other films. In all, these boats help educate close to 90,000 families in Bangladesh.
- 7 Parents who live in the flood area are happy to have the boats in their communities. When asked about the program, Farida, whose sixyear-old daughter attends class on a school boat, said, "It was difficult for my parents to send me to school, but now all the facilities are in the village. I have started planning for my daughter's future education. I want to see her become a doctor or engineer."





8 By floating down these rivers, the school boats deliver more than books. They deliver knowledge, opportunity, and hope to all generations. "This [library] boat inspired me," said 18-year-old student Shanto Islam, who enjoys reading science fiction books. "I started to dream." Islam now wants to attend a university.



- 1 Which statement about education does this article best support?
 - **A** Schools should adapt to local conditions.
 - **B** Schools should give students time off.
 - **C** Smaller class sizes are better for instruction.
 - **D** Students prefer attending classes with friends.

2 The organization of paragraphs 2 through 4 contributes to the author's main idea by -

GO ON

- **F** describing school boats from their flat bottoms to their waterproof roofs
- **G** explaining how school boats came to be
- ${\bf H}~$ comparing school boats with other types of boats
- J highlighting the effects school boats have had on people



3 Read these sentences from paragraph 7.

"It was difficult for my parents to send me to school, but now all the facilities are in the village. I have started planning for my daughter's future education. I want to see her become a doctor or engineer."

This quotation shows that —

- **A** Rezwan's efforts have improved educational conditions for future generations
- **B** Farida thinks that there are enough facilities in her village to serve all the children
- C Rezwan believes that his school boats will create many doctors and engineers
- **D** Farida's own difficulties in attending school cause her to be doubtful about her daughter's education

- 4 As used in paragraph 2, what does the word periodic mean?
 - F Regularly occurring
 - G Unexpected
 - H Previous
 - J Seldom repeated





- **5** Which sentence from the article best supports the claim that Rezwan's boats have successfully addressed a problem in Bangladesh?
 - A The purpose of the organization is to help the people of Bangladesh receive an education and also to bring technology and an improved quality of life to poor people in remote areas of the country.
 - **B** In all, these boats help educate close to 90,000 families in Bangladesh.
 - **C** Each boat was built to accommodate between 30 and 35 students.
 - **D** Students study using solar lamps that are charged during the day at stations near the river.

- 6 The reader can conclude that Rezwan believes that -
 - F educating children is easier than educating adults
 - G floating schools cannot compete with traditional schools
 - H developing technology skills is a necessity in today's world
 - **J** choosing a career is a difficult decision

- 7 The message conveyed by the photographs is that
 - **A** students are engaged in learning on school boats
 - **B** each school boat needs many workers to manage it
 - **C** the school boats float down the river to pick up students
 - **D** the school boats can be used in both sunny and rainy weather



Read the selection and choose the best answer to each question. Then fill in the answer on your answer document.

Back to First Grade

- 1 "Crisscross, applesauce!" The teacher's voice bounced off the alphabetlined walls of the first-grade room. Immediately the six-year-olds knew to scramble to the reading rug and take their seats with their legs crossed. The room filled with their babble until Miss Sanchez called out, "Bubbles in your mouth, everyone." All 21 students hushed as they sucked in air until they looked like blowfish.
- *2* I looked at the students and gave them a thumbs-up.
- Just six weeks ago I had been the envy of my middle school peers. For my mentoring project I had been assigned to first grade, a desired position. Everyone figured that working with little kids would be less challenging than working with the older elementary students. Story time, coloring, recess, and games would be so much fun compared with helping students with multiplication tables, science projects, and writing exercises.
- 4 "You're so lucky, Chloe," my best friend Maneya had told me. "I have to work with fourth graders. Ugh!"
- 5 "I know! It's going to be great. It'll be like having a couple of hours off from school each week!" I gloated.
- 6 But I soon learned that helping teach first grade was no vacation at all. The first week was a nightmare. I was assigned a small group of students: Sara, Allie, Cameron, and Fernando. Sara cried every morning, for any number of reasons. One time she cried because she didn't know how to use her scissors. I helped her, but then she started crying again because she realized she was the only one in the classroom who didn't know how to use scissors. There was no pleasing her! Allie had a bad cold and continually wiped her hands on the back of my shirt. Fernando refused to speak. Cameron didn't want to participate in anything.
- 7 "I think first grade has changed a lot from when we were first graders," I told Maneya. "I don't remember learning about trapezoids and hexagons back then. Do you? I'm trying my best to help teach this stuff, but the kids look at me like I've just arrived from another planet."
- 8 Maneya smiled at me, and secretly I think she was thanking her lucky stars that she was working with fourth graders. Her students listened intently to tales about middle school, an exciting world they were looking forward to. They even completed their multiplication drills without complaining. It sounded like a great classroom to spend time in.



- 9 Twice a week for 52 minutes—and not a minute more!—I worked with my group, creating patterns with geometric shapes, reading short stories, learning about neighborhoods, and much more. The days were also filled with glue sticking to things it shouldn't and kids tattling about things they shouldn't. Most days I returned to my own campus exhausted, and I limped along through my afternoon classes. Once, after my classmates snickered at me, my teacher asked me why I was wearing a crown made of construction paper. I had completely forgotten that I had been filling in for Cameron, who had decided he no longer wanted to be the king in the group's rehearsal of their skit "King for a Day."
- 10 Then there were all the first-grade codes I had to learn. When Fernando held up three fingers and stuck them in my face, I told him to keep his hands to himself. A few minutes later, Fernando stuck three fingers in the air again. Back and forth for the next 10 minutes, those fingers went up and I made him put them down. Finally another student told Miss Sanchez in her "outside voice" so that everyone could hear, "Miss Chloe won't let Fernando go to the bathroom!"
- 11 "How was I to know they had hand signals for everything? Two fingers for a drink of water, three fingers for bathroom, and one finger to ask a question," I grumbled to Maneya.
- 12 Maneya comforted me as I told story after story about first grade. But as the weeks went on, I began to notice a change in our conversations. I wasn't the one who was complaining anymore. I had figured out how things worked in the first grade, and Maneya was the one who started to complain. Her experiences with fourth graders began to dull in comparison with my adventures with the six-year-olds.
- 13 And now the last day of the mentoring project had arrived, and overall, things had changed for the better. Sara still cried, but less frequently now that she was deemed the student with the best handwriting in the class and was sought out by others for help. Allie had taken ownership of the skit the group had been assigned to write and produce, and she was able to get Fernando to speak; we soon realized that he was really funny and could write some really great lines. Cameron even relented and decided he would be the king after all.
- 14 The students let go of the breath they were holding. The room was quiet now. My group returned my thumbs-up gesture as they sat patiently on the reading rug and waited for their turn to perform the "King for a Day" skit they had practiced for weeks. After watching their terrific performance, I smiled widely, congratulated and hugged each student, shook hands with parents, and nibbled on tiny sandwiches. When I left that day, I knew I would miss those first graders—even Sara and her endless tears.

GO ON

- 8 From Chloe's description of the fourth-grade students in paragraph 8, the reader can tell that Chloe -
 - F is jealous of Maneya's mentoring assignment
 - **G** realizes that mentoring requires long hours
 - **H** regrets becoming a school mentor
 - J is unhappy with Maneya's approach to mentoring

- 9 What is one message the author conveys in the story?
 - **A** Treat others as you want to be treated.
 - **B** People who prepare are the most successful.
 - **C** You must take risks in order to succeed.
 - **D** It is best not to judge situations too early.

- **10** In paragraph 13, the word relented means
 - F created a spectacle
 - G gave in
 - ${\bf H}$ entertained an audience
 - J worked hard



- 11 Paragraphs 6 and 7 contribute to the rising action of the story by showing that Chloe
 - A no longer wants to participate in the mentoring program
 - **B** has the wrong impression about first grade
 - **C** is unfamiliar with the concepts being taught in first grade
 - ${\boldsymbol D}$ does not like being told what to do

- 12 The author's choice of first-person narrator helps the reader
 - F understand how the mentoring experience has had an impact on Chloe
 - G comprehend how Chloe's classmates view her
 - H learn how the first graders feel about Chloe
 - J realize that the other mentors are not as serious about the project as Chloe is

- 13 What can the reader conclude about Chloe's and Maneya's mentoring experiences?
 - **A** Both mentoring assignments end in a positive way.
 - **B** Both mentors need help to be successful in their assignments.
 - **C** Both mentors fail to learn from their assignments.
 - **D** Both mentoring assignments present unique challenges.



- 14 In paragraphs 4 and 5, what does Chloe's conversation with Maneya reveal about Chloe?
 - **F** She believes that she will not have to work hard in the first-grade classroom.
 - **G** She has experience working with young children.
 - **H** She dislikes fourth-grade students.
 - **J** She does not enjoy attending classes at her middle school.

- **15** Which sentence expresses the turning point in the story?
 - **A** I looked at the students and gave them a thumbs-up.
 - **B** I wasn't the one who was complaining anymore.
 - **C** It sounded like a great classroom to spend time in.
 - **D** Just six weeks ago I had been the envy of my middle school peers.



- 16 What is the best summary of the story?
 - **F** As noise fills the first-grade classroom, Miss Sanchez makes the students stop talking. Chloe is excited about working with the students as part of a mentoring program. Chloe's friend Maneya is assigned to mentor fourth-grade students, and Maneya is unhappy about her assignment.
 - **G** Chloe is assigned to mentor in a first-grade class, and her friend Maneya is assigned to mentor in a fourth-grade class. At first Chloe thinks teaching first graders will be easy, but she soon finds out that it is not as easy as she had thought. Maneya has success with the fourth-grade class while Chloe struggles.
 - **H** Chloe becomes confused when Fernando puts three fingers in front of her face. She complains to her friend Maneya that mentoring in a first-grade class is not easy at all. Chloe thinks that the students do not understand her. Chloe learns that being a mentor in a first-grade class is not nearly as easy as she had first thought.
 - J Chloe and her friend Maneya are both assigned to be mentors in elementary school classrooms. Maneya finds success early with her fourth-grade class, but Chloe has a difficult time managing her first graders. Chloe eventually learns that she has to adapt to the procedures of the first-grade classroom in order to succeed.

17 Read the following sentence from paragraph 7.

"I'm trying my best to help teach this stuff, but the kids look at me like I've just arrived from another planet."

This sentence helps illustrate Chloe's -

- **A** ignorance
- **B** stubbornness
- **C** frustration
- **D** uncertainty



Read the selection and choose the best answer to each question. Then fill in the answer on your answer document.

Renewed Hope for "Extinct" Species

- 1 Long ago in the highlands of Australia, it was common at night to hear a loud repeating noise that resembled that of a motorcycle in the distance. This bizarre sound came from a frog known as the yellow-spotted bell frog. The frog also had other distinctive features. As its name suggests, it had yellow spots on its groin and outer thighs. It also had fully webbed feet. Although these unusual features should make it easy to recognize, the average Australian today has never seen this frog. Nor have they heard its call.
- 2 More than 30 years ago, a fungus called chytrid began attacking many of Australia's frogs. The fungus had an especially harmful effect on the yellow-spotted bell frog. Those frogs that survived the fungus were preyed on by foxes and cats. Scientists thought that the yellow-spotted bell frog had become extinct—or at least that is what was believed until one day in October 2008.
- 3 On that day fisheries conservation officer Luke Pearce was walking along a stream in the Australian state of New South Wales. He was attempting to find a fish known as the southern pygmy perch. Instead, on the side of the stream, he saw a type of frog he had never seen before.





- 4 However, Pearce had recently attended a talk given by Dr. David Hunter, an expert on threatened species, about Australia's disappearing frogs. Among the frogs Hunter described was the yellow-spotted bell frog. Although the species had not been seen for decades, Hunter was hopeful that tiny populations of the frogs might still remain in remote areas as had occurred with some other species. He asked the members of his audience to watch for them.
- 5 As Pearce stared at the frog, he recalled Hunter's talk. "It was basking out on a reed during the day, and when it jumped across and started swimming away, I thought it definitely looked like a bell frog," Pearce said. Excitedly he called Hunter. "Mate,"¹ he said, "I think I've just seen a bell frog out here."
- 6 A year passed before Pearce and Hunter could return to the area together. There they and others discovered a colony of about 100 of the rare frogs. This discovery, Hunter said, "was definitely the most exciting moment of my career, and I'd be surprised if I'll repeat it."
- 7 He added, "To have found this species that hasn't been seen for 30 years and that professional researchers thought was extinct is great. It gives us a lot of hope that a lot of other species that we thought were extinct aren't actually extinct—we just haven't found them."
- 8 The rediscovery of the yellow-spotted bell frog, though, does not mean that it is out of danger. On its own, a colony of 100 frogs has little chance of long-term survival. One worry that remains is the fungus. Possibly, as Hunter hopes, this colony survived because it is resistant to the fungus. Another explanation is that somehow its location provided protection from the fungus.
- 9 Determining which of the possibilities is the case is important because the answer could help increase the numbers of yellow-spotted bell frogs. To that end, six tadpoles have been removed from the site of the discovery and taken to the Taronga Zoo. There the tadpoles will become part of a breeding program. When enough frogs have been bred, they will be placed in locations in the wild where they once thrived. Their survival in these areas would support the resistance theory.
- 10 In the meantime, other <u>measures</u> have been taken to protect the yellow-spotted bell frog. Among them was a long delay in announcing the frog's rediscovery. This delay, Hunter said, gave experts time to develop plans to protect the colony. Even now, the exact location of the colony remains a secret. This will help keep human intrusion to a minimum so that what may be the yellow-spotted bell frog's last remaining refuge will remain, in fact, a refuge.



¹*Mate* means "friend" in Australian usage.

- 18 The author organizes paragraphs 2 through 7 by -
 - **F** presenting events that led to the rediscovery of the yellow-spotted bell frog
 - **G** showing the reasons people thought yellow-spotted bell frogs were extinct
 - ${\bf H}$ comparing the disappearance of yellow-spotted bell frogs to that of other species
 - J illustrating the attempts to increase the numbers of yellow-spotted bell frogs

19 In paragraph 8, the word resistant means —

- **A** looking similar to
- B able to withstand
- **C** hidden from sight
- **D** becoming unwanted





- 20 What is the best summary of this selection?
 - **F** Luke Pearce was searching for a fish in a stream in New South Wales when he saw an unusual frog. He called Dr. David Hunter, an expert on threatened species. After Pearce took Hunter to the location where he first saw the frog, Hunter confirmed that it was from a colony of yellow-spotted bell frogs.
 - **G** Originally thought to be extinct, a yellow-spotted bell frog was seen by Luke Pearce. A year later Pearce and Dr. David Hunter, an expert on threatened species, discovered a small colony of the frogs. This species' population was drastically reduced to near extinction by a harmful fungus.
 - **H** Luke Pearce and Dr. David Hunter discovered a colony of yellow-spotted bell frogs. A few of the frogs were taken to the Taronga Zoo for breeding. Once the frog population has been replenished, groups of the yellow-spotted bell frogs will be released in different locations in the wild.
 - J While walking along a stream, Luke Pearce noticed a frog that was thought to be extinct. He contacted Dr. David Hunter, an expert on threatened species. The two men returned to the site and discovered a small colony of yellow-spotted bell frogs. Efforts are now being made to save the species from extinction.



21 Read this sentence from the selection.

On its own, a colony of 100 frogs has little chance of long-term survival.

The author included this sentence most likely to show -

- A that the life span of the yellow-spotted bell frog is extremely short
- **B** why scientists are taking several different steps to protect the remaining yellow-spotted bell frogs
- **C** that the yellow-spotted bell frogs can live only in zoos
- **D** how scientists are trying to help the yellow-spotted bell frog by eliminating the chytrid fungus

- **22** Why did Dr. Hunter have hope that the yellow-spotted bell frog might someday be rediscovered?
 - **F** The decrease in predators made it likely that some frogs survived.
 - **G** Other species thought to be extinct had been found.
 - **H** Conditions where the frogs were typically found became less dangerous.

GO OI

J Less human contact reduced the risk to the species.



measure \n **1.** an acceptable amount **2.** a standard used for comparison **3.** an action intended to achieve a result **4.** a size, capacity, or weight of an object

Which definition of the word measures is used in paragraph 10?

- **A** Definition 1
- **B** Definition 2
- C Definition 3
- **D** Definition 4

24 Pearce was able to identify the yellow-spotted bell frog because he -

- **F** had seen the species before a fungus attacked them
- G studied endangered frog species as a fisheries conservation officer
- H visited the Taronga Zoo with Hunter
- J had attended a lecture given by Hunter



Read the next two selections. Then choose the best answer to each question.

Tomato Harvest

by Robert D. San Souci

What it was I still don't know That urged a fourth-grade me to grow Tomatoes in the strip of clay Not used for planting—just for play.

 5 My brothers laughed and called me dense— Tomato farming made no sense.
 What's more, the place already grew
 Lots of sour grass to chew.

I ignored them both, my mind on things

10 Like hanging foil strips on stringsTo keep away the birds that hoped to eatThe seeds fresh-sown in earth and peat.

I watered and weeded those seedlings of mine Braced the stalks with stakes and twine,

15 And watched for snails and worms—that bunch Of pests for whom green leaves mean lunch.

One night it rained so fiercely that By dawn most plants were beaten flat; *I* felt beaten splashing out to see

20 How little garden was left to me.

Those losses made my harvest small: One bucketful of fruit was all— But when I picked my first and tried it, What sweetness and pride I found inside it.

"Tomato Harvest" by Robert D. San Souci, from *Food Fight*, edited by Michael J. Rosen, copyright © 1996 by Robert D. San Souci. Used by permission of Michael J. Rosen.

A Run to Remember

by Barbara L. Glenn

- 1 Thirteen can be a challenging age. Not only did I have to adapt to my changing body; I also had to deal with my parents' bitter divorce, a new family and the upsetting move from my country home to a crowded suburb.
- 2 When we moved, my beloved companion, a small brown pony, had to be sold. I was trashed. Feeling helpless and alone, I couldn't eat or sleep, and I cried all of the time. I missed my family, my home and my pony. Finally, my father, realizing how much I missed my pony, purchased an old red gelding for me at a local auction.
- *3* Cowboy was without a doubt the ugliest horse in the world. He was pigeon-toed and knock-kneed. But I didn't care about his faults. I loved him beyond all reason.
- 4 I joined a riding club and endured rude comments and mean snickers about Cowboy's looks. I never let on about how I felt, but deep down inside, my heart was breaking. The other members rode beautiful registered horses.
- 5 When Cowboy and I entered the events where the horse is judged on appearance, we were quickly "shown the gate." No amount of grooming, vitamins or unconditional love would turn Cowboy into a beauty. I finally realized that my only chance to compete would be in the timed-speed events. I chose barrel racing.
- 6 One girl named Becky rode a big brown thoroughbred mare in the race events. She always won the blue ribbons. Needless to say, she didn't feel threatened when I competed against her at the next show. She didn't need to. I came in next to last.
- 7 The stinging memory of Becky's smirks made me determined to beat her. For the whole next month I woke up early every day and rode Cowboy five miles to the arena. We practiced for hours in the hot sun and then I would walk Cowboy home. On the way home I would be so tired, those five miles seemed twice as long.
- 8 All of our hard work didn't make me feel confident by the time the show came. I sat at the gate and sweated it out while I watched Becky and her horse charge through the pattern of barrels, acing the course with ease.
- 9 My turn finally came. As I nudged Cowboy forward he stumbled, and almost fell, much to the delight of the other riders. I jammed my hat down on my head, stroked Cowboy's big red neck, and entered the arena. At the



signal, we dashed toward the first barrel, quickly whipped around it and with perfect precision rounded the second and thundered on to the third. We tore around the final curve and shot for the finish line.

- 10 No cheers filled the air. The end of our <u>run</u> was met with surprised silence. With the sound of my heart pounding in my ears, I heard the announcer call our time. Cowboy and I had beaten Becky and her fancy thoroughbred by a full two seconds!
- 11 I gained much more than a blue ribbon that day. At thirteen, I realized that no matter what the odds, I'd always come out a winner if I wanted something badly enough to work for it. I can be the master of my own destiny.

"A Run to Remember" by Barbara L. Glenn, copyright © 1989 by Barbara L. Glenn. Used by permission of the author.



Use "Tomato Harvest" (p. 22) to answer questions 25–29. Then fill in the answers on your answer document.

- **25** In line 24, why does the speaker say that he found "sweetness and pride" in the first tomato?
 - **A** He has worked hard to grow the tomatoes.
 - **B** He has planted a very sweet-tasting variety of tomato.
 - **C** Tomatoes are his favorite food to eat.
 - **D** He knows the next tomato will not taste as good.

26 Stanza 4 is important to the poem because it shows -

- **F** the way the speaker feels about his brothers
- **G** the speaker's commitment to his garden
- **H** the speaker's lack of experience with gardening
- J the changes the speaker notices in his plants



27 Read these lines from the poem.

I felt beaten splashing out to see How little garden was left to me.

The poet uses these lines to show that the speaker feels -

- **A** defeated by the storm
- **B** confused by the effect the rain had on the garden
- **C** burdened by the amount of work required to manage a garden
- **D** concerned that the storm has not ended

- 28 The poet organizes the poem by -
 - F explaining the reasons for each of the speaker's actions
 - **G** listing the growing phases of the speaker's tomato plants
 - H presenting the order of events in the speaker's experience
 - **J** noting the frequent changes in the speaker's emotions

29 Which line from the poem presents a problem that the speaker cannot control?

- **A** To keep away the birds that hoped to eat
- **B** Of pests for whom green leaves mean lunch.
- **C** Tomatoes in the strip of clay
- **D** One night it rained so fiercely that



Use "A Run to Remember" (pp. 23–24) to answer questions 30–36. Then fill in the answers on your answer document.

- **30** What can the reader tell about the narrator's feelings for Cowboy?
 - **F** She hoped her father would trade him for another horse.
 - **G** She wished he looked more like her brown pony.
 - **H** She was concerned about his inability to win a competition.
 - **J** She was fond of him regardless of his appearance.

- **31** In paragraph 5, the author uses the phrase "shown the gate" to illustrate that the narrator was
 - A instructed where to race
 - **B** eliminated from competition
 - C told which event to enter
 - D given a tour of the area





- 32 Why did the author include paragraphs 1 and 2 in the selection?
 - **F** To illustrate why the narrator loved the pony she had to sell
 - **G** To show why the narrator enjoyed living in the country
 - ${\ensuremath{\textbf{H}}}$ To explain why the narrator's father bought her a new horse
 - J To create a description of the narrator's new home

33 Read the following dictionary entry.

run \'rən\ n
1. an established route or course
2. a series of similar events 3. a continued effort 4. a flow of liquid

Which definition matches the word run as it is used in paragraph 10?

- **A** Definition 1
- **B** Definition 2
- **C** Definition 3
- **D** Definition 4

34 When Cowboy and the narrator won the race, people were –

- F delighted
- G impressed
- H concerned
- J stunned

Page 28



- 35 What is the central message the author presents in this selection?
 - **A** It is satisfying to watch others succeed.
 - **B** Receiving negative comments leads to a lack of confidence.
 - **C** Being dedicated can help one obtain a seemingly impossible goal.
 - **D** It is tempting to quit when situations become difficult.

36 Read the following sentence from the selection.

The stinging memory of Becky's smirks made me determined to beat her.

From this sentence, the reader can conclude that -

- F the narrator wanted to be like Becky
- **G** the narrator's efforts amused Becky
- H Becky was bothered by the narrator
- J Becky's actions angered the narrator



- **37** The speaker in the poem and the narrator of the selection are both -
 - A doubted by others
 - **B** defeated by nature
 - **C** expected to succeed
 - **D** supported by family

38 In what way do the speaker in the poem and the narrator of the selection differ?

- **F** The speaker is new to gardening, while the narrator was an expert barrel racer.
- **G** The speaker is focused on one goal, while the narrator initially attempted different events.
- **H** The speaker exerts little effort, while the narrator struggled greatly.
- **J** The speaker knows why he chose to garden, while the narrator was unsure of which event to enter.



39 Both the poem and the selection end with a feeling of -

- **A** anticipation
- **B** frustration
- **C** accomplishment
- **D** relief

40 One difference between the speaker in the poem and the narrator of the selection is that the speaker —

- **F** receives more than he expected, while the narrator's performance did not meet her expectations
- **G** is pleased with the process of growing plants, while the narrator was annoyed with the results of her work
- **H** has to be patient in order to achieve his goal, while the narrator had to practice in order to achieve her goal
- J worries about what others say, while the narrator did not listen to the opinions of others



Read the selection and choose the best answer to each question. Then fill in the answer on your answer document.

Robot on the Ice

by Kimberly Shillcutt Tyree, Ph.D.

- 1 We stood on a giant ice field about 1,000 miles from the South Pole. We were surrounded by blowing snow, with nothing in sight but a few crates of supplies and a robot.
- *2* First things first—we started putting up tents!
- 3 Seven of us had just arrived on the Antarctic Plateau to work on a project for NASA. We were part of a research team from the Field Robotics Center at Carnegie Mellon University in Pittsburgh, Pennsylvania. I was one of three students in robotics who were lucky enough to be invited to go on this trip by the project leader, Dr. Dimitrios Apostolopoulos.

Rocks from Space

- 4 We had come to see if our robot could find *meteorites*—rocks that have fallen to Earth from space.
- 5 Meteorites are important to NASA because they can tell us more about what is in space. Some were blasted off the surface of Mars long ago by asteroids.¹ They have given us clues about the red planet. Even older meteorites hold clues about the birth of the solar system.
- 6 We needed to come to this faraway place because Antarctica is the best place to find meteorites. When space rocks fall on Antarctic ice fields, snow covers them. As the ice fields creep toward the ocean, some of them run into hills and mountains. There the ice stops, and the wind blows away the top layers of snow. The buried meteorites then come to the surface, where they can be found.
- 7 A few people come to Antarctica every summer to hunt for meteorites, but searching on the ice is cold and tiring. Even in the summer, the temperature can feel like forty degrees below zero.
- 8 We were not typical meteorite hunters, though. We had a robot. We would stay in a heated tent and "talk" to the robot through our computers while the robot searched on the ice more than a mile away.



¹Asteroids are small rocky bodies found in outer space, typically in the area between Mars and Jupiter.

A Wandering Robot

- 9 We called our robot Nomad. We had designed it to explore remote places, just as a space robot explores other planets. Nomad had to be able to travel over rough ground and drive for long distances. It had to be able to look around, study objects that we had programmed it to look for, and send its information back to humans. So we gave Nomad a sturdy frame, four wheels, lots of sensors and computers, and wireless access so that humans could communicate with it.
- 10 Nomad had already explored a desert in South America, but before we went to Antarctica we had to make some changes. We added heaters to keep the computers and sensors warm, and we added studs to the tires so Nomad could move on the ice without slipping.
- 11 After setting up our tents, we went to work on our robot. It had traveled from the coast hanging under a helicopter, so we had taken off all the fragile parts before the trip. Now we put them all back on: cameras and a laser to help the robot see, and a sensor called a *spectrometer*.



- 12 The spectrometer was attached to the end of Nomad's robot arm, so Nomad could lower the sensor onto rocks. The spectrometer measures changes in light as the light reflects off rock. Using those changes, Nomad can tell better than our eyes if a rock is a meteorite or an ordinary rock. We call those ordinary rocks "meteor-wrongs."
- 13 Dr. William "Red" Whittaker, director of the Field Robotics Center, said that Nomad was a new kind of robot because it could search on its own and even sort meteorites from Earth rocks.

Page 33

14 "Humans classify [things] every time they sort pennies from nickels, and they search every time they lose their car keys," he said. "But these are new skills for robots."

Searching for Meteorites

- 15 We started up the robot and all its computers and told it to start searching. But Antarctica is very different from Pennsylvania, where we had done most of our original testing. We needed to test Nomad in this new environment, and we had to make some changes to the software and the sensors.
- 16 Finally we had everything working, and we sent off the robot. We sat in our tent and watched Nomad's progress from our computers. It found several ordinary rocks, and then, suddenly, my computer screen flashed an alert. Nomad had found a meteorite!
- 17 Nomad found several more meteorites before we left Antarctica. After we returned to the United States, scientists began to study the rocks for clues about outer space. And our robot had returned a hero.



@ 2008 Highlights for Children, Inc., Columbus, Ohio



- **41** What is the most likely reason the author included paragraph 5 in the section "Rocks from Space"?
 - **A** To explain why scientists are interested in studying meteorites
 - **B** To demonstrate how technology can be used to help robots find meteorites
 - **C** To show that a few people hunt for meteorites every summer
 - **D** To describe how a meteorite falls from space onto an ice field

- 42 The author structures paragraphs 9 and 10 so that they -
 - F show that Nomad has been searching for meteorites for a long time
 - **G** explain the changes that were made to Nomad before it could be used at the South Pole
 - H report early successes Nomad had while meteorite hunting in South America
 - J emphasize the difficulties Nomad might encounter while being used in Antarctica

- 43 Antarctica is a good place to search for meteorites because
 - A natural events in Antarctica make it possible for meteorites to be noticed easily
 - **B** the weather conditions in Antarctica keep people from visiting the area
 - C meteorites land in Antarctica more often than in other areas
 - D a robot can easily travel on the ice-covered land in Antarctica



remote \ri-'mōt\ adj
unlikely to happen 2. located far away 3. not directly involved
4. controlled from a distance

Which definition best fits the way the word remote is used in paragraph 9?

- **F** Definition 1
- **G** Definition 2
- H Definition 3
- J Definition 4

45 The reader can conclude that conditions in Antarctica make it important for both Nomad and the researchers to —

GO OI

- A search for buried meteorites
- **B** stay inside heated tents
- **C** look for ordinary rocks
- **D** be prepared for the climate



- 46 Which evidence does Tyree give to support the claim that Nomad is a unique robot?
 - **F** Nomad is equipped with a way to communicate with humans.
 - **G** Nomad has the ability to differentiate between objects that appear identical.
 - **H** Nomad needs to be assembled after reaching its destination.
 - **J** Nomad is used to helping scientists do their work.

47 What is the best summary of the selection?

- A Meteorites are important to NASA because they hold clues about planets and the origin of the solar system. Seven scientists journeyed to the Antarctic Plateau to find meteorites for NASA. They experienced freezing temperatures and set up tents immediately.
- **B** A group of scientists went to Antarctica as part of a project for NASA. The scientists worked to reassemble Nomad, an advanced robot, after it had been flown in by helicopter from the coast. With the robot's help, the scientists searched for and identified several meteorites on the ice fields.
- **C** A robot named Nomad traveled long distances over rough and slippery ground in Antarctica. Nomad had already been used to explore a South American desert. Heaters were added to keep the robot's equipment warm, and studs were added to its tires so that it could move on ice without slipping.
- **D** Several scientists in Antarctica used a robot named Nomad. The scientists got the robot to start searching for meteorites in the ice fields. Antarctica was different from Pennsylvania, where Nomad was first tested, and changes needed to be made to the robot's software and sensors.





- **48** The photograph after paragraph 17 helps readers
 - F understand how Nomad is controlled
 - **G** see the process Nomad uses to locate meteorites
 - **H** gain perspective about Nomad's size
 - **J** see how Nomad was programmed to relay information

BE SURE YOU HAVE RECORDED ALL OF YOUR ANSWERS ON THE ANSWER DOCUMENT.



