

Student Name \_\_\_\_\_

Teacher Name \_\_\_\_\_

School \_\_\_\_\_

System \_\_\_\_\_

# ACH



# TENNESSEE

LEARNING

## Tennessee Comprehensive Assessment Program Achievement Test ~ Grade 7 Practice Test





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# Introduction

## **What is the TCAP Achievement Test?**

The TCAP Achievement Test is a multiple-choice test designed to measure student achievement in certain skills in four content areas: Reading/Language Arts, Mathematics, Science, and Social Studies. The questions in this practice test are examples of items used in the actual test.

## **What are the questions testing?**

Questions are written to test student performance in state content standards. The State Content Standards and Performance Indicators were developed by the Tennessee Department of Education. These Standards and Performance Indicators are listed on the State Department of Education Web site at <http://www.state.tn.us/education/curriculum.shtml>.

## **Who will be tested?**

Students in grades 3 through 8 will be tested.

## **How long will the tests take?**

The length of the tests will vary, depending on the grade level. The time limits are generous and allow most students time to finish. Extended time limits only apply to students who are eligible for special or English Language Learner (ELL) accommodations.

## **How will the tests be scored?**

The test answers will be machine scored. Results from the test provide information about how well students performed on the content being tested.

## **May calculators be used?**

Calculators may be used on Part 1 and 2 of the mathematics portions of the TCAP Achievement Test (grades 3–8) as per system policy.

## **Which test accommodations may be used?**

The TCAP Achievement Test may be administered using various procedures that are used during the student's daily educational program. Certain conditions must be met for students to be eligible for Special and ELL accommodations.

## **What is the purpose of the practice test?**

In a classroom learning session, these questions can be used to prepare students for the actual test. Teachers can use the practice test to help familiarize students with the format of test questions and how the actual test will be administered. This practice test can also be used to inform parents of the type of test their children will be taking.

## **Here are some tips for preparing students for the test.**

Remind students to:

**Relax:** It is normal to be somewhat anxious before the test. Remember that the score is only one of a number of measures of performance.

**Listen:** Listen to and read the test directions carefully.

**Plan Use of Time:** First, answer all the questions you are sure about. Do not spend too much time on any one question. If a question seems to take too long, skip it and return to it later if you have extra time.

**Pause and Think:** If you are not sure how to answer a question, carefully read it again. Rule out answer choices that you know are incorrect and then choose from those that remain.

# Reading/Language Arts



## Part 1

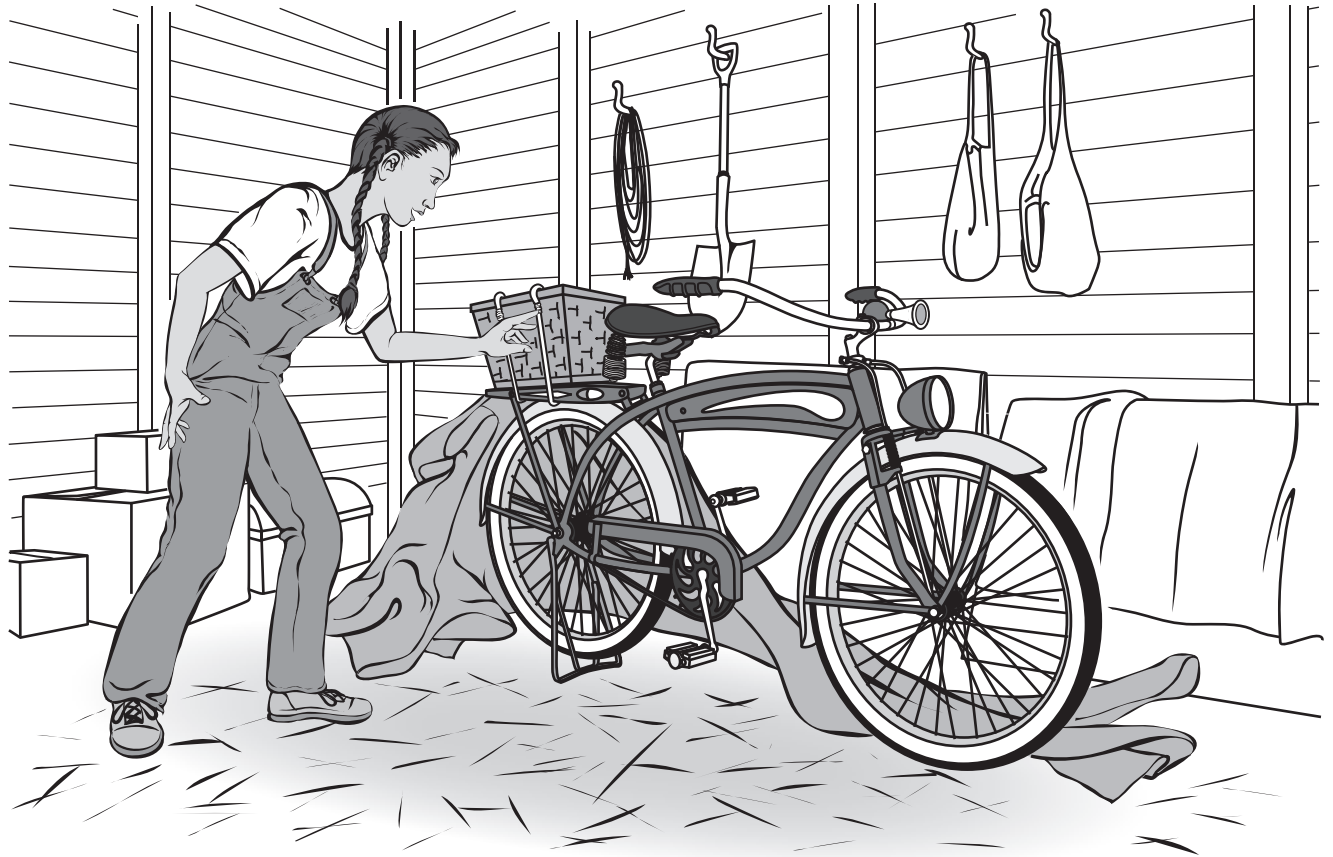
**Directions** Read the story. Then answer Numbers 1 through 5.

### Recycled Bicycle

- 1 “When you finish in that corner, would you come help me over here, Emma?”
- 2 “Sure thing, Mrs. Ames,” Emma said cheerfully. Emma was helping her neighbor clean the small barn behind her house. Mrs. Ames had grown up in the farmhouse that was still her home, and the city had grown up around the house. The barn was a reminder that the neighborhood used to be farmland.
- 3 “What do you want me to do with the bales of hay?” Emma asked.
- 4 “They will be good mulch around all those tomato plants I’m going to grow,” said Mrs. Ames. “Please leave them right there.”
- 5 Emma smiled. Mrs. Ames had her dream, and Emma had hers. She had been working to save money to buy a new bike and dreamed of riding to school in the mornings and to soccer practice in the afternoons. She knew just which bike she wanted too: a gleaming, candy-apple red, ten-speed bike with cast aluminum rims and racing tires. It had to have racing tires!
- 6 Emma carefully sorted the debris. Mrs. Ames had commented that for the past forty years, the barn had been a place to “defer decisions” about whether or not to discard old or broken items. Now Emma and Mrs. Ames were making decisions about items that had been adding up over the last four decades. The burlap sacks, if they were still sound, went into a “recycle” pile. In addition to being useful for carrying things, they had fascinating logos of long-disappeared companies printed on them in faded reds and blues. Someone would be sure to use them again.
- 7 Near the back of the barn, where dust specks danced in shafts of light, Emma saw an old canvas tarp. Lifting the heavy cloth revealed a bicycle. It was very rusty and had rotten, cracked tires. Apparently, this was one of those “deferred decisions” of which Mrs. Ames had spoken. Well, Emma thought, this clearly goes out on the junk heap.
- 8 Still, she thought, someone had once cared enough for this wreck to cover it with a tarp. Emma studied the ruin and shook her head. It was nothing like the bike *she* wanted.

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9 No, it was as different as it could be from the bike of her dreams. Instead of a straight bar of metal tubing across the center, this old bike featured a flowing, curved center with scalloped indentations. Emma took an old burlap sack and brushed at the metal for a bit to reveal midnight blue paint that seemed darker because of the shadowy recess of the barn. Against the background was a bright star with a trailing tail. The word “COMET” was emblazoned across it, its letters slightly trailing to indicate speed.



10 Emma stepped back to look at the bike again. It had a full fender over the back tire and a half fender over the front. A thick metal guard covered the chain. There was something about it . . . something that stuck with Emma and reminded her of . . . of the antique cars she had seen in the downtown parade one year. The flowing fenders, the curved fins on the back—it all fit. It was a wreck, Emma thought, but it was no piece of junk: it was a classic—an antique. Emma stared at the bike, trying to imagine the bike when it was new. She smiled and nodded.

11 “Oh, you found my bike!” said Mrs. Ames, interrupting Emma’s daydream. “That certainly brings back some memories.”

12 “How old is it?” Emma asked.

13 “Younger than I am!” Mrs. Ames said, chuckling. “I bought the bicycle with ‘egg money,’ money I made by selling eggs. I used to walk into town, carrying that basket to sell them,” she said pointing to the bike. “Later, I put it on the bike and rode to town with the eggs in it.”



- 14 “Was ‘COMET’ a fancy brand name back then?”
- 15 “No. I stenciled that on there myself. You see, there was a comet that year—1948—that was very special. No one knew it was there until we had a solar eclipse. Then everyone could see the comet next to the sun. That’s when I named my bicycle COMET. It seemed like I was traveling as fast as a comet when I went flying into town with those eggs. The funny thing is I never broke one either! Later, I even had a paper route. That basket could actually hold 72 copies of the afternoon paper—if they were folded properly.”
- 16 “Mrs. Ames . . . your bike . . . it’s not like any other bike I’ve ever seen. I know you still love your bike.” Emma hesitated and then asked tentatively, “Would you consider giving me your bike instead of paying me for helping you?”
- 17 “Are you sure you would want this bike? It’s nothing like the bike you told me you wanted.”
- 18 “I can see that this bike is special, Mrs. Ames, and I’m sure I can fix it up. It just needs a couple of new tires, a drop or two of oil on the chain, and a little polishing.”
- 19 “Oh, I don’t know. It might need a new horn, too,” said Mrs. Ames, reaching out and honking the old one. Instead of a hearty squeak, the horn let out a tired sigh. “You have yourself a deal, Emma.”
- 20 Emma beamed as she wheeled the bike into the light. She could really see it now: the gleaming midnight blue COMET flying down the streets. It would be just the thing for getting to school or soccer practice—or even delivering papers.

**1** The main reason that Emma helps Mrs. Ames is because Emma

- A** is curious about what is in the barn.
- B** wants to learn how to deliver newspapers.
- C** knows her neighbor needs help.
- D** wants to earn money to buy something special.

**2** Read these sentences from Paragraph 10.

*It was a wreck, Emma thought, but it was no piece of junk: it was a classic—an antique. Emma stared at the bike, trying to imagine the bike when it was new. She smiled and nodded.*

**What plot element is revealed in these sentences?**

- F** exposition
- G** rising action
- H** climax
- J** falling action

**3** The author reveals Emma’s feelings about finding Mrs. Ames’s bicycle through what

- A** Emma thinks and says.
- B** Emma does.
- C** Mrs. Ames thinks.
- D** Mrs. Ames thinks and says.

**4** Look at the list.

- Baling hay
- Living in a farmhouse
- Cleaning out a barn
- Gathering eggs to sell

Choose the best title for the list.

- F** Life in a Rural Setting
- G** Work Available in the 1940s
- H** Raising Children in the Country
- J** Crops in the 1940s and 1950s

**5** Read the sentence from Paragraph 6.

*Mrs. Ames had commented that for the past forty years, the barn had been a place to “defer decisions” about whether or not to discard old or broken items.*

Choose an antonym for the underlined word.

- A** move
- B** substitute
- C** obtain
- D** remodel

**Directions**

Kate's letter contains mistakes. Read the letter and answer Numbers 6 through 13.

October 2, 2008

Herman Junior High School  
1441 Joe Herman Way  
Anytown, TN 37804

Dear Principal Monahan

(1) The students at Herman Junior High have many clubs from which to choose. (2) We have clubs for painting, skateboarding, science, gardening, and many other hobbies, however many students, including myself, are still searching for a club that suits our interests. (3) A group of us for this reason wish to start a new school club—the Herman Junior High Book Club.

(4) I've always loved reading. (5) My friends feel the same way. (6) We discuss books every chance we get. (7) We like analyzing characters, and we often debated about why they behave the way they do.

(8) A few weeks ago, my friends and me were discussing a book. (9) Then someone said I think a book club would be so cool. (10) It occurred to us that other Herman students might enjoy books as much as we do, so we started asking around. (11) So far, twelve students said they would definitely join a book club if Herman had one.

(12) We decided that the first book we would read as a group would be *Crossed Cultures: Growing up American, Growing up Peruvian* by Gabriella Sparks. (13) Did you know that she lives right here in our town? (14) One of our potential members lives on Ms. Sparks's street. (15) He thinks he can get her to speak at one of our meetings. (16) It would be so exciting because she would be the first published author to visit our school! (17) Already, we are discussing other books that will be best for club reading.

(18) Thank you for taking the time to read my letter. (19) I hope you will agree that a book club would be interesting, fun, and educational.

Sincerely,

Kate Vigliotti

**6** Choose the item that best shows correct punctuation for the salutation of this business letter.

- F** Dear Principal Monahan;
- G** Dear Principal Monahan,
- H** Dear Principal Monahan . . .
- J** Dear Principal Monahan:

**7** Read Sentence 2.

*We have clubs for painting, skateboarding, science, gardening, and many other hobbies, however many students, including myself, are still searching for a club that suits our interests.*

How should the underlined words be revised to correct this run-on sentence?

- A** hobbies: however, many
- B** hobbies; however many
- C** hobbies; however, many
- D** hobbies: however many

**8** Read Sentence 3.

*A group of us for this reason wish to start a new school club—the Herman Junior High Book Club.*

Choose the best way to revise this sentence for clarity.

- F** A group, for this reason, of us wish to start a new school club—the Herman Junior High Book Club.
- G** A group of us wish to start a new school club, for this reason—the Herman Junior High Book Club.
- H** For this reason, a group of us wish to start a new school club—the Herman Junior High Book Club.
- J** A group of us wish to start a new school club—the Herman Junior High Book Club for this reason.

**9** Read Sentences 4 through 6.

*I've always loved reading. My friends feel the same way. We discuss books every chance we get.*

Choose the best way to combine these sentences.

- A** I have always loved reading, and my friends feel the same way, and we discuss books every chance we get.
- B** I love reading as do my friends, and we discuss books every chance we get.
- C** My friends and I love reading; therefore; we love to discuss books together every chance we get.
- D** Since my friends and I love reading, we discuss books every chance we get.

**10** Read Sentence 7.

*We like analyzing characters, and we often debated about why they behave the way they do.*

Choose the correct way to revise the underlined part of this sentence.

- F** had debated
- G** debate
- H** debating
- J** will debate

**11** Read Sentence 8.

*A few weeks ago, my friends and me were discussing a book.*

Choose the correct way to revise the underlined words.

- A** my friends and myself
- B** my friends and I
- C** I and my friends
- D** me and them

**12** Read Sentence 9.

*Then someone said I think a book club would be so cool.*

Choose the item that correctly uses quotation marks.

- F “Then someone said, I think a book club would be so cool.”
- G “Then someone said” I think a book club would be so cool.
- H Then someone said “I think a book club would be so cool.”
- J Then someone said, “I think a book club would be so cool.”

**13** Choose the correct way to write the book title.

- A **Crossed Cultures: Growing up American, Growing up Peruvian**
- B “Crossed Cultures: Growing up American, Growing up Peruvian”
- C *Crossed Cultures: Growing up American, Growing up Peruvian*
- D “Crossed Cultures: Growing up American, Growing up Peruvian”



## Directions

Read the passage. Then answer Numbers 14 through 20.

### Mount Everest Then and Now

- 1 Standing 29,035 feet above sea level, Mount Everest is the highest mountain on Earth. It is part of the Himalayas, a mountain range that crosses the countries of Tibet and Nepal. For a mountain climber, getting to the top of Mount Everest is the ultimate challenge.
- 2 Mount Everest is so enormous that it is impossible to climb to the top and descend to the bottom in one day. Climbers must carry tents and supplies with them as they move slowly up steep, icy slopes. Blizzards and strong winds are common. Climbers endure challenges like deep ditches, tall walls of solid ice, and giant snow towers that might topple over at any moment. In addition, Mount Everest is so high that the air around it does not contain much oxygen. This makes it hard for climbers to breathe, think, and move. For this reason, most climbers breathe oxygen from tanks, just like astronauts do in outer space.
- 3 In spite of its many dangers, climbers from all over the world travel to Mount Everest. In May, the best month to attempt the climb, many climbers from different countries join together to form expeditions. Many of these people will make it to the top of Mount Everest. Guides and Sherpas<sup>1</sup> show these climbers the best routes. Ropes and ladders, set up by preceding climbers, help new groups of climbers through the most dangerous and difficult parts of Mount Everest. Modern equipment, like satellite phones and laptop computers, keeps climbers in touch with each other and the outside world. Extra-warm clothing and sleeping bags offer protection from the bitter cold.
- 4 None of these modern conveniences were available in 1953, when Sir Edmund Hillary and Tenzing Norgay became the first two men to reach the top of Mount Everest. For them, just getting to Mount Everest was difficult. It involved a 170-mile trek through the mountains before they could begin climbing to the peak. Today, climbers just take a short plane ride to get to the foot of the mountain.
- 5 Hillary was a beekeeper from New Zealand who began climbing mountains when he was 20. Norgay was a Sherpa, part of a group of people who have lived in small villages in Nepal for five centuries. Since the Sherpas have lived in the Himalayas for so long, mountain climbing is an important part of their culture.
- 6 Hillary and Norgay were part of a British expedition made up of nine climbers. The government of Nepal had allowed very few groups to try to climb Mount Everest. Each of those early expeditions had failed. Hillary's group was hopeful, but since no climber had ever made it to the top of Mount Everest, there was no established route to follow. They had to find their own route as they went along, step by dangerous step.
- 7 Each of the climbers in Hillary's expedition wanted to be the first to reach the top of Mount Everest, but they were all disciplined men who understood that for any of them to have a chance, they had to work



**Sir Edmund Hillary, John Hunt,  
and Tenzing Norgay**

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<sup>1</sup>**Sherpas:** expert mountain-expedition guides from Tibet or Nepal

together. John Hunt, the leader of the group, divided the group into small teams and gave each team an assignment. Some teams had to find a route through the worst areas. Others had the hard, painful task of cutting a path in the ice and fixing ropes for the climbers to hold on to. Hunt also chose two men, Charles Evans and Tom Bourdillon, to try to reach the summit. If Evans and Bourdillon did not succeed, Hillary and Norgay would be given the chance to reach the top.

- 8 Evans and Bourdillon were not successful, however, and had to turn back. Hillary and Norgay then tried to find their way through the unknown territory of the highest points of Mount Everest. They had to cut steps into icy slopes. They had to constantly calculate how much oxygen they had left in their tanks, knowing they would be in grave danger if their oxygen ran out. When they had nearly reached their goal, they had to climb a 40-foot wall of ice that looked impossible. Hillary did find a way, and the route is now called the Hillary Step in his honor.
- 9 Though Hillary and Norgay were elated to reach the top, they knew their battle was only half over. Making it down Mount Everest was just as difficult. They succeeded, however, and achieved lasting fame and the world's admiration. Although climbing Mount Everest will always be an incredible accomplishment, Hillary, Norgay, and their expedition deserve credit for paving the way for everyone else.

**14** Choose the most reliable resource for a reader researching how people train to climb Mount Everest.

- F** a newspaper article titled “Mount Everest: Hidden Gem of the Himalayas”
- G** an eyewitness account from a person who climbed Mount Everest
- H** an interview with a person writing a book about mountain climbing
- J** an Internet site titled How to Climb a Mountain in Ten—or a Thousand—Steps

**15** A part of Mount Everest is named “the Hillary Step” because Sir Edmund Hillary had found

- A** the true peak.
- B** a safe way down.
- C** the path to the top.
- D** a way to the base camp.

**16** Choose the sentence from the passage which supports the idea that John Hunt’s group faced greater difficulties than groups climbing later.

- F** Mount Everest is so enormous that it is impossible to climb to the top and descend to the bottom in one day.
- G** Blizzards and strong winds are common.
- H** Climbers endure challenges like deep ditches, tall walls of solid ice, and giant snow towers that might topple over at any moment.
- J** Hillary and Norgay then tried to find their way through the unknown territory of the highest points of Mount Everest.

**17** The best reason for comparing climbers to astronauts is because both

- A** are viewed by people as heroes.
- B** experience changes in the atmosphere.
- C** must be in excellent physical condition.
- D** belong to groups formed by governments.

**18** Which question is not answered in the passage?

- F** What equipment was used to climb the final wall of ice leading to the summit?
- G** Which countries were the climbers in Hillary and Norgay's group representing?
- H** What was Hillary's profession before he began climbing mountains?
- J** When is the best time of year to attempt climbing Mount Everest?

**19** Choose the organizational structure used in Paragraphs 6 through 9.

- A** comparison-contrast
- B** cause-effect
- C** chronological
- D** problem-solution

**20** Choose an opinion stated in the passage.

- F** Standing 29,035 feet above sea level, Mount Everest is the highest mountain on Earth.
- G** The government of Nepal had allowed very few groups to try to climb Mount Everest.
- H** John Hunt, the leader of the group, divided the group into small teams and gave each team an assignment.
- J** Although climbing Mount Everest will always be an incredible accomplishment, Hillary, Norgay, and their expedition deserve credit for paving the way for everyone else.

**Directions**

Read the poem. Then answer Numbers 21 through 25.

## Nothing to Do Stew

One long, long dull day  
I had nothing to do,  
So I filled up a pot  
With a strange sort of stew.

- 5 It had dreamy ideas  
And a lot of big words,  
And bright mixed-up colors  
And silvery birds.

- A piece of a moonbeam  
10 Got thrown in the mix,  
A chopped-up, old beanstalk,  
A house made of sticks.

- The yap of a puppy,  
A strand of gold hair,  
15 The hush of the night owl,  
A thump on the stair

- Got tossed in together  
And cooked all day long,  
While I stirred in some spices  
20 —It smelled a bit strong.

But I ate it with pleasure,  
That odd, crazy stew,  
Made out of a dull day  
With nothing to do.



Go On ►

**21** Which line from the poem indicates the meal is not real?

- A** With a strange sort of stew.
- B** And a lot of big words,
- C** And cooked all day long,
- D** While I stirred in some spices

**22** The stew in this poem is a symbol of

- F** endless possibilities.
- G** a hearty portion.
- H** future happenings.
- J** an honest approach.

**23** The poet's purpose for writing this poem was most likely to

- A** teach a lesson about enjoying time alone.
- B** inform readers how to cook a stew.
- C** share an experience about making a special meal.
- D** tell about a person with a vivid imagination.

**24** In Stanza 4, the author uses onomatopoeia with the words “yap,” “hush,” and “thump” mostly likely to

- F** add a rhyme scheme to the poem.
- G** emphasize the important idea in the poem.
- H** support the playful nature of the poem.
- J** contribute to the details in the illustration.

**25** Choose how this poem is different from a short story.

- A** This poem contains a predictable rhyme scheme.
- B** This poem uses figurative language.
- C** This poem tells about a specific event.
- D** This poem is told from a first person point of view.

**Directions**

This is a student's reflections about Native American Music. The passage contains mistakes. Read the passage and answer Numbers 26 through 34.

## Native American Music

- 1 Riding to school this morning, I could hear loud music coming from the car beside me. I could feel the vibration of the drum just like the sound of my heartbeat. As I listened, it reminded me of the time I spent this past July at a powwow on a Native American reservation. I remember walking from one campsite to another, visiting with each group. Five different Native American nations traveled to the reservation to attend the ceremonies. Although they had different languages and cultural traditions, they did have a common way to share their beliefs and ways with others—music.
- 2 Native Americans danced around the campfires to the beat of drums. They chanted and danced in patterns that I had never seen before. I could tell that each song was a little different. One song consisted of an irregular pattern of fast and then slow drumbeats. Another song sounded like an echo of high sounds tumbling down to low sounds. All the groups sang and danced around the campfires to drumbeats. The dancers danced around the fire with their left hands toward the flames. They were beautiful to watch.
- 3 Jacob continued to say music was a Native American tradition. In traditional Native American cultures, some songs are used for specific purposes, such as paying respect to another person or paying tribute to an important occasion. \_\_\_\_\_ some songs are for enjoyment, such as lullabies or games.
- 4 At one campsite, I met a little boy named Jacob and asked him about some of the music I was hearing. I pointed to one group that was singing and dancing not only to the beat of drums but also to a strange-looking wooden flute. I asked Jacob what that song was about. He said it was their way of celebrating the wonderful weather they'd had. The great weather allowed their farmers to have an excellent growing season. Now there would be food for everyone.
- 5 Jacob told me several stories about Native American music. They were very interesting and made the music come to life for me. Hearing their music was one thing, but seeing it happen right in front of me was fantastic. What a great opportunity I had! It is an experience I will never forget.



**26** In this passage, the author's mode of writing is mainly

- F** persuasive.
- G** creative.
- H** technical.
- J** narrative.

**27** Which sentence from the passage best states the thesis?

- A** I remember walking from one campsite to another, visiting with each group.
- B** Five different Native American nations traveled to the reservation to attend the ceremonies.
- C** Although they had different languages and cultural traditions, they did have a common way to share their beliefs and ways with others—music.
- D** Hearing their music was one thing, but seeing it happen right in front of me was fantastic.

**28** The author's intended audience for this passage is most likely

- F** members of a dance group.
- G** people who like studying new cultures.
- H** musicians who play the flute.
- J** travelers looking for a new place to camp.

**29** Choose the most logical order for Paragraphs 2 through 5.

- A** 5, 3, 4, 2
- B** 3, 2, 4, 5
- C** 2, 4, 3, 5
- D** 4, 5, 2, 3

**30** Read these sentences from Paragraph 3.

*In traditional Native American cultures, some songs are used for specific purposes, such as paying respect to another person or paying tribute to an important occasion. \_\_\_\_\_ some songs are for enjoyment, such as lullabies or games.*

Choose the word that provides the best transition between the sentences and should be written on the blank line.

- F** Fortunately,
- G** Hence,
- H** However,
- J** Moreover,

**31** Which sentence best supports the context and flow of ideas in Paragraph 4?

- A** Jacob was the son of one of the dancers and a member of the Navajo nation.
- B** Jacob asked for the names of musical instruments that I had played before.
- C** The campsite had a huge fire blazing warmly as the night grew colder.
- D** The music could be heard from miles away as the drummers tapped on the drums.

**32** What could be added to this student's report to best support the ideas presented?

- F** a calendar of local Native American events
- G** a photograph from the event showing dancers in motion around a campfire
- H** a recording of Jacob giving information about the wooden flute
- J** a diagram showing the patterns in a Native American song

**33** The author most likely wrote this passage to

- A** persuade readers to listen to music with a strong beat.
- B** entertain with a story about making new friends.
- C** inform readers about the daily life on a reservation.
- D** describe details about a memorable experience.

**34** Choose the primary source that could have been used to write this passage.

- F** a magazine article about Native American music
- G** an interview with a Native American musician
- H** an Internet blog about a powwow
- J** an online encyclopedia entry about powwows

**Directions** Read and answer Numbers 35 through 42.

**35** Choose the sentence that is written correctly.

- A He is the student what lived in our neighborhood.
- B Kate is the person that gave me the blue necklace.
- C I saw them photographs you took on your trip.
- D Willa is a new student who recently moved here.

**36** Choose the sentence that is written correctly.

- F My math teacher Mr. Ramirez, is known for his simple explanations of geometry.
- G My math teacher, Mr. Ramirez, is known for his simple explanations of geometry.
- H My math teacher, Mr. Ramirez is known for his simple explanations of geometry.
- J My math teacher, Mr. Ramirez is known, for his simple explanations of geometry.

**37** Read the sentence.

*After running for nearly an hour in the heat of the day, Ryan couldn't wait to \_\_\_\_\_ his thirst with a tall glass of ice-cold water.*

Choose the word for the blank line that best fits the meaning of the sentence.

- A quench
- B halt
- C drown
- D swallow

**38** Cameron is working on a project with students from his English class. Some members of the group are worried that they will not finish their project on time. Which is the best way for Cameron to help the group finish on time?

- F** ask the teacher to add more students to the group
- G** restate the goals of the group project for his team
- H** ask his parents to work with the group after school
- J** delegate the remaining work to individuals in the group

**39** Choose the group member who is most responsible for taking notes.

- A** recorder
- B** reporter
- C** timekeeper
- D** information gatherer

- 40** Candace researched information about spider monkeys and wrote the following paragraph. Read her paragraph.

*Spider monkeys are not spiders at all. They are primates that live in the rain forests of Central and South America. Scientists are studying how these animals communicate. Spider monkeys are small, rarely growing larger than two feet tall. Spider monkeys live mostly in the tops of trees. They use their strong hands and tail to grip and move through the branches with ease.*

**Choose the sentence that is irrelevant to the paragraph.**

- F** They are primates that live in the rain forests of Central and South America.
- G** Scientists are studying how these animals communicate.
- H** Spider monkeys are small, rarely growing larger than two feet tall.
- J** They use their strong hands and tail to grip and move through the branches with ease.

- 41** Which of these is an example of inductive reasoning?

- A** People enjoy going to parks for picnics; my friend will probably have a picnic.
- B** My dog likes to have his ears scratched; most dogs probably like to have their ears scratched.
- C** No one my age can drive; if I want a ride home, I will probably have to ask an adult.
- D** Our football team has won every game this year; the team will probably win its next game.

The poster shown below was used during World War I to communicate a message to U.S. citizens.



What is the main purpose of this poster?

- F** to persuade people to plant their own gardens
- G** to entertain gardeners and people interested in plants
- H** to provide information about how to plant a garden
- J** to display a beautiful piece of artwork

## Part 2

**Directions** Read the story. Then answer Numbers 43 through 47.

### The Election

- 1 “I can’t believe what I’m hearing!” I thought to myself as I stared at the intercom in homeroom. Jeff Stafford was the last candidate announced to run for president of Student Council.
- 2 I looked around at the faces of my classmates to see how they felt about this announcement. I could not tell if they were glad or sad. It was hard to decide since no one was looking my way.
- 3 Finally, after what seemed like a year, my best friend Eric turned toward me. “I’m sorry, Cliff. I really thought you were going to be chosen to run for president,” he said with sincerity.
- 4 “It’s okay,” I responded. “These things happen.”
- 5 The bell rang, and we both picked up our books and scrambled to first-period math class.
- 6 Later that day, as I walked through the lunch line with the aroma of cheeseburgers in the air, I happened to pass Jeff. He looked hesitant, as if he wanted to ask me something. This seemed unusual, since I thought the new candidate for Student Council president would be grinning like a clown. I offered him a polite “congratulations” and strolled to my usual table. Much to my surprise, Jeff plopped his tray down beside mine.
- 7 “Cliff, I need to talk with you about something,” he said nervously.
- 8 “What is it?” I asked, not too thrilled to be talking with him.
- 9 “I was wondering if you would consider coming to work on my team for the campaign,” he said quickly. “You are really smart, and we could use your help. You would be a great campaign manager.”
- 10 “I don’t think so,” I said, feeling unsure.
- 11 “Well, if you change your mind, we are meeting tomorrow at 3:15,” he said before moving to another table.
- 12 All that night and all the next morning, I thought about the offer from Jeff. I had wanted to be part of Student Council to make our school a better place. Maybe being a part of the election process would somehow give me a chance to help make important changes at our school. I decided to join the campaign.
- 13 Everyone at the meeting was glad to see me. We discussed campaign strategies. It was easy for me to think of ideas to help Jeff win the election, and all the members of the team were thrilled with my suggestions.
- 14 Student Council presidents have many duties. They organize and lead the Student Council meetings and represent the student body at conferences with the school’s administrators. They are also responsible for managing Student Council funds. If Jeff was going to win this election, I needed to convince the school that he was the perfect candidate for the position.



15 My first goal was to create a catchy ad campaign that would get kids to vote for Jeff. I proposed, “Get Jeff and Get Active.” I thought this slogan was perfect because Jeff participated in many activities and believed the school should provide plenty of opportunities for all students to get involved.

16 Within just a few days, we designed campaign posters with Jeff’s new slogan. Below the slogan I placed pictures of Jeff that showed him involved in a number of activities, including soccer, the computer club, and Boy Scouts. No one could walk through any hallway without passing Jeff’s smiling face.



17 “These posters look great!” I overheard one student comment.

18 “Yes,” replied another one, “I’m getting worn out just looking at them. He really is active! I bet he would make a good president for Student Council.”

19 My next step involved talking with students to find out which new activities they would like to have at our school. Many students wanted a chess club and a tennis team.

20 Armed with the information I had gathered, Jeff met with the principal. Impressed by Jeff’s presentation, the principal said that it would be possible to add these activities to our school program. Now I just had to find a way to get the news out to the student body.

21 I arranged for Jeff to talk with students about our new ideas. He held meetings with study hall classes. He also chatted with students before sporting events and at other afterschool activities. Wherever he went, Jeff and our ideas were received with enthusiasm.

22 Jeff’s commitment to adding new activities to the school became very well known. Again, I overheard several students speaking about it.

23 “I can’t wait to try out for the new tennis team,” a girl in eighth grade said.

24 “I know,” replied her friend, “with Jeff as president, it will be like attending a whole new school.”

25 “He has my vote,” chimed in another friend. “I’m so excited about the new chess club.”

26 Hearing these words made my heart swell with pride. I originally wanted to become president of Student Council to make a difference. I achieved that and more by working as a member of Jeff’s team. Jeff became the most popular candidate, and I was a large part of his success. I have found a new talent that I enjoy. The fact that it has made a difference in other people’s lives is the real prize. What a great feeling!

**43** Read these sentences from Paragraph 14.

*Student Council presidents have many duties. They organize and lead the Student Council meetings and represent the student body at conferences with the school’s administrators.*

Which of these is an example of an administrator?

- A** a principal
- B** a parent
- C** a student
- D** a coach

**44** Why does Jeff ask for Cliff’s help?

- F** He thinks Cliff should be president.
- G** He has worked with Cliff before.
- H** He desires Cliff’s popularity.
- J** He admires Cliff’s skills.

**45** Complete the analogy below.

Slogan is to words as mural is to \_\_\_\_\_.

- A** paint
- B** design
- C** brush
- D** wall

**46** What type of persuasive device is used with Jeff's campaign posters?

- F** loaded terms
- G** name-calling
- H** testimonial
- J** bandwagon

**47** What will Cliff most likely do next year?

- A** talk with Jeff about being his vice president
- B** plan new activities with the principal
- C** run a campaign for another candidate
- D** try out for the tennis team

**Directions**

Sallie wrote a book report. It contains mistakes. Read the report and then answer Numbers 48 through 53.

### Book Talk on *The Lost Lap*

(1) With the Olympic trials six months away, Mellie McBride with instinctive precision swims her laps. (2) Through dedication and hard work, she had won a place on the U.S. National Junior Swim Team. (3) Now her dreams of an Olympic gold medal are within her grasp. (4) The rythum of her swimming strokes and the strength of her kicks have produced a swimmer capable of record-breaking times. (5) Every practice brings her one stroke closer to the dream. (6) Her three coaches applause at the end of every practice reinforces the knowledge that her dedication will soon be rewarded. (7) Her confidence grows.

(8) Mellie's confidence, however, is quickly shattered when she injures her right eye. (9) With only three months left until the Olympic trials, Mellie must take four weeks off from swimming practice for recovering. (10) Mellie finally returns to practice, hoping that her injury has not effected her swimming. (11) After just one extremely tiring practice race, Mellie finds that her time has increased by one full minute. (12) There is no way she can shave off one minute in the limited time she has before the Olympic trials. (13) With her dreams destroyed, she leaves practice in despair.

(14) Mellie is forced to choose leave swimming behind or face the challenge. (15) Can she recover the lost lap will she hang up her swimsuit for good? (16) Read the heart-wrenching novella *The Lost Lap* by Alexa Sauls to discover if Mellie overcomes her obstacles or admits her defeat.

**48** Read Sentence 1.

*With the Olympic trials six months away, Mellie McBride with instinctive precision swims her laps.*

Choose the correct way to revise the sentence for clarity.

- F** Six months away, Mellie McBride with the Olympic trials swims her laps with instinctive precision.
- G** Mellie McBride, with instinctive precision, swims her laps with the Olympic trials six months away.
- H** With the Olympic trials six months away, Mellie McBride swims her laps with instinctive precision.
- J** With instinctive precision, Mellie McBride, with the Olympic trials six months away, swims her laps.

**49** Read Sentence 4.

*The rythum of her swimming strokes and the strength of her kicks have produced a swimmer capable of record-breaking times.*

Choose the correct way to spell the underlined word.

- A** rhithem
- B** rythym
- C** rhythm
- D** rhythem

**50** Read Sentence 6.

*Her three coaches applause at the end of every practice reinforces the knowledge that her dedication will soon be rewarded.*

Choose the **best** replacement for the underlined word.

- F** coaches'
- G** coaches's
- H** coachs'
- J** coach's

**51** Read Sentence 9.

*With only three months left until the Olympic trials, Mellie must take four weeks off from swimming practice for recovering.*

Using an infinitive, what is the correct way to revise the underlined words?

- A** to be recovered
- B** for recovery
- C** to recover
- D** for to recover

**52** Read Sentence 10.

*Mellie finally returns to practice, hoping that her injury has not effected her swimming.*

Choose the underlined word that is used incorrectly.

- F** finally
- G** returns
- H** injury
- J** effected

**53** Read Sentence 15.

*Can she recover the lost lap will she hang up her swimsuit for good?*

Choose the correct way to revise the run-on sentence.

- A** Can she recover the lost lap, or will she hang up her swimsuit for good?
- B** Can she recover the lost lap, but will she hang up her swimsuit for good?
- C** Can she recover the lost lap, yet will she hang up her swimsuit for good?
- D** Can she recover the lost lap, and will she hang up her swimsuit for good?

**Directions** Read and answer Number 54.

**54** Read this sentence.

*When choosing elective classes, Laura had three choices from which to choose band, choir, or journalism.*

Choose the best way to write the underlined words.

- F** choose: band, choir, or journalism
- G** choose . . . band, choir, or journalism
- H** choose; band, choir, or journalism
- J** correct as is



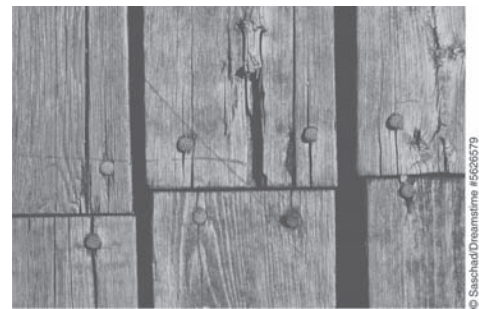
## Directions

Read the speech. Then answer Numbers 55 through 61.

### Washington Middle School “Green” Addition

*Allison Reagan, a seventh grader at Washington Middle School, is giving a speech to the school board. Teachers and classmates are there as well as the school principal, Allison’s parents, and the seven members of the school board. The school board makes many of the important decisions for Washington Middle School and its students.*

- 1 My name is Allison Reagan, and in August I will start my last year here. With this in mind, I have thought hard about what I am going to say to you tonight. I hope you will consider my words with the seriousness I feel they deserve.
- 2 There is a great deal of talk in the media about living “green.” Here at Washington Middle School, many of us may help care for the environment in our own homes by choosing recycled printer paper and drinking water from a reusable bottle instead of buying cases of plastic bottles. We try to follow the advice to “reduce, reuse, and recycle” because we want to help protect our environment.
- 3 The other day when I was outside during lunch, I looked over at the place where the new addition to the school will be built. I wondered how much wood, metal, and glass it would take to build the new rooms. Then I had an idea.
- 4 It occurred to me that if we altered the original plans a bit, our new addition could be a “green” addition. I used the Internet to find good information about how easily we could do this. What I found out was very interesting.
- 5 Schools all over the world are turning “green.” In Ireland, school administrators are making major changes to the ways that they manage their buildings. They use energy-efficient light bulbs, they are careful with their water usage, and they build their own mulch pits. They recycle and conserve energy by not overusing lights and other forms of electricity. With this new addition to our school, we have the opportunity to make an even bigger change—from the floor up!
- 6 First of all, we can build with reclaimed materials. These are materials from buildings that are being torn down. Why not reuse a sturdy doorknob, a solid cabinet handle, or even wood that simply needs to be sanded or shaved down a bit?



Go On ►

- 7 Unnecessary materials are often used to make floors. With most buildings, a concrete slab is poured. Then wood, carpet, or tile is laid on top. What about dyeing the concrete instead of covering it? The floor will be beautiful and eliminate the extra work and supplies.
- 8 Installing a digital thermostat is a way to save money on utility costs. Most of these new thermostats can be set on a timer. When students leave for the day or weekend, the thermostat will adjust the temperature so less energy is used during those times when people are not in the building.
- 9 We can also improve our “green” addition and the rest of our school by using special light bulbs. I’m sure you’ve seen these new bulbs in the stores. They curl around and look a little odd. They cost more than ordinary bulbs, but they last longer, use less energy, and save money over time.
- 10 The schools in Ireland I mentioned have formed a group of students called the “energy detectives.” These students are chosen to monitor the energy and water being used. If they see an empty classroom with a light on, they simply turn it off. If they see a faucet leaking and wasting water, they fix it. Such a task force at our school would be a great way to get students of different ages involved in this effort.
- 11 Although we save money in the end, it initially costs a little more to build a “green” addition. If we start now, by August we could raise the extra funds the school will need. My suggestion for raising funds is to begin with the “green” theme. I have already spoken with several of my classmates, and we are willing to organize a group to collect old cell phones and used ink jet cartridges from computers. These are items that are plentiful in the community. I’m confident that community members will donate these items to help improve our school. Then we can earn money from these items by taking them to the recycle center. Everyone wins because reusing cell phones and ink cartridges helps the environment, and we earn money for our school addition.
- 12 Even if this plan doesn’t go into effect for Washington Middle School, I hope you’ll consider the ideas I’ve presented tonight. If you use them in your own homes, you will be making a difference.
- 13 I appreciate your time, and I hope you will consider this very important proposal.



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**55** Read Paragraph 7.

*Unnecessary materials are often used to make floors. With most buildings, a concrete slab is poured. Then wood, carpet, or tile is laid on top. What about dyeing the concrete instead of covering it? The floor will be beautiful and eliminate the extra work and supplies.*

The word eliminate means to

- A** use less energy.
- B** cost more.
- C** leave out.
- D** make a difference.

**56** Whom is Allison mainly addressing in her speech?

- F** her parents
- G** students in her class
- H** the school principal
- J** the school board

**57** Choose the sentence that best identifies the thesis of Allison’s speech.

- A** We try to follow the advice to “reduce, reuse, and recycle” because we want to help protect our environment.
- B** It occurred to me that if we altered the original plans a bit, our new addition could be a “green” addition.
- C** In Ireland, school administrators are making major changes to the ways that they manage their buildings.
- D** Everyone wins because reusing cell phones and ink cartridges is helping the environment, and we earn money for our school addition.

Go On ►

**58** What can Allison do to engage her audience?

- F** use a quiet voice
- G** introduce her friends
- H** make eye contact with her audience
- J** wave her hands while she speaks

**59** How is the speech organized?

- A** cause-effect
- B** chronological order
- C** sequential order
- D** problem-solution

**60** Choose the reason that Allison most likely wrote this speech.

- F** to entertain listeners with a story about the environment in Ireland
- G** to persuade listeners to consider environmental alternatives when adding on to the school
- H** to inform listeners about schools in Ireland that have made some progressive environmental changes
- J** to explain to listeners how easy and environmentally friendly recycling at home can be

**61** Allison started organizing her speech.

Introduction
Present ideas
Closing Remarks

Where should she place “Brief Summary”?

- A** before the Introduction
- B** after the Introduction
- C** before the Closing Remarks
- D** after the Closing Remarks

*Go On* ►

**Directions**

Read the poem. Then answer Numbers 62 through 66.

## Vacant Lot

The empty lot down the block,  
Is the best place to play,  
Full of wood and stray papers,  
Loose gravel and clay.  
5 We children know better  
Just how to create  
With the magical treasure  
That lies past the gate.  
We make imaginary kingdoms  
10 From old bricks and rocks  
Tarnished pennies, lengths of string,  
Weathered wooden blocks

To a grownup, the woodpile  
Might look a bit plain,  
15 Like a bunch of old junk  
Lying out in the rain.  
But we kids can see  
It is more than just wood.  
It's the span of a bridge  
20 To a make-believe neighborhood.  
It's a castle's tall tower,  
A cave dweller's lair,  
It's a rabbit's tight burrow,  
A creaky old stair.  
25 It's the passage we take  
That leads straight to pretending.  
You're welcome to join us;  
The game's never-ending.



**62** The author's point of view in this poem is

- F** first person.
- G** third-person objective.
- H** third-person limited.
- J** third-person omniscient.

**63** Read Lines 1 through 4.

*The empty lot down the block,  
Is the best place to play,  
Full of wood and stray papers,  
Loose gravel and clay.*

The rhyme in these lines occurs on

- A** Lines 1 and 4.
- B** Lines 2 and 4.
- C** Lines 1 and 3.
- D** Lines 2 and 3.

**64** Choose the implied theme of this poem.

- F** Travel to distant lands requires only a walk and a pair of clear eyes.
- G** A child learns best in an inspirational environment.
- H** Work and play do not necessarily need to take place at different times.
- J** Ordinary items are transformed by an extraordinary imagination.

Go On ►

**65** In this poem, the vacant lot is a metaphor for

- A** emptiness.
- B** adulthood.
- C** neglect.
- D** possibilities.

**66** The reader knows that this passage can only be a poem because it

- F** explains how to complete a task.
- G** has short lines and is divided into stanzas.
- H** has a clearly stated problem and solution.
- J** gives information about a specific topic.



**Directions**

José wrote a report for his history class. It contains mistakes. Read the report and answer Numbers 67 through 75.

## Alexander Graham Bell

- 1 Most people remember Alexander Graham Bell for his work with the telephone. However, Bell invented many things in his life. Bell was a brilliant scientist who continued investigating and experimenting throughout his life.
- 2 Bell built his first invention, a machine that took the husks off wheat, when he was only twelve. Even at this young age, he had a strong desire to understand and improve the world. At the end of his life, Bell was still inventing. This time his interest was in hydrofoils, which are fast-moving boats that can partly lift themselves out of the water. Bell and a friend actually ended up building the fastest hydrofoil in the world.
- 3 Bell also made improvements to other inventions, such as Thomas Edison's early record player. The "records" were shaped like cans of food, broke easily, could not hold many sounds, and also could not be copied. Edison had given up trying to solve these problems and had abandoned the record player for other inventions. Bell believed the problems could be solved, and by 1878 he had created a flat, hard, round disk similar to the records called LPs (a long-playing phonograph record). This improvement made the phonograph useful and popular. Today, people enjoy listening to recorded music on CDs.
- 4 In 1879, Bell invented the audiometer, a device used to check a person's hearing. Bell was passionate about helping deaf people. His mother had gone deaf when he was a boy, and later Bell would fall in love with and marry a deaf woman. Because sign language was not commonly used yet, Bell saw how difficult it could be for deaf people to communicate with others. Using a special method invented by his father, Bell taught deaf people who could not speak how to make sounds and, later, words. He even started a school for deaf children.
- 5 Late in his life, Bell became fascinated with flight. He wanted to design a kite that was strong enough to hold a motor and a passenger. The first step was to find the right shape. Bell sent up kites shaped like cubes, rings, and cylinders. He finally discovered the perfect shape—a tetrahedron, or a triangle-shaped pyramid. Although Bell did not succeed in creating the first working "flying machine," his efforts were still useful.
- 6 Bell once said, "Wherever you may find the inventor, you may give him wealth or you may take from him all that he has; and he will go on inventing. He can no more help inventing than he can help thinking or breathing." These words certainly describe the way Bell lived his life.

**67** Choose the best thesis statement for the report.

- A** Alexander Graham Bell made many advances toward helping deaf people.
- B** Alexander Graham Bell started his life as an inventor at the age of twelve.
- C** Alexander Graham Bell's greatest accomplishment was improving the record player.
- D** Alexander Graham Bell's constant experiments with new ideas made him famous.

**68** Choose the sentence that would best conclude Paragraph 5.

- F** Many people believe the first recorded flight was accomplished by the Wright brothers.
- G** Due to his work, the tetrahedron is used today in supports for bridges and other heavy structures.
- H** Around 400 B.C., the Chinese were the first to invent kites that were able to fly.
- J** The dream of flying is not new or uncommon, as it has been around for centuries.

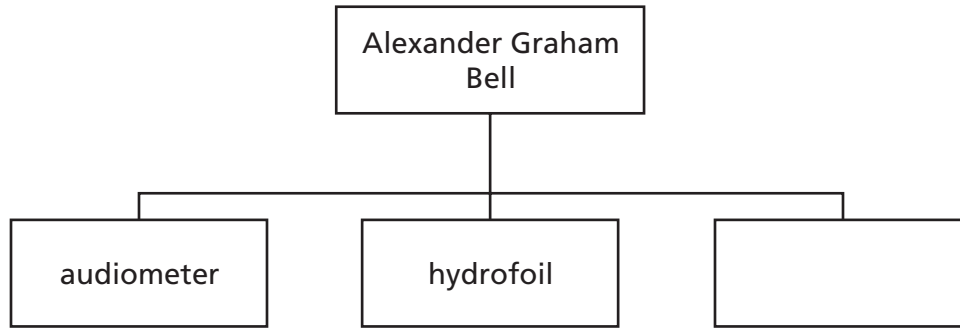
**69** Read Paragraph 3.

*Bell also made improvements to other inventions, such as Thomas Edison’s early record player. The “records” were shaped like cans of food, broke easily, could not hold many sounds, and also could not be copied. Edison had given up trying to solve these problems and had abandoned the record player for other inventions. Bell believed the problems could be solved, and by 1878 he had created a flat, hard, round disk similar to the records called LPs (a long-playing phonograph record). This improvement made the phonograph useful and popular. Today, people enjoy listening to recorded music on CDs.*

**Which sentence should be removed from the paragraph?**

- A** Edison had given up trying to solve these problems and had abandoned the record player for other inventions.
- B** Bell believed the problems could be solved, and by 1878 he had created a flat, hard, round disk similar to the records called LPs (a long-playing phonograph record).
- C** This improvement made the phonograph useful and popular.
- D** Today, people enjoy listening to recorded music on CDs.

**70** Look at the chart.



Choose the item that best fills the chart.

- F** long-playing phonograph record
- G** flying machine
- H** kite
- J** record player

**71** Choose the best alternate title for the report.

- A** Beyond the Telephone
- B** Improving Upon Edison
- C** Fascination With Flight
- D** Science: The Way of the Future

**72** The report was probably intended for people who

- F** wish to be electricians.
- G** enjoy reading about historical figures.
- H** study the science of electronics.
- J** teach others how to fly aircraft.

**73** Choose the statement that best supports the idea that Bell was always experimenting.

- A** The telephone was just one thing Bell improved.
- B** Many of Bell's inventions are still in use today.
- C** Bell flew kites of different shapes to find the best one.
- D** Bell established a school for deaf children.

**74** Choose the secondary source used to write the report.

- F** a letter Bell wrote about the telephone to his wife
- G** an interview Bell gave after the success of the audiometer
- H** a journal entry by a neighbor who saw Bell's kite experiments
- J** an encyclopedia article about Bell's inventions

**75** José wrote this report most likely to

- A** explain Bell's formula for kite design.
- B** describe how Bell's many inventions worked.
- C** inform readers about Bell's achievements.
- D** entertain readers with stories about Bell's life.

**Directions** Read and answer Numbers 76 through 83.

**76** In a restaurant, the salad offered or served today is called the salad

**F** *du jour*.

**G** *déjà vu*.

**H** *bon voyage*.

**J** *faux pas*.

**77** Choose the most focused research topic.

**A** effect of soil erosion in the tropical rain forest

**B** diet of the toucan bird in the Costa Rican rain forest

**C** mammals and reptiles in the tropical rain forests

**D** plants and vegetation native to Hawaiian rain forests

**78** Ben is researching volcanoes in the Pacific Ocean. Choose the best source to support his research.

- F** an Internet blog featuring photographs of volcanoes
- G** a magazine article featuring uses for volcanic rock
- H** a series of essays from a writer living near a volcano
- J** an online encyclopedia entry about how volcanoes are formed

**79** Which of these provides an example of a false premise?

- A** If a television star gives a statement, the information must be correct.
- B** When food is warmed in the microwave, the food can become too hot to touch.
- C** If no one can tell you where the cafeteria is, you have not asked the right person.
- D** In order to pass the class, attendance is mandatory.

*Go On* ►

### Creating a Compost Pile

*Compost is often used to improve the quality of gardening soil. Follow these easy steps to create a compost pile.*

- 1. To ensure good aeration and drainage, begin by putting down a 3-inch layer of coarse plant matter, such as small twigs, chopped plant stalks, or coarse wood chips.*
- 2. Add 8 to 10 inches of dry leaves or other dry plant matter from your yard.*
- 3. If no soil is included in your compost materials, add a sprinkling of soil or compost starter to each layer to introduce tiny organisms that cause the plant matter to decay.*
- 4. Provide nitrogen for these compost-promoting organisms by adding 2–3 inches of fresh grass clippings on top of the dry materials.*
- 5. Moisten the materials each time you add clippings and leaves, keeping the pile damp but not soggy.*

**Which step is missing from Will's instructions?**

- F** what to use when beginning the pile
- G** what to do to keep the pile active and aerated
- H** how to know when the compost in the pile is ready to use
- J** how to make sure the pile contains small organisms



**81**

Thomas has written a report about modern industry in China. Choose the image that would be most appropriate for his presentation.

**A**



**C**



**B**



**D**



**82** Read this excerpt from a film screenplay.

**Movie: One More Race to Run**

**Opening Scene:**

*Sudden shift from black screen to white. Footsteps slap pavement. The sound of breathing and crowd noise is muffled in the background. The camera focuses on Billy Mills running through the tunnel under the stadium and then out into the sunlight. The sound of the footsteps becomes louder. He crosses the finish line and snaps it just as the soundtrack begins.*

*Voiceover of announcer: Billy Mills crosses the finish line. Look at Billy Mills! Look at Billy Mills! Amazing! Billy Mills has just become the first American to win the 10,000-meter event. What a great day for Billy Mills! What a great day for America!*

*With the sound of the announcer still in the background, the scene fades to show young Billy Mills running with other boys at the Pine Ridge Reservation. An older friend shouts, “Billy, you’re too little to run with us!” Mills grins and begins running faster.*

Choose the statement that best summarizes the message of the opening scene of the film.

- F** Victory requires great sacrifice.
- G** Friendships count more than talent.
- H** Success comes with practice.
- J** People are naturally competitive.

**83** Look at the picture.



The conflict in this picture best represents

- A** person vs. self.
- B** person vs. person.
- C** person vs. technology.
- D** person vs. environment.

**DO NOT  
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ON THIS  
PAGE**

# Mathematics



## Part 1

- 1** What is the value of this expression?

$$8.1\left(\frac{4}{9} + \frac{1}{27}\right)$$

- A**  $\frac{9}{10}$
- B**  $1\frac{1}{2}$
- C**  $3\frac{3}{5}$
- D**  $3\frac{9}{10}$

- 2** The numbers of points the Panthers scored in 9 basketball games are listed below.

75, 84, 65, 77, 88, 48, 85, 92, 92

What is the lower quartile of the number of points the Panthers scored in the 9 games?

- F** 20
- G** 44
- H** 70
- J** 84

*Go On* ►

**3** What is the value of  $3n^2 + 6n$  when  $n = \frac{5}{3}$ ?

**A**  $9\frac{1}{6}$

**B** 15

**C**  $18\frac{1}{3}$

**D** 35

**4** What value of  $k$  will make the equation below true?

$$\frac{7}{4}k - 9 = 3$$

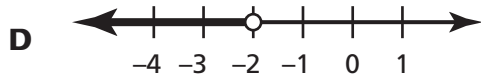
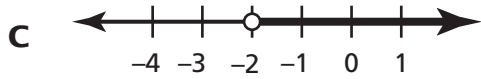
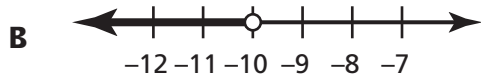
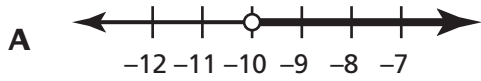
**F**  $3\frac{3}{7}$

**G**  $6\frac{6}{7}$

**H** 12

**J** 21

**5** Which graph best represents the solution to the inequality  $\frac{4 - a}{2} > 3$ ?



**6** Which value of  $x$  makes this inequality true?

$$x \geq 1.6$$

**F**  $\frac{8}{5}$

**G**  $\frac{11}{7}$

**H**  $\frac{13}{9}$

**J**  $\frac{17}{11}$

*Go On* ►

- 7** The ages, in years, of six members of the Owen family are listed below.

26, 41, 45, 53, 53, 94

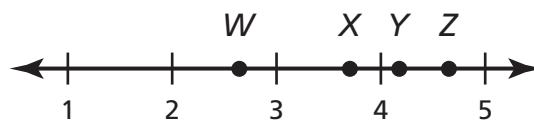
What is the mean age of these family members?

- A** 49 years
- B** 52 years
- C** 53 years
- D** 68 years

- 8** The temperature in Chicago was  $-3^{\circ}\text{F}$  at 8 A.M. The temperature increased  $5^{\circ}\text{F}$  by noon. The temperature then decreased  $7^{\circ}\text{F}$  by 4 P.M. What was the temperature in Chicago at 4 P.M.?

- F**  $-15^{\circ}\text{F}$
- G**  $-9^{\circ}\text{F}$
- H**  $-5^{\circ}\text{F}$
- J**  $-1^{\circ}\text{F}$

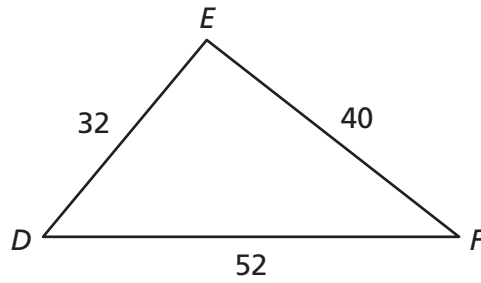
- 9** Which point best represents the location of  $\sqrt[3]{100}$  on the number line?



- A** W
- B** X
- C** Y
- D** Z



- 10** The picture shows the side lengths of Triangle  $DEF$ .



Which could be the lengths of the sides of a triangle similar to Triangle  $DEF$ ?

- F** 16, 24, 36
  - G** 24, 30, 36
  - H** 40, 48, 60
  - J** 40, 50, 65
- 11** What is the value of  $8.50p + 7.99c$ , when  $p = 15$  and  $c = 6$ ?

- A** 127.94
- B** 170.85
- C** 175.44
- D** 346.29

**12** A brand of pasta costs \$2.10 for 14 ounces. At this rate, what is the price for 22 ounces of this brand of pasta?

**F** \$0.10

**G** \$0.15

**H** \$2.90

**J** \$3.30

**13** The table below gives values of  $x$  and  $y$ .

$x$	$y$
3	3
6	4
9	5
15	7

Which equation best describes the relationship between the values of  $x$  and  $y$ ?

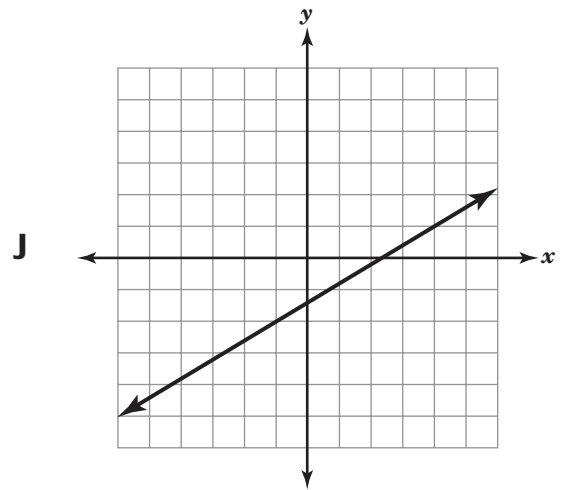
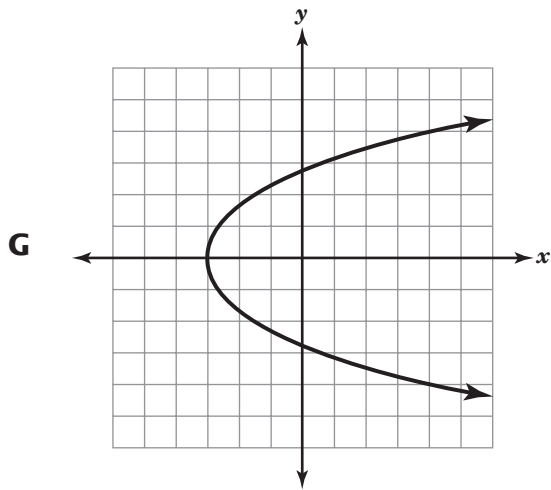
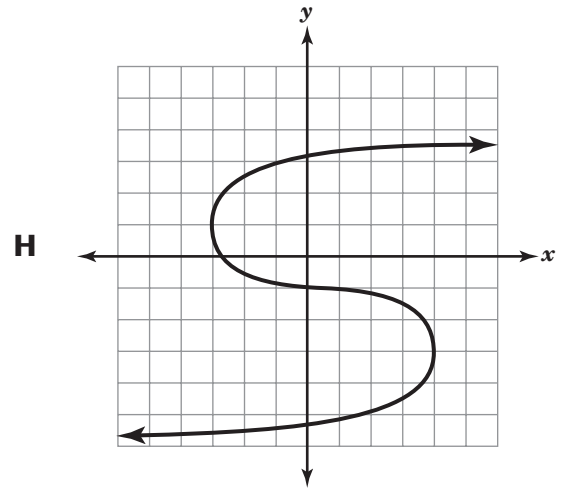
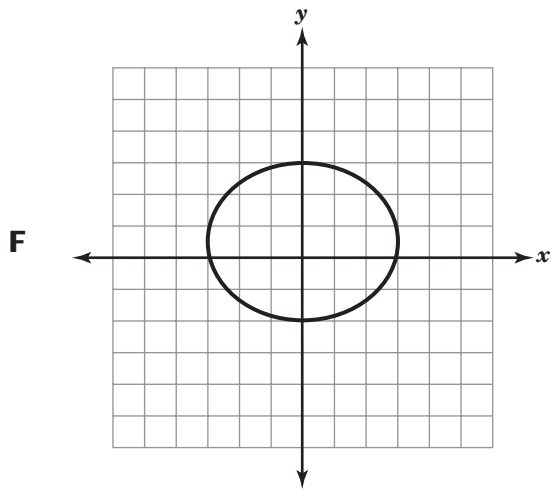
**A**  $y = \frac{1}{3}x + 2$

**B**  $y = \frac{1}{2}x + 1$

**C**  $y = \frac{2}{3}x - 1$

**D**  $y = \frac{4}{3}x - 7$

**14** Which of these graphs represents  $y$  as a function of  $x$ ?



**15** A number cube with faces labeled 1 through 6 is rolled one time. What is the probability that either a 2 or a 4 is rolled?

**A**  $\frac{1}{36}$

**B**  $\frac{1}{6}$

**C**  $\frac{1}{3}$

**D**  $\frac{1}{2}$

**16** Which table shows a directly proportional relationship?

**F**

x	y
1	$\frac{1}{10}$
3	$\frac{3}{10}$
5	$\frac{1}{2}$

**H**

x	y
7	$\frac{1}{14}$
8	$\frac{1}{24}$
9	$\frac{1}{36}$

**G**

x	y
2	$\frac{1}{3}$
4	$\frac{1}{5}$
6	$\frac{1}{7}$

**J**

x	y
8	$\frac{1}{16}$
10	$\frac{1}{20}$
12	$\frac{1}{24}$

**17** Ms. Anderson traveled from Nashville, Tennessee, to Kansas City, Missouri. Her trip was 480 miles and took 7 hours 30 minutes. Which trip represents the same rate of travel?

- A** 120 miles in 2 hours
- B** 192 miles in 3 hours
- C** 100 miles in 1 hour 30 minutes
- D** 240 miles in 3 hours 15 minutes

- 18** A cube has a volume of 512 cubic centimeters.

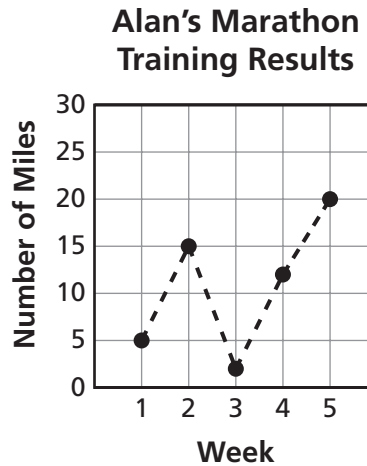
$$SA = 6 \times e^2$$
$$V = e^3$$

If the cube is completely covered with wrapping paper, what is the minimum amount of paper needed to cover all 6 faces?

- F** 384 square centimeters
- G** 256 square centimeters
- H** 138 square centimeters
- J** 64 square centimeters

**19**

The line graph below shows the number of miles Alan ran while training for a marathon during each of 5 weeks.



Based on the graph, which conclusion is not true?

- A** The number of miles Alan ran during Week 5 is about 4 times the number of miles he ran during Week 1.
- B** The number of miles Alan ran during Week 3 is about 3 miles less than the number of miles he ran during Week 1.
- C** The difference between the number of miles Alan ran during Week 2 and the number of miles he ran during Week 3 is less than 15.
- D** The difference between the number of miles Alan ran during Week 2 and the number of miles he ran during Week 4 is greater than 5.

*Go On* ►

- 20** A class has 12 boys and 16 girls. The teacher writes each student's name on a different note card and then places the cards in a bag. If the teacher randomly selects one card from the bag, what is the probability that a boy's name will be selected?

**F**  $\frac{1}{28}$

**G**  $\frac{1}{12}$

**H**  $\frac{3}{7}$

**J**  $\frac{3}{4}$

- 21** Raiden has a gift box in the shape of a cube. The total surface area of the gift box is 486 square inches.

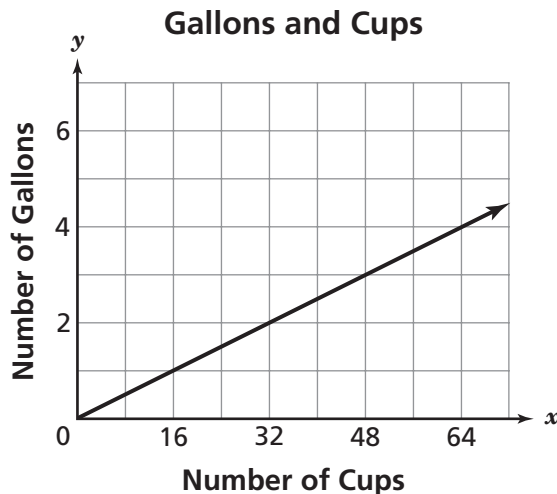
$SA = 6 \times e^2$ $V = e^3$
----------------------------------

What is the length of an edge of the gift box?

- A** 8 inches  
**B** 9 inches  
**C** 11 inches  
**D** 22 inches



- 22** Which statement best describes the slope of the line shown?



- F** The slope represents the number of gallons in 48 cups.
- G** The slope represents the number of cups in 6 gallons.
- H** The slope represents the number of cups per gallon.
- J** The slope represents the number of gallons per cup.

- 23** A movie is being shown on television. The movie is scheduled for a 150-minute time period. There will be some 6-minute commercial breaks ( $b$ ) throughout the movie. The actual length of the movie is 114 minutes. Which equation could be used to find  $b$ , the number of 6-minute commercial breaks?

- A**  $150 = 6(114 + b)$
- B**  $150 = 114b + 6$
- C**  $114 = 150 - 6b$
- D**  $114 = 6(150 - b)$

- 24** Sekayi has a credit card balance of \$1,000 and decides to make no new purchases until the balance is paid off. The table shows the remaining balance at the end of each month after Sekayi makes one of his equal payments.

**Sekayi's Credit Card Balance**

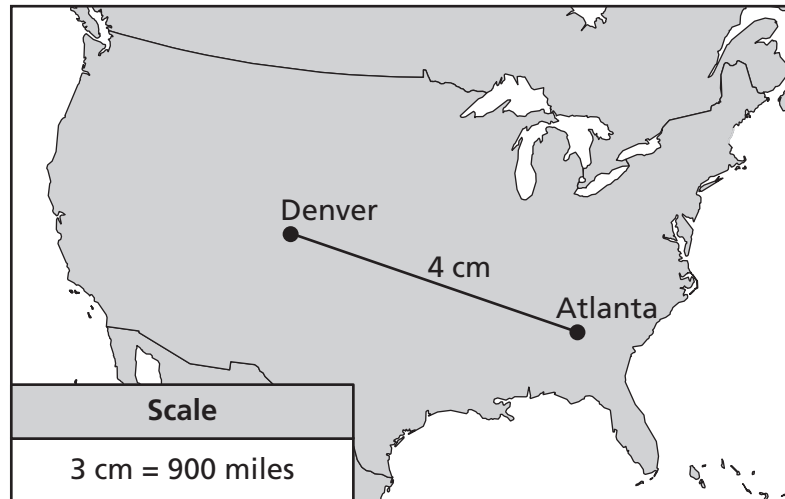
Month	Balance
1	\$965
2	\$930
4	\$860
7	\$755

If the pattern continues, what will Sekayi's balance be at the end of Month 11?

- F** \$650
- G** \$615
- H** \$475
- J** \$245

25

The scale drawing below shows the distance, in centimeters (cm), between Denver and Atlanta.



According to the scale, what is the actual distance between Denver and Atlanta?

- A 300 miles
- B 900 miles
- C 1,000 miles
- D 1,200 miles

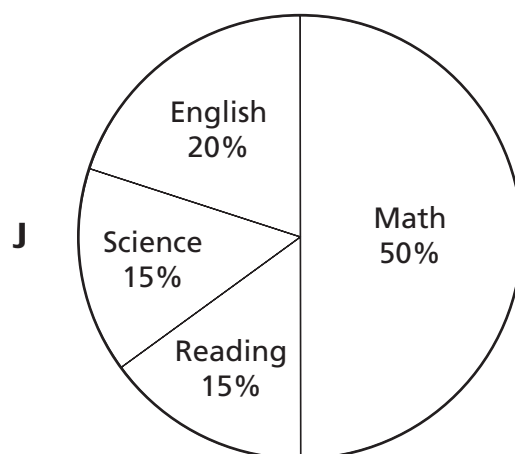
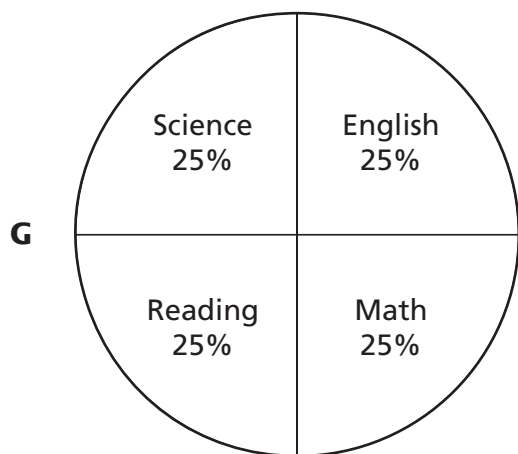
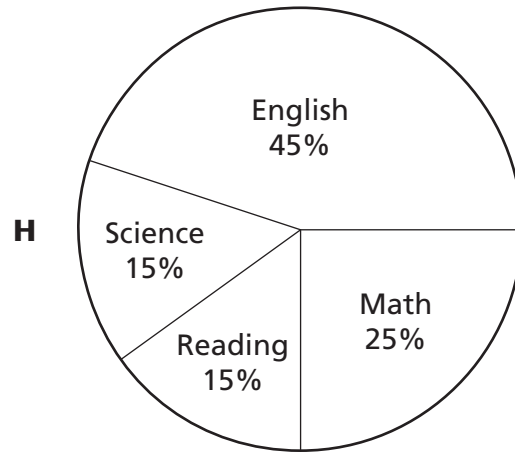
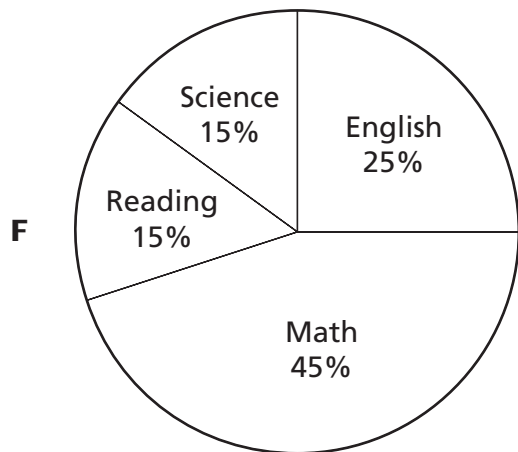
Go On ►

**26** The table below shows the time Derrick spent studying 4 subjects.

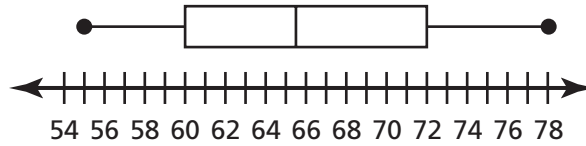
**Derrick's Study Time**

Subject	Time (minutes)
English	25
Math	45
Reading	15
Science	15

Which graph best represents the data in the table?



- 27** The box-and-whisker plot represents the heights, in inches, of the members of a tennis team.



Which value is closest to the upper quartile of the heights, in inches, of the tennis team members?

- A** 55
- B** 60
- C** 72
- D** 78

- 28** Which table does not represent a proportional relationship?

**F**

$x$	$y$
3	3
6	5
9	7
12	9
15	11

**H**

$x$	$y$
3	1
6	2
9	3
12	4
15	5

**G**

$x$	$y$
3	2
6	4
9	6
12	8
15	10

**J**

$x$	$y$
3	4
6	8
9	12
12	16
15	20

**29** Which value of  $n$  makes this inequality true?

$$\frac{3}{10} < n < \frac{8}{25}$$

- A** 0.29
- B** 0.30
- C** 0.31
- D** 0.32

**30** A taxi company charges an initial fee of \$4 plus \$2 per mile for taxi fares. The total taxi bill for Uma to travel from a hotel to an airport was \$56. The equation below can be used to find  $n$ , the number of miles traveled.

$$56 = 2n + 4$$

How many miles did Uma travel in the taxi?

- F** 30
- G** 28
- H** 26
- J** 14

**31** An 8-ounce container has 6 ounces of coffee and 2 ounces of milk. A 20-ounce container has the same ratio of coffee to milk. How many ounces of milk are in the 20-ounce container?

- A** 5 ounces
- B** 15 ounces
- C** 18 ounces
- D** 80 ounces

- 32** The members of a school club are planning a car wash. They estimate that 650 gallons of water will be needed to wash 10 cars. At this rate, which equation could be used to estimate  $g$ , the number of gallons of water needed to wash 25 cars?

**F**  $\frac{10}{650} = \frac{35}{g}$

**G**  $\frac{g}{650} = \frac{10}{35}$

**H**  $\frac{650}{10} = \frac{25}{g}$

**J**  $\frac{650}{10} = \frac{g}{25}$

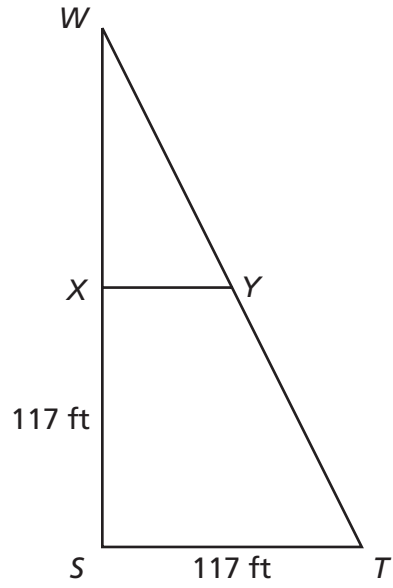
- 33** The table below shows values of  $x$  and  $y$ .

$x$	$y$
-8	-16
-2	-10
4	-4
10	2

Which equation describes the relationship between the values of  $x$  and  $y$ ?

- A**  $y = 2x$   
**B**  $y = 5x$   
**C**  $y = x + 8$   
**D**  $y = x - 8$

- 34** The diagram below represents a triangular section of a park.



Triangle  $WST$  is similar to Triangle  $WXY$ . If the length of  $\overline{WS}$  is 234 feet, what is the length of  $\overline{XY}$ ?

- F** 39 feet
- G** 58.5 feet
- H** 117 feet
- J** 175.5 feet



**35** Sofia made 35% of her shots in a basketball game. What is the ratio of the number of shots Sofia made to the number of shots she did not make in the game?

- A** 7:13
- B** 13:7
- C** 7:20
- D** 20:7

## Part 2

**36** A small rectangular prism is 4 inches long. A large rectangular prism is 24 inches long. These two prisms are similar. Which statement is true?

- F** The volume of the large rectangular prism is 6 times the volume of the small one.
- G** The volume of the large rectangular prism is 20 times the volume of the small one.
- H** The volume of the large rectangular prism is 36 times the volume of the small one.
- J** The volume of the large rectangular prism is 216 times the volume of the small one.

**37** The table shows the relationship between the number of books Julie checked out from the library and the number of minutes she spent at the library for each visit.

**Library Visits**

Number of Books Checked Out	Time Spent (in minutes)
1	8
3	16
4	28
6	30
8	26

Which of these best describes this relationship?

- A** linear
- B** nonlinear
- C** directly proportional
- D** inversely proportional

**38** A rectangular painting has an area of 720 square inches. Jasmine reduced the length and width of this painting by a scale factor of  $\frac{1}{6}$  to create a miniature copy. What is the area of the miniature copy?

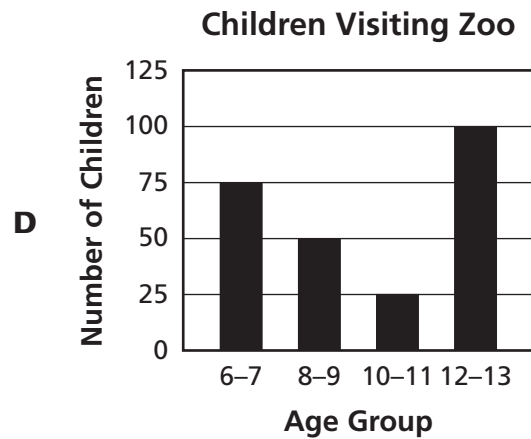
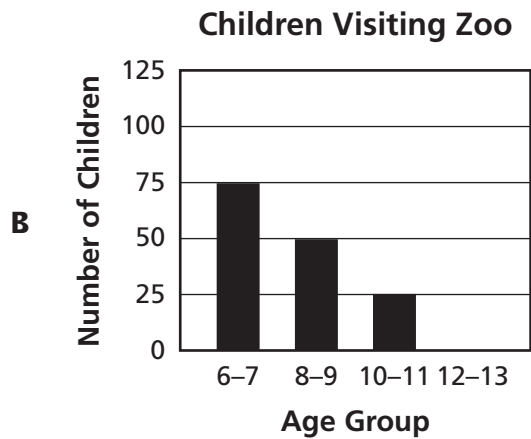
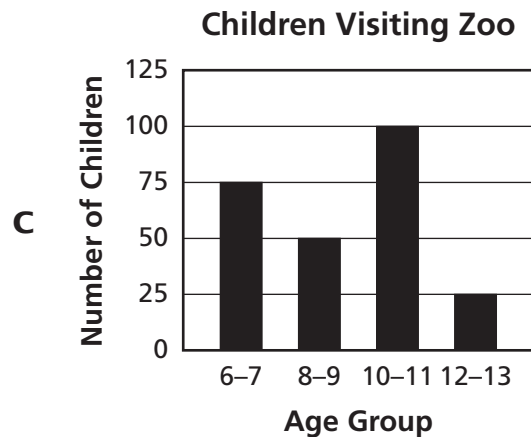
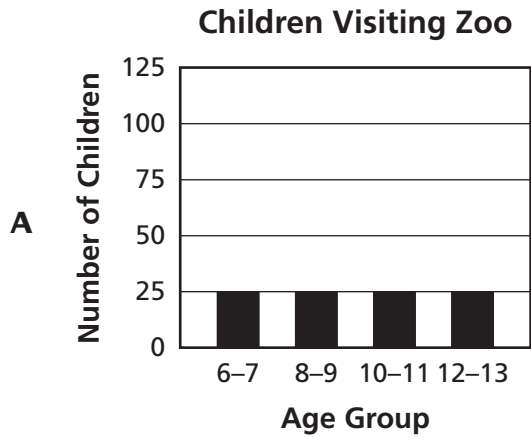
- F** 12 square inches
- G** 20 square inches
- H** 60 square inches
- J** 120 square inches

**39** The pictograph below shows the number of children in each age group who visited a zoo on Tuesday morning.

**Children Visiting Zoo**

Age Group	Number of Children
6–7 year olds	⊗ ⊗ ⊗ ⊗ ⊗ ⊗ ⊗
8–9 year olds	⊗ ⊗ ⊗ ⊗
10–11 year olds	⊗ ⊗
12–13 year olds	⊗ ⊗ ⊗ ⊗ ⊗ ⊗ ⊗ ⊗ ⊗ ⊗
<b>Key</b>	
⊗ = 10 children	

Which graph best represents this information?



**40** A salt solution was made by mixing 4 pounds of salt with 10 gallons of water. At this rate, how many pounds of salt are required for 15 gallons of water?

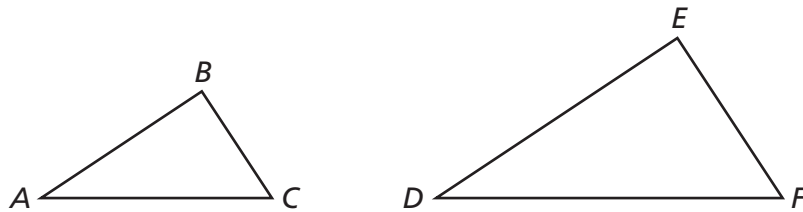
**F**  $2\frac{2}{3}$  pounds

**G** 6 pounds

**H**  $37\frac{1}{2}$  pounds

**J** 60 pounds

**41** Look at the two triangles below.



Which set of relationships would prove that the two triangles are similar?

**A**  $\frac{BC}{AC} = \frac{EF}{DF}$  and  $m\angle A = m\angle D$

**B**  $\frac{DE}{AB} = \frac{DF}{AC}$  and  $m\angle B = m\angle E$

**C**  $m\angle B = m\angle E$ , and  $m\angle C = m\angle F$

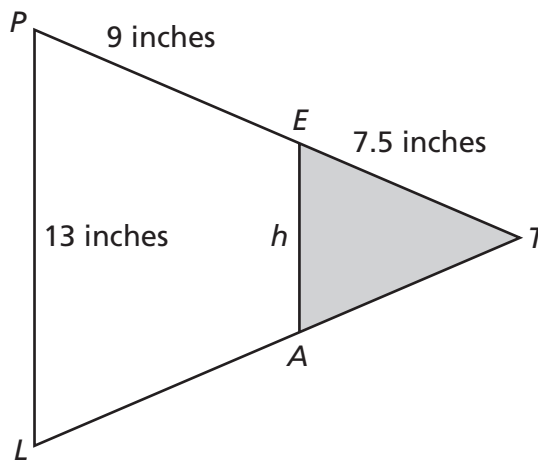
**D**  $m\angle A = m\angle D$ ,  $AB = DE$ , and  $BC = EF$

Go On ►

**42** Rebecca's goal is to save \$700. She has already saved \$220. Rebecca will save \$12 per week. Which equation could be used to find  $w$ , the number of weeks Rebecca needs to save to reach her goal?

- F**  $12w = 700$
- G**  $232w = 700$
- H**  $12w - 220 = 700$
- J**  $220 + 12w = 700$

**43** The figure shows a model for a sports-team pennant. In this model, Triangle  $PTL$  is similar to Triangle  $ETA$ .



Which is closest to the length of  $h$ ?

- A** 5.2 inches
- B** 5.9 inches
- C** 9.5 inches
- D** 10.8 inches

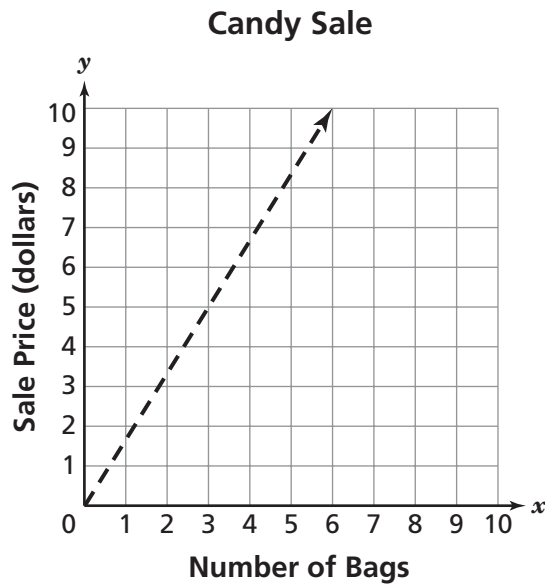
- 44** Lauren's first cell phone bill of \$72.75 included an activation fee of \$36 and a charge of \$0.25 for each minute used. This situation is represented by the equation below, where  $x$  represents the number of minutes used.

$$0.25x + 36 = 72.75$$

According to her cell phone bill, how many minutes did Lauren use the first month?

- F** 109
  - G** 147
  - H** 255
  - J** 291
- 45** A triangle has side lengths of 16 feet and 20 feet. The measure of the included angle is  $30^\circ$ . Which measurements could be the side lengths and the included angle of the corresponding parts in a similar triangle?
- A** side lengths: 32 feet, 36 feet; included angle:  $30^\circ$
  - B** side lengths: 32 feet, 40 feet; included angle:  $60^\circ$
  - C** side lengths: 36 feet, 45 feet; included angle:  $30^\circ$
  - D** side lengths: 36 feet, 40 feet; included angle:  $60^\circ$

- 46** Bags of candy are on sale. The graph shows the relationship between the number of bags of candy and the sale price of those bags.

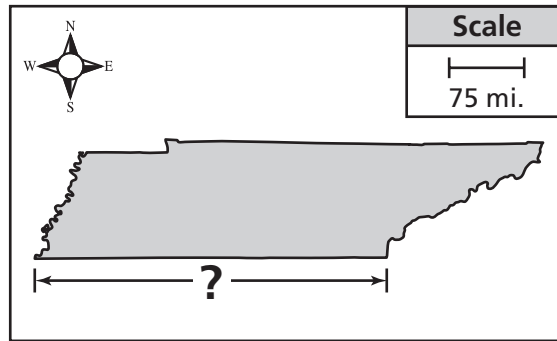


Based on the graph, which is closest to the sale price for 30 bags of candy?

- F** \$95
- G** \$50
- H** \$32
- J** \$18



- 47** This map shows the state of Tennessee.



Based on the map, what is the approximate length of the southern border of Tennessee?

- A** 150 miles
- B** 350 miles
- C** 450 miles
- D** 750 miles

**48** The table below shows several values of a function.

$x$	$f(x)$
2	13
1	5
0	-3
-1	-11
-2	-19
-3	-27

Which equation represents this function, and what is  $f(-7)$ ?

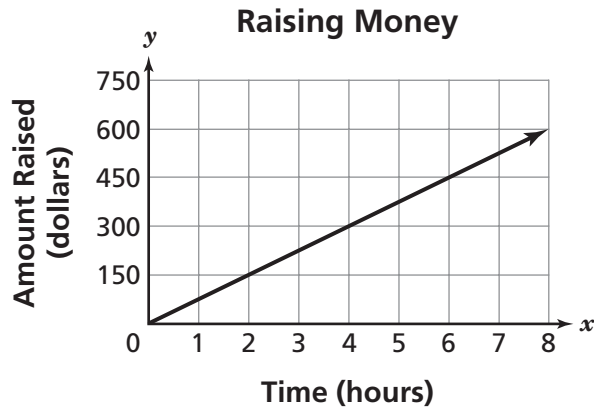
**F**  $f(x) = \frac{8x^2 + 7}{3}$  and  $f(-7) = -133$

**G**  $f(x) = \frac{8x^2 + 7}{3}$  and  $f(-7) = -105$

**H**  $f(x) = 8x - 3$  and  $f(-7) = -80$

**J**  $f(x) = 8x - 3$  and  $f(-7) = -59$

- 49** What does the slope of this line represent?



- A** the number of dollars raised per hour
- B** the number of hours per dollar raised
- C** the number of dollars raised after 8 hours
- D** the number of hours needed to raise \$750

- 50** The table below shows the time it takes Jason to complete a bike trail each week for 4 weeks.

**Bike Trail**

Week Number	Time (minutes)
1	118
2	116
3	114
4	112

If this pattern continues, which expression represents the time, in minutes, it will take Jason to complete the bike trail in Week  $n$ ?

- F**  $n + 2$
- G**  $n - 2$
- H**  $2n + 120$
- J**  $-2n + 120$

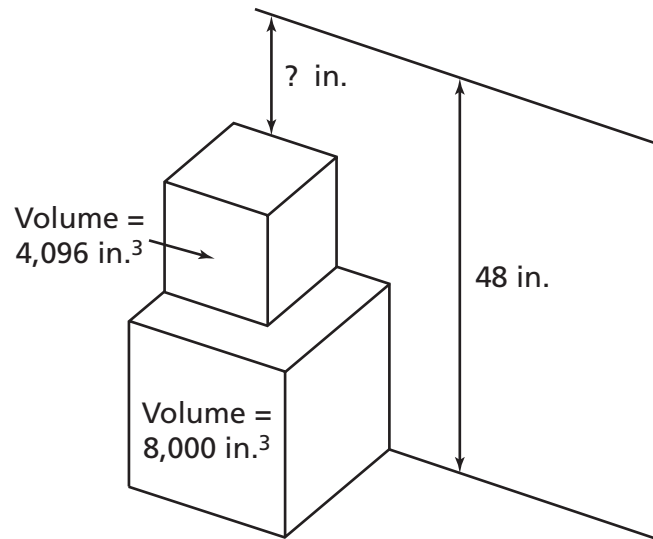
- 51** A teacher writes the following word on the board.

ARITHMETIC

He tells his students to randomly pick one letter from the word. What is the probability that Jonah will pick the letter T?

- A**  $\frac{1}{2}$
- B**  $\frac{1}{5}$
- C**  $\frac{1}{10}$
- D**  $\frac{1}{100}$

- 52** A closet has a height of 48 inches. Raymond stacked two cube-shaped boxes in this closet. One box has a volume of 8,000 cubic inches ( $\text{in.}^3$ ), and the other box has a volume of 4,096  $\text{in.}^3$ , as shown below.

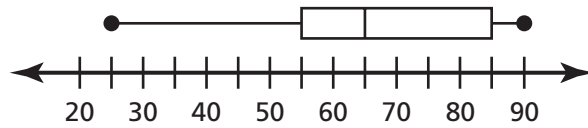


$$V = e^3$$

If a third cube-shaped box is added to the top of the stack, what is the greatest possible edge length of this cube?

- F** 12 inches
- G** 16 inches
- H** 20 inches
- J** 25 inches

- 53** The box-and-whisker plot shows a summary of the number of minutes James practiced piano each day in November.



According to the box-and-whisker plot, which statement is true?

- A** James practiced for 25 minutes on the first day in November.
- B** James practiced an average of 65 minutes each day in November.
- C** James practiced less than 55 minutes on half of the days in November.
- D** James practiced between 55 and 85 minutes on half of the days in November.

- 54** Which table shows an inversely proportional relationship?

**F**

$p$	$q$
0.5	10
1.0	20
2.0	40

**H**

$p$	$q$
1	2.5
2	5.0
4	10.0

**G**

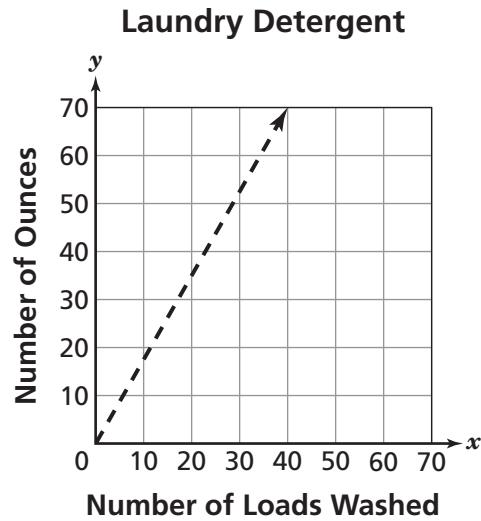
$p$	$q$
2	10.0
4	5.0
8	2.5

**J**

$p$	$q$
2.5	5
5.0	10
10.0	20

**55**

The graph shows the relationship between the number of ounces of laundry detergent used and the number of loads washed.

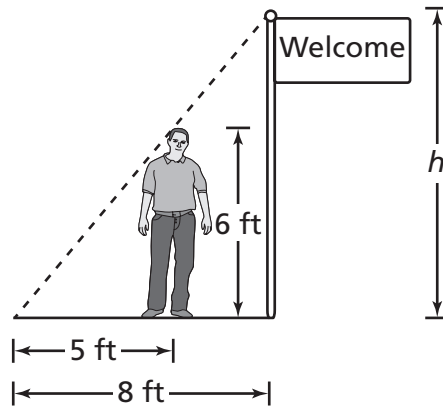


What does the slope of the line represent?

- A** number of ounces of detergent per load washed
- B** number of ounces of detergent used in 70 loads
- C** number of loads washed per ounce of detergent
- D** number of loads washed with 70 ounces of detergent

*Go On* ►

- 56** A flagpole casts a shadow that is 8 feet long. A 6-foot-tall man casts a shadow that is 5 feet long, as shown.

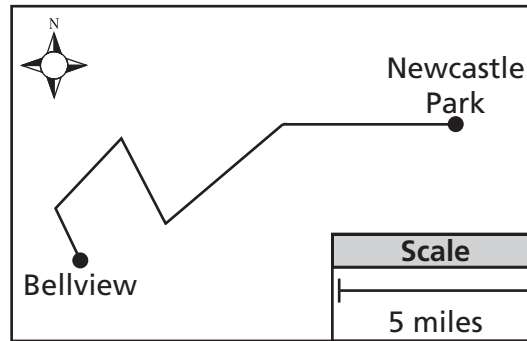


What is the value of  $h$ , the height of the flagpole?

- F**  $9\frac{3}{5}$  feet
- G**  $9\frac{3}{4}$  feet
- H**  $10\frac{5}{6}$  feet
- J**  $15\frac{3}{5}$  feet



- 57** Roberto rode his bicycle from Bellview to Newcastle Park and back on the bicycle path shown on the map.



Which is closest to the roundtrip distance Roberto traveled?

- A** 6 miles
- B** 15 miles
- C** 24 miles
- D** 30 miles

**58** The table shows John's height during the first years of his life.

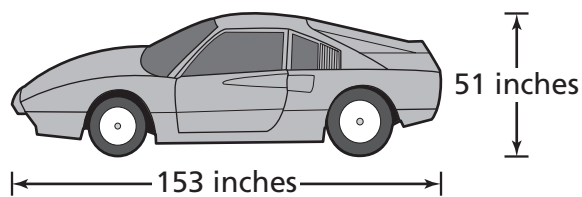
**John's Height**

Age (years)	Height (inches)
0	19
1	28
2	35
3	40
4	44
5	47

Which type of graph would best represent the change in John's height during these years?

- F** line graph
- G** circle graph
- H** stem-and-leaf plot
- J** box-and-whisker plot

**59** The actual length and height of a car are shown below.



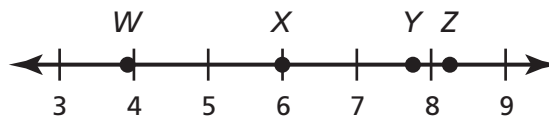
A toy model of this car that is made to scale has a length of 12 inches. What is the height of this toy model?

- A** 3 inches
- B** 4 inches
- C** 17 inches
- D** 36 inches

**60** On Friday, the students in a physical education class were allowed to play either soccer or basketball. The ratio of students playing soccer to students playing basketball on Friday was 4:1. What percent of the students in class on Friday were allowed to play basketball?

- F** 20%
- G** 25%
- H** 75%
- J** 80%

**61** Which point best represents the location of  $\sqrt{60}$  on the number line?



- A** W
- B** X
- C** Y
- D** Z

**62** A fish was located 4 feet below sea level and then descended at a rate of 2 feet per second. Which integer best describes the location of this fish after 3 seconds?

- F** 24 feet below sea level
- G** 10 feet below sea level
- H** 6 feet below sea level
- J** 2 feet below sea level

**63** What is the interquartile range of the data listed below?

$$\{18, 33, 58, 67, 73, 93, 147\}$$

- A** 60
- B** 67
- C** 93
- D** 129

**64** Which inequality is the solution for  $-\frac{1}{2}r - \frac{2}{3} < \frac{1}{6}$ ?

- F**  $r > -\frac{5}{3}$
- G**  $r < -\frac{5}{3}$
- H**  $r > -\frac{5}{12}$
- J**  $r < -\frac{5}{12}$

**65** What value of  $x$  makes this equation true?

$$3x - 2 = 2.5$$

- A** 0.17
- B** 0.9
- C** 1.5
- D** 2.83

**66** The expression  $300n$  gives the number of calories in  $n$  cups of dry oatmeal. What is the number of calories in  $2\frac{1}{4}$  cups of dry oatmeal?

- F** 750
- G** 675
- H** 600
- J** 450

**67** What is the value of the expression shown?

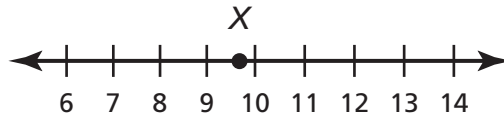
$$1\frac{1}{2} + 4\frac{1}{2} \div \frac{3}{8}$$

- A**  $2\frac{1}{4}$
- B**  $3\frac{3}{20}$
- C**  $13\frac{1}{2}$
- D** 16

**68** Which of these relations is a function?

- F**  $\{0, 1\}\{1, 2\}\{2, 4\}$
- G**  $\{0, 1\}\{0, 2\}\{0, 3\}$
- H**  $\{0, 1\}\{1, 2\}\{1, 4\}$
- J**  $\{0, 1\}\{0, 2\}\{2, 4\}$

- 69** Which is closest to the location of Point  $X$  on the number line?



- A  $\sqrt{75}$
- B  $\sqrt{80}$
- C  $\sqrt{95}$
- D  $\sqrt{105}$

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# Science

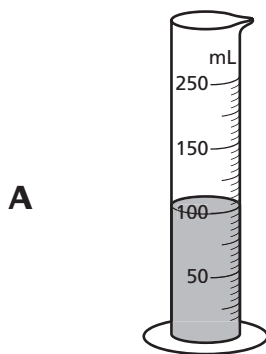


## Part 1

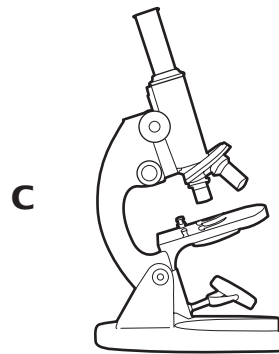
- 1** Students were investigating some properties of rocks. They wanted to compare the volumes of the rocks.



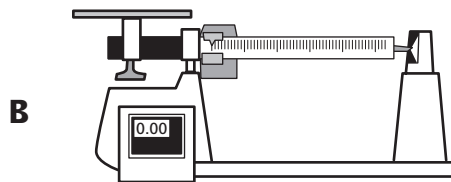
Which tool should the students use to accurately measure the volume of each rock?



Graduated Cylinder



Light Microscope



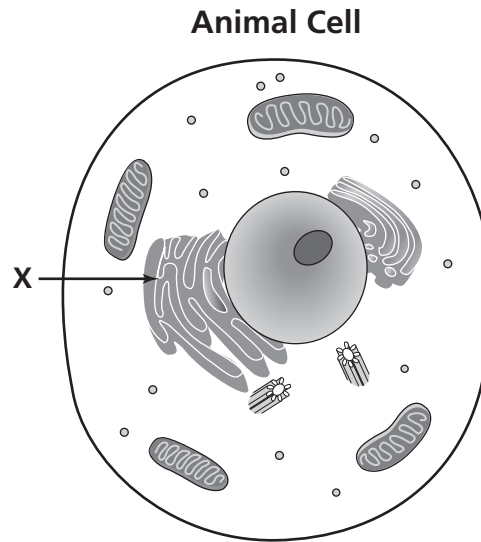
Balance



Ruler

Go On ►

- 2** An animal cell is shown in the diagram below.

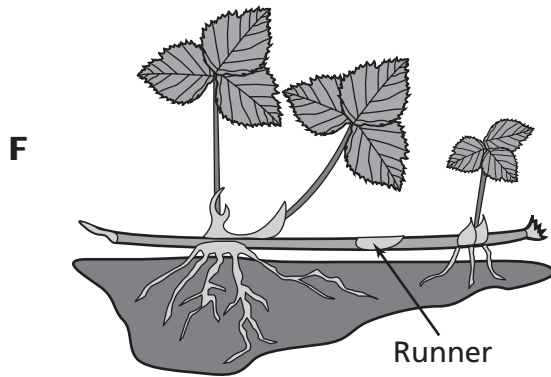


What organelle is identified by the X?

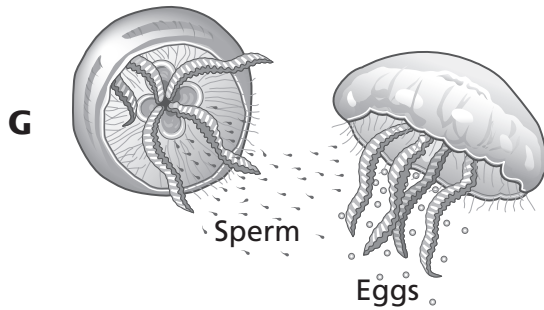
- F** centriole
  - G** ribosome
  - H** Golgi apparatus
  - J** endoplasmic reticulum
- 3** Which of these equations best shows the reactants and products of cellular respiration?
- A** carbon dioxide + water  $\rightarrow$  sugar + oxygen
  - B** water + oxygen  $\rightarrow$  sugar + carbon dioxide
  - C** sugar + oxygen  $\rightarrow$  carbon dioxide + water
  - D** sugar + carbon dioxide  $\rightarrow$  oxygen + water

**4** Which diagram is the best example of an organism undergoing sexual reproduction?

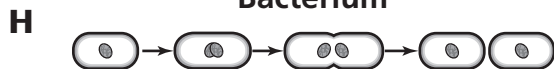
**Strawberry Plant**



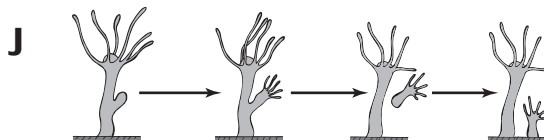
**Jellyfish**



**Bacterium**

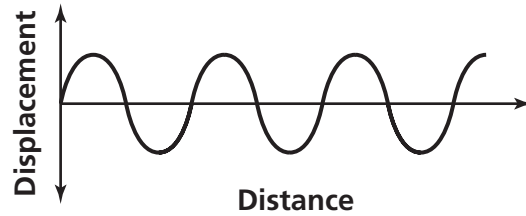


**Hydra**



*Go On* ►

- 5** A wave is shown in the diagram below.



Which best describes the wave?

- A** The wavelength ends at the crest.
- B** The amplitude equals the wavelength.
- C** The amplitude of the crest equals the amplitude of the trough.
- D** The wavelength is the height of the crest plus the height of the trough.

- 6** Which of these must happen for the sea floor to spread apart?

- F** a flood
- G** a hurricane
- H** plate movement
- J** volcanic eruption

- 7** Some processes in the rock cycle are described in the chart below.

**Some Processes in the Rock Cycle**

<b>1</b>	New rock forms from rock that is melted and then cools.
<b>2</b>	New rock forms after rock experiences high temperatures and pressure.
<b>3</b>	New rock forms after pieces of rock weather and then erode and are deposited in layers.

What type of rock is most likely formed by process 1?

- A** sedimentary
- B** igneous
- C** metamorphic
- D** magma

- 8** The main function of which system is to help protect inner organs from being damaged by an outside force?

- F** excretory
- G** nervous
- H** skeletal
- J** circulatory

- 9** The characteristic for having dimples (D) is dominant to the characteristic for not having dimples (d). A Punnett square showing a cross between a dimpled person and a non-dimpled person is shown below.

	D	d
d		
d		

What percentage of the offspring from this cross will most likely have dimples?

- A** 25%
- B** 50%
- C** 75%
- D** 100%

**10** Different types of water pollution and their effects are described in the table below.

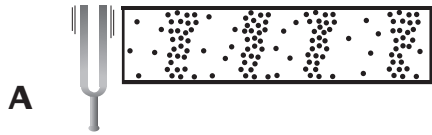
**Descriptions of Water Pollution**

Type	Effect
Raw Sewage	Illnesses such as typhoid and hepatitis can spread to humans
Phosphate and Nitrate	Increases algae, then decaying algae uses up oxygen in water
Poison	Stored in the bodies of fish and builds up in organisms that eat fish
Oil	Becomes stuck on bird feathers
Thermal (heat)	Causes water to be less able to contain oxygen; causes bacteria to grow

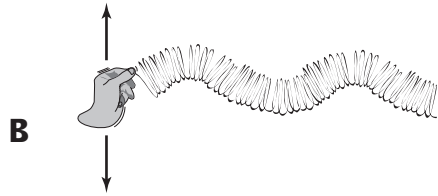
Based on the table, which results from both phosphate and nitrate pollution and thermal (heat) pollution in water?

- F** Diseases are carried through the water.
- G** Materials contaminate the bodies of birds.
- H** Growth of algae rapidly increases.
- J** Levels of oxygen in the water decrease.

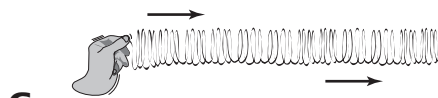
**11** Which diagram shows only a transverse wave?



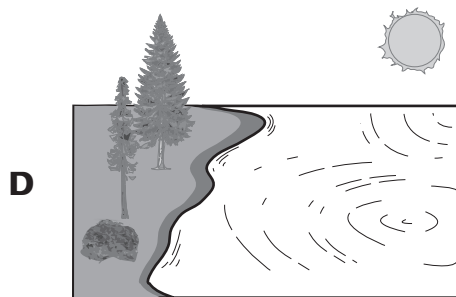
A tuning fork producing sound



A coil spring vibrating up and down



A coil spring vibrating horizontally



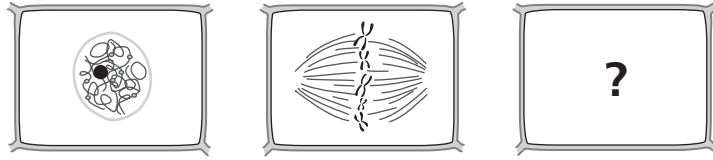
Water traveling toward a shore



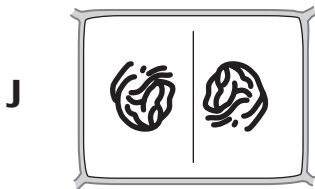
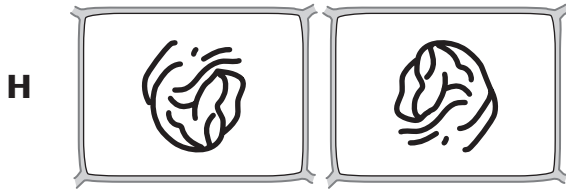
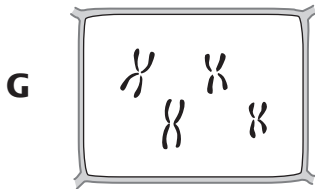
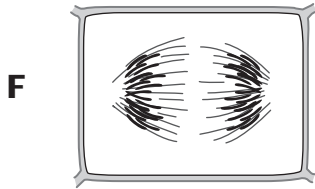
- 12** Scientists theorize that the Atlantic Ocean is slowly increasing in width. Which is the best approximation of the rate at which lithospheric plates beneath the Atlantic Ocean are moving?
- F** 2 millimeters per year
  - G** 2 centimeters per year
  - H** 2 meters per year
  - J** 2 kilometers per year

- 13** A screw is an example of a simple machine that would be most useful for
- A** cutting a sandwich.
  - B** hammering a nail.
  - C** opening a corked bottle.
  - D** lifting a rock.

**14** Some phases of a dividing plant cell are shown in the diagram.



What is the next phase of plant cell division?



**15** Some researchers are developing a new fertilizer designed to improve the growth of plants in hot, dry climates. The fertilizer was applied to one hundred desert plants in a greenhouse. The average daytime temperature in the greenhouse was 90°F, and the humidity levels were low. Which is best for the researchers to do next?

- A** compare plants that received fertilizer to similar plants that received none
- B** begin selling the fertilizer to gardeners living in hot, dry climates
- C** change the conditions in the greenhouse and retest the fertilizer
- D** test the fertilizer on plants that are adapted to cooler climates

**16** A student performed 50 joules of work by raising an object 2 meters with a pulley.

$$\text{Force} = \frac{\text{work}}{\text{distance}}$$
$$F = \frac{W}{d}$$

What was the force on the object?

- F** 25 newtons
- G** 48 newtons
- H** 52 newtons
- J** 100 newtons

**17** Which is not a major function of the muscular system?

- A** moving the bones of the skeleton
- B** helping the stomach digest food
- C** helping the lungs take in air
- D** relaying messages to the brain

- 18** Students observed an unknown mineral. The mineral was yellow, had a white streak, and was able to be scratched by quartz.

**Mineral Properties**

Name	Hardness	Common colors	Streak color
Sulfur	2	Yellow, yellow-brown	Yellow
Calcite	3	White, colorless, yellow, pink	White
Quartz	7	White, colorless, pink, gray	White
Topaz	8	Clear, yellow, orange	White
Diamond	10	White, colorless, yellow, brown	White

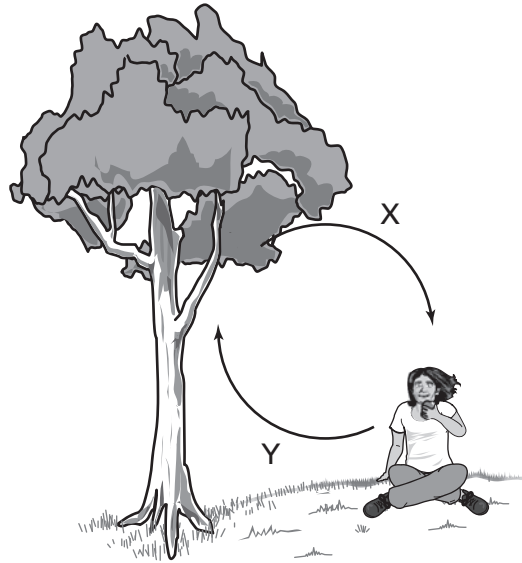
Based on the table, which of these minerals were the students most likely observing?

- F** Sulfur
- G** Calcite
- H** Topaz
- J** Diamond

- 19** Which is the best example of an adaptive bioengineered product?

- A** sugar cane that is processed to make fuel
- B** mules that are bred from horses and donkeys for farm work
- C** ladybugs that are raised to eat garden pests
- D** eyeglasses that are used to correct near-sighted vision

**20** The picture shows an exchange of gases between plants and animals.



What gas is most likely represented by the arrow labeled X?

- F** carbon dioxide
- G** hydrogen
- H** nitrogen
- J** oxygen

**21** Which structure of a flower is correctly matched with its function?

- A** The petal protects young buds.
- B** The stamen produces female gametes.
- C** The pistil guides pollen to the ovary.
- D** The anther holds the ovule.

*Go On* ►

- 22** Students in a science class were observing properties of an unknown mineral. The mineral was soft enough to be scratched by a fingernail. The students compared the hardness of the mineral to the chart below.

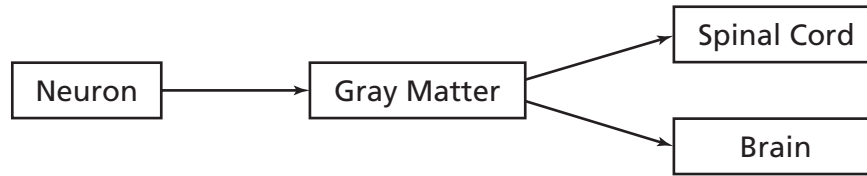
**Mineral Hardness Chart**

1	Talc
2	Gypsum
2.5	Fingernail
3	Calcite
3.5	Penny
4	Fluorite
5	Apatite
5.5	Steel File
6	Feldspar

Which mineral could the students have been observing?

- F** Gypsum
  - G** Calcite
  - H** Apatite
  - J** Feldspar
- 23** Which is the best example of Newton's first law of motion?
- A** A basketball thrown in the air falls to the ground.
  - B** A soccer ball remains motionless until it is kicked by a player.
  - C** A baseball player swings at an approaching ball.
  - D** An ice skater pushes off from a wall and moves backwards.

**24** The chart shows structures that work together in an organism.



What do the structures as a whole represent?

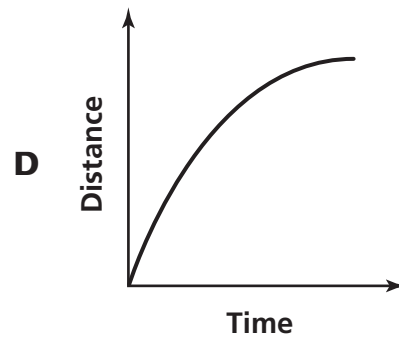
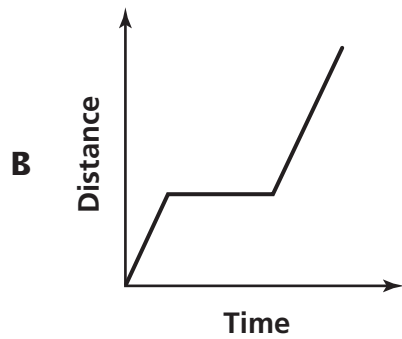
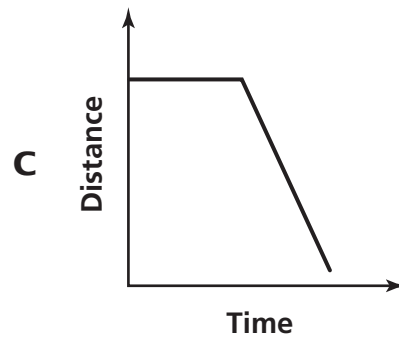
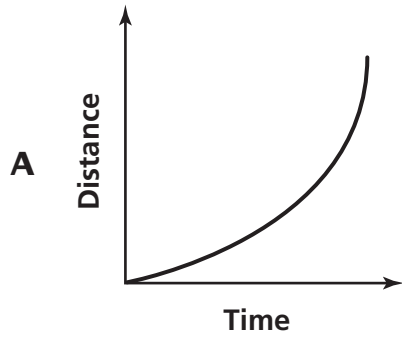
- F** an organ system
- G** an organ
- H** a tissue
- J** a cell

- 25** A student took a field trip on a bus. The student recorded the distance traveled by the bus every 10 minutes for one hour. The student's data are shown below.

Field Trip Time vs. Distance

Time (minutes)	Distance from School (kilometers)
0	0
10	8
20	28
30	50
40	74
50	80
60	85

Which line best represents the data?





**26** Use the equation to solve the problem.

$$\text{Distance } (d) = \text{Rate } (r) \times \text{Time } (t)$$

A cheetah can run at a rate of 30 meters per second. How far could a cheetah travel in 60 seconds?

- F** 90 meters
- G** 120 meters
- H** 150 meters
- J** 1800 meters

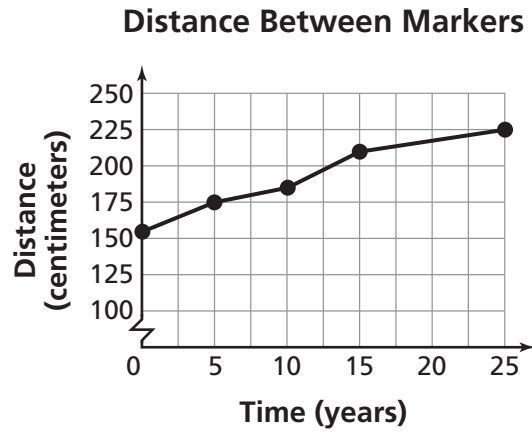
**27** Medical researchers are developing a wireless blood pressure monitoring system for use in hospitals. This system allows nurses to measure a patient's blood pressure without awakening the patient. Which is the intended benefit of this technology?

- A** Patients will not be disturbed.
- B** Patients will have to take fewer medications.
- C** Patients can experience pain relief.
- D** Patients can avoid having surgery.

**28** Which of these best describes the composition of the inner core of Earth?

- F** liquid iron and nickel
- G** carbon dioxide and ice
- H** quartz and oxygen
- J** solid iron and nickel

**29** Scientists measured the movement of tectonic plates relative to one another over time by placing markers on either side of a fault. The graph below displays the results.



Which data set was most likely used to create the graph?

**Distance Between Markers**

**A**

Time (years)	Distance (centimeters)
1	155
2	175
3	185
4	210
5	225

**Distance Between Markers**

**C**

Time (years)	Distance (centimeters)
1	225
2	210
3	185
4	175
5	155

**Distance Between Markers**

**B**

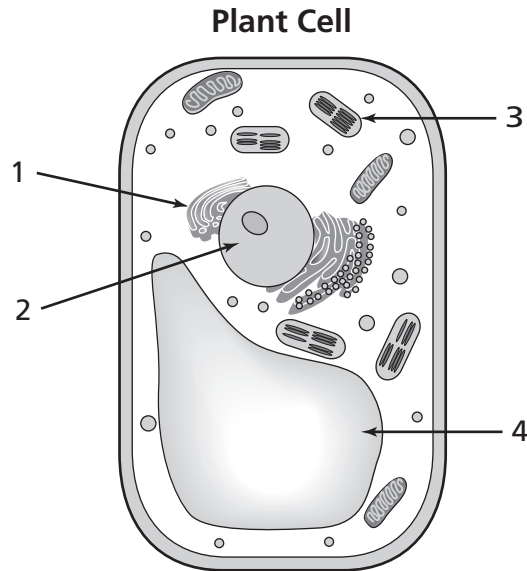
Time (years)	Distance (centimeters)
155	0
175	5
185	10
210	15
225	25

**Distance Between Markers**

**D**

Time (years)	Distance (centimeters)
0	155
5	175
10	185
15	210
25	225

**30** The diagram shows some organelles in a plant cell.



Which organelle captures and absorbs light energy?

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

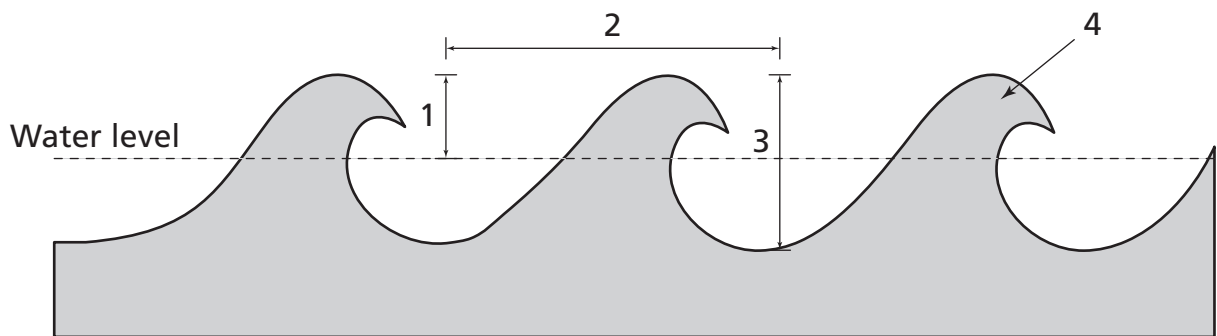
- 31** In guinea pigs, black fur (B) is dominant to white fur (b). A Punnett square of a cross between a black-furred and a white-furred guinea pig is shown below.

	<b>B</b>	<b>b</b>
<b>b</b>		
<b>b</b>		

What can be determined from this Punnett square?

- A** There is a 100% chance that these guinea pigs will have live offspring.
- B** There is a 100% chance that these guinea pigs will have four offspring.
- C** There is a 50% chance that the offspring will have gray fur.
- D** There is a 50% chance that the offspring will have black fur.

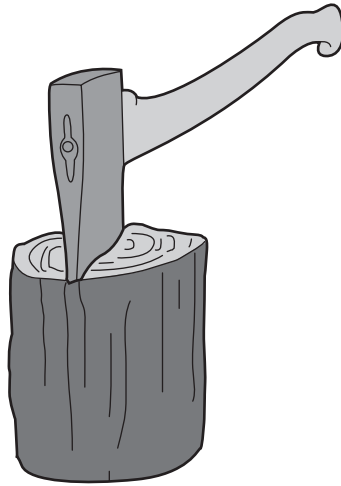
- 32** Scientists measured the amplitude of ocean waves during a storm.



Which part of the diagram shows the amplitude of a wave?

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

**33** A logger splits a piece of wood.



What simple machine splits the wood?

- A** wedge
- B** wheel and axle
- C** pulley
- D** lever

**34** Which processes can change a metamorphic rock into an igneous rock?

- F** weathering and erosion
- G** melting and cooling
- H** deposition and cementation
- J** heat and pressure

**35** Which is a major function of the human reproductive system?

- A** protecting internal organs
- B** producing gametes
- C** breaking down food
- D** eliminating wastes

## Part 2

**36** The Andes Mountains of South America were gradually formed when the Nazca and South American tectonic plates collided. Which of these caused this collision?

- F** convection currents in Earth's mantle
- G** volcanic activity in Earth's crust
- H** movement of material within Earth's core
- J** changes in Earth's magnetic field

**37** During respiration, what substances combine to release energy for the cell?

- A** glucose and oxygen
- B** oxygen and carbon dioxide
- C** glucose and water
- D** water and oxygen

**38** Which statement best explains the difference between longitudinal and transverse waves?

- F** Longitudinal waves have troughs, while transverse waves have crests.
- G** Longitudinal waves produce energy, while transverse waves consume energy.
- H** Particles in longitudinal waves travel towards a force, while particles in transverse waves travel away from a force.
- J** Particles in longitudinal waves travel in the direction of the wave, while particles in transverse waves travel perpendicular to the wave.

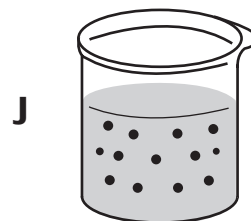
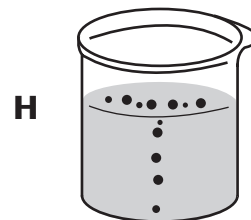
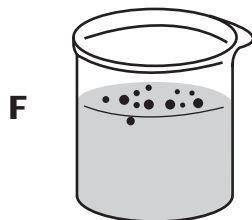
**39** Which is the best description of where earthquakes are likely to occur?

- A in the middle of a continent
- B along a coastline
- C along two plate boundaries
- D in the middle of an ocean

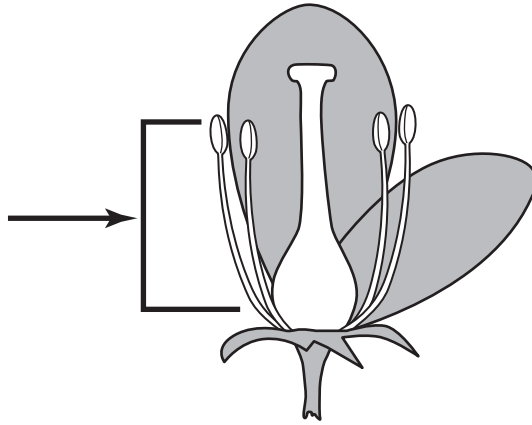
**40** A student adds drops of dye to a beaker of room-temperature water, as shown in the diagram below.



Which diagram best shows the end result of diffusion?



**41** A flower is shown in the diagram.



What is the main function of the flower part indicated by the arrow?

- A** attracting pollinators
- B** producing pollen
- C** protecting the ovule
- D** supporting the pistil

**42** Which layer of Earth is composed mostly of liquid water and different types of rock crystals such as quartz?

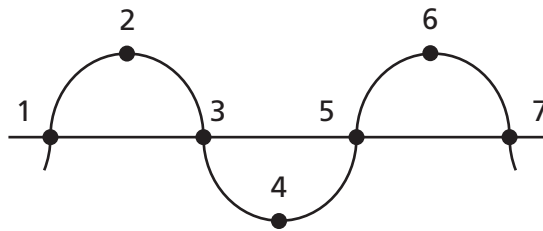
- F** crust
- G** mantle
- H** inner core
- J** outer core



**43** Which of these is the best reason to use a renewable energy source instead of relying on fossil fuels?

- A** Fossil fuels can be solids, liquids, or gases.
- B** Fossil fuels power many different devices.
- C** Fossil fuels form naturally on Earth.
- D** Fossil fuels create many kinds of pollution.

**44** Some points are marked on a wave, as shown in the diagram below.



The wavelength is the distance between which points?

- F** 1 and 3
- G** 2 and 6
- H** 4 and 5
- J** 1 and 7

**45** A gardener uses a lever to lift a rock from the ground. The gardener applies a force of 50 newtons and moves the rock 1.5 meters.

$$w = F \times d$$

How much work is being done by the gardener?

- A** 33.0 newton-meters
- B** 48.5 newton-meters
- C** 51.5 newton-meters
- D** 75.0 newton-meters

Go On ►

**46** A scientist investigates the effect of carbon dioxide on plant height. The scientist grows plants in several closed containers. All the plants receive the same amounts of water and light, but the air in each container has a different amount of carbon dioxide. What is the independent variable in this experiment?

- F** the amount of carbon dioxide in each container
- G** the number of plants in each container
- H** the amount of water provided to the plants
- J** the height of each plant after a period of time

**47** Which cell parts are found in pairs and move towards the opposite ends of the nucleus during cell division?

- A** centrioles
- B** vacuoles
- C** ribosomes
- D** Golgi bodies

**48** In some breeds of dogs, wire hair texture is dominant to smooth hair texture. Two parents with wire hair produce an offspring with smooth hair. To express smooth hair, the offspring would need to have inherited

- F** the same chromosomes from each parent.
- G** an allele for smooth hair from each parent.
- H** two of the same type of chromosomes from one of its parents.
- J** an allele for wire hair from one parent and an allele for smooth hair from the other.

**49** Some processes in the rock cycle are listed below.

**Rock Cycle Process**

Process	Description
X	Rocks change by heat and pressure.
Y	Rocks melt and cool.
Z	Rocks weather and erode.

Which type of rock is most likely to form by Process Z?

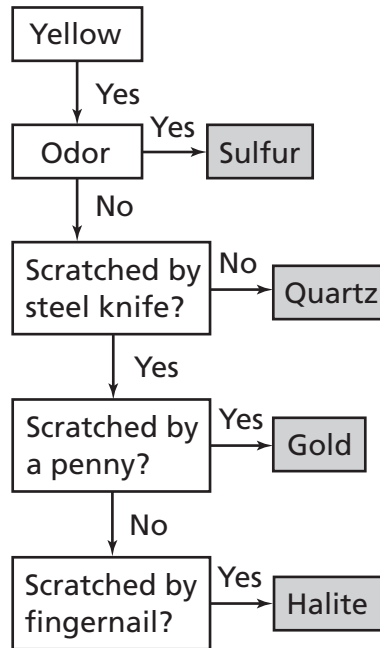
- A** lava
- B** metamorphic
- C** igneous
- D** sedimentary

**50** An object is resting motionless on a surface. According to Newton's first law, the object will only start to move if

- F** the net forces on the object equal zero.
- G** an unbalanced force is applied to the object.
- H** the upward force of the object is equal to its acceleration.
- J** two forces that are equal and opposite are applied to the object.

- 51** A student wanted to identify a mineral based on the flow chart below. The mineral was yellow and odorless. The student scratched the mineral with a steel knife and a penny, but not with a fingernail.

**Mineral Flow Chart**



Based on this flow chart, which mineral could the student have been observing?

- A** Sulfur
- B** Quartz
- C** Gold
- D** Halite

- 52** A bus traveled at an average speed of 100 kilometers per hour for 5 hours.

$$\text{Distance } (d) = \text{Speed } (s) \times \text{Time } (t)$$

**How far did the bus travel?**

- F** 20 kilometers
- G** 95 kilometers
- H** 105 kilometers
- J** 500 kilometers

**53** A meteorologist recorded high temperatures for five days at three locations on land. The data are shown in the table below.

**High Temperatures**

Date	Temperature at the Beach (°C)	Temperature 25 km West of Beach (°C)	Temperature 50 km West of Beach (°C)
June 1	29.4	18.8	36.1
June 2	27.2	26.6	27.2
June 3	27.7	27.7	28.8
June 4	27.7	28.8	26.6
June 5	26.6	22.7	25.0

Which is the best conclusion based on these data?

- A** Areas at the beach have the coolest temperatures.
- B** Areas farther from the beach always have the warmest temperatures.
- C** Areas at the beach have the most stable temperatures.
- D** Areas farther from the beach always have the same weather as areas at the beach.

- 54** In watermelons, a solid green color (G) is dominant to green stripes (g). Two solid green watermelons are crossed, as shown in the Punnett square below.

	<b>G</b>	<b>g</b>
<b>G</b>		
<b>g</b>		

Which type of watermelon has the greatest chance of being produced by this cross?

- F** homozygous solid
- G** heterozygous solid
- H** homozygous striped
- J** heterozygous striped

- 55** Which systems work most closely together to carry oxygen to cells and to remove carbon dioxide waste?

- A** digestive and excretory
- B** skeletal and muscular
- C** circulatory and respiratory
- D** nervous and reproductive

- 56** Which chemical compounds are the reactants of photosynthesis and products of cellular respiration?

- F** water ( $H_2O$ ) and glucose ( $C_6H_{12}O_6$ )
- G** oxygen ( $O_2$ ) and carbon dioxide ( $CO_2$ )
- H** glucose ( $C_6H_{12}O_6$ ) and oxygen ( $O_2$ )
- J** carbon dioxide ( $CO_2$ ) and water ( $H_2O$ )

- 57** Some students investigated plant growth by growing two sets of the same type of plant. One set was grown indoors and the other set was grown outdoors. They recorded data in the table below.

**Indoor vs. Outdoor Plant Growth**

	Indoor Plants Height (cm)			Outdoor Plants Height (cm)		
	Plant 1	Plant 2	Plant 3	Plant 4	Plant 5	Plant 6
Week 1	18.0	14.3	16.6	15.0	16.2	14.7
Week 2	22.1	16.5	18.2	16.5	17.3	15.9
Week 3	24.4	19.0	20.5	17.2	19.1	17.0
Week 4	26.3	22.1	23.6	19.1	20.6	19.4

The students concluded that the plants grown indoors grew faster because they received better quality light than the plants grown outdoors. Which is the most likely reason this conclusion may be flawed?

- A** The students measured the plants at different times.
- B** The students should have grown different types of plants.
- C** The growth of the plants in each set was affected by more than one factor.
- D** The outdoor plants grew faster than the indoor plants.

- 58** Which example could only be classified as an outcome of sexual reproduction?

- F** when all of the offspring are genetically identical
- G** when two of the offspring are produced from one parent
- H** when one parent combines its genetic information with another parent to produce offspring
- J** when the cells in the offspring have the same number of chromosomes as cells in the parent



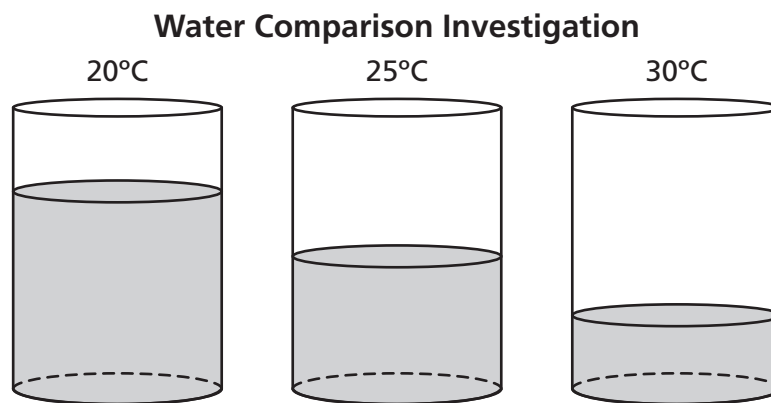
**59** Some scientists want to design a system of instruments that will evaluate ocean currents, temperatures, and winds in order to predict weather patterns. What should they do before they produce the first complete working version of the system?

- A build a prototype of the system
- B evaluate the results of the system
- C improve the design of the system
- D conduct tests on the system

**60** Which statement accurately describes the process that forms a type of rock?

- F Metamorphic rock forms when igneous rocks are compacted at low temperatures.
- G Sedimentary rock forms when metamorphic rock melts.
- H Sedimentary rock forms when small pieces of rock are compacted and cemented.
- J Metamorphic rock forms when magma cools and crystallizes.

**61** A student filled three identical cups with equal amounts of water. The student placed each cup in a room with a different air temperature. After a few days, the student compared the amounts of water remaining in each cup.

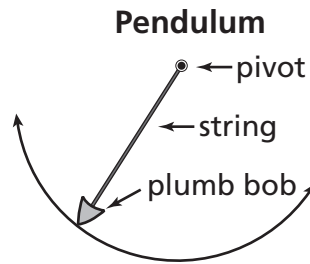


What cause-and-effect relationship does this investigation support?

- A As evaporation decreases, air temperature decreases.
- B As evaporation increases, air temperature increases.
- C At higher air temperatures, more water evaporates.
- D At higher air temperatures, less water evaporates.

*Go On* ►

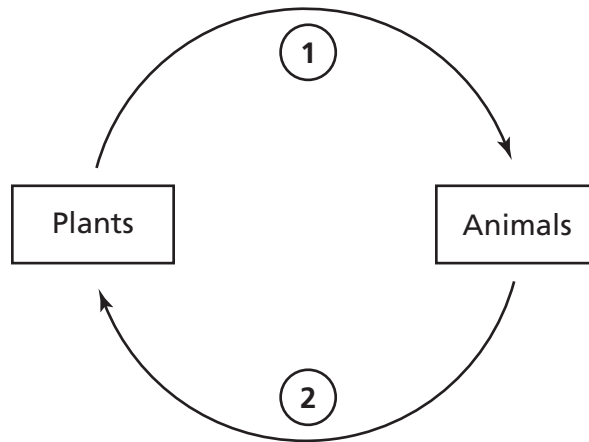
- 62** Students in a science class plan to investigate a factor that affects the rate at which a pendulum swings.



In which way should the students manipulate the variables to get valid results in this investigation?

- F** use equal string lengths and different plumb bob masses
- G** use different string lengths and different plumb bob masses
- H** use equal string lengths and the same plumb bob shapes
- J** use different string lengths and different plumb bob shapes

- 63** Students need to label a diagram that shows the exchange of gases between plants and animals as the plants and animals obtain energy.



Which best completes the diagram?

- A** 1- nitrogen, 2 - oxygen
- B** 1- oxygen, 2 - nitrogen
- C** 1- carbon dioxide, 2 - oxygen
- D** 1- oxygen, 2 - carbon dioxide

**64** Scientists theorize that millions of years ago South America and Africa formed a single land mass.



Which statement best explains why South America and Africa are now thousands of miles apart?

- F** Lithospheric plates moved the continents apart at a rate of centimeters per year.
- G** Ocean currents carried some land masses east and some land masses west.
- H** Tectonic plates slid together forming mountains that forced the continents apart.
- J** Strong winds continually pushed the land masses away from each other.

**65** As the wheels of a train push down on a track, the track pushes back against the wheels. Which of Newton's laws is used to explain these forces?

- A** An object at rest tends to stay at rest unless acted upon by an unbalanced force.
- B** The net force of an object is equal to its mass times its acceleration.
- C** For every action, there is an equal and opposite reaction.
- D** Any two objects exert a gravitational force of attraction on each other.

- 66** Students placed a raw egg without its shell into a highly concentrated solution of sugar. If the amount of sugar in the solution is greater than in the egg, which of these is most likely to occur?
- F** Water will flow into the egg and cause the egg to expand.
  - G** Water will flow out of the egg and cause the egg to shrink.
  - H** The sugar will dissolve the egg.
  - J** The sugar will break the egg into pieces.

- 67** Where are the genes for the physical traits of an organism located?
- A** on a strand of RNA
  - B** on a chromosome
  - C** inside a hormone
  - D** inside a carbohydrate

- 68** Which organ system is most responsible for helping a swimmer push her body through water?
- F** circulatory
  - G** excretory
  - H** muscular
  - J** integumentary

- 69** What type of simple machine is a ramp?
- A** wedge
  - B** lever
  - C** screw
  - D** inclined plane

**DO NOT  
MARK  
ON THIS  
PAGE**

# Social Studies



## Part 1

- 1** Which activity contributes most to water pollution?
- A** using diesel fuel in trucks
  - B** using fertilizers in agriculture
  - C** using explosives in mining
  - D** using wood in home construction
- 2** A government in which all citizens can participate is called
- F** a monarchy.
  - G** an oligarchy.
  - H** a democracy.
  - J** an autocracy.

*Go On* ►

**3** Compared to someone living in the city, a person growing up on a small, rural farm is more likely to have

- A** plowed fields with a tractor.
- B** had an apartment in a skyscraper.
- C** taken a subway to school.
- D** bought clothes in a shopping mall.

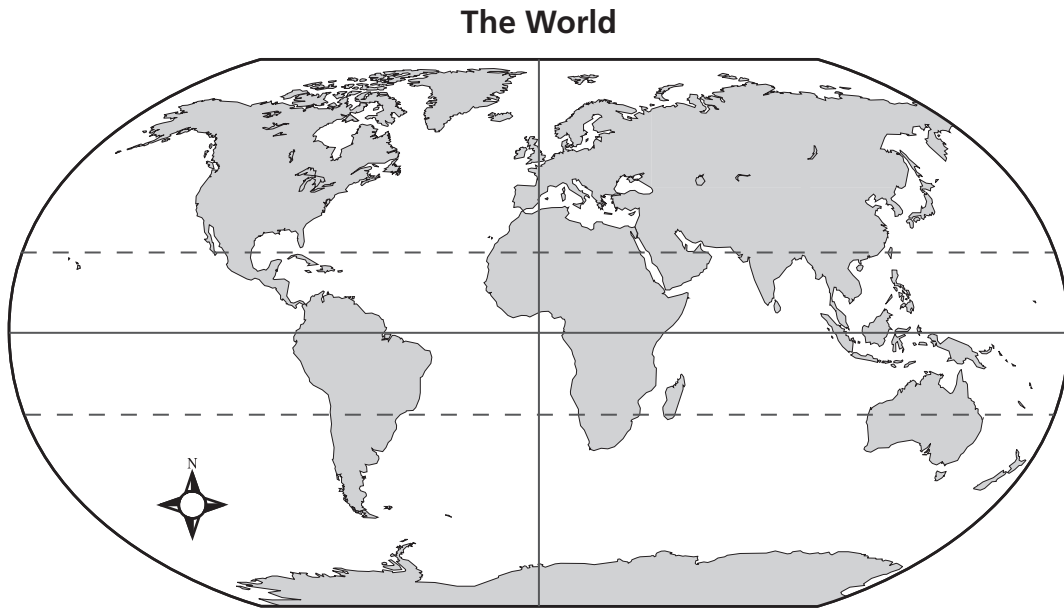
**4** Which rivers begin in the Appalachian Mountains and empty into the Ohio River?

- F** Missouri and Mississippi rivers
- G** Tennessee and Cumberland rivers
- H** Holston and Elk rivers
- J** Wolf and Sequatchie rivers



**Directions**

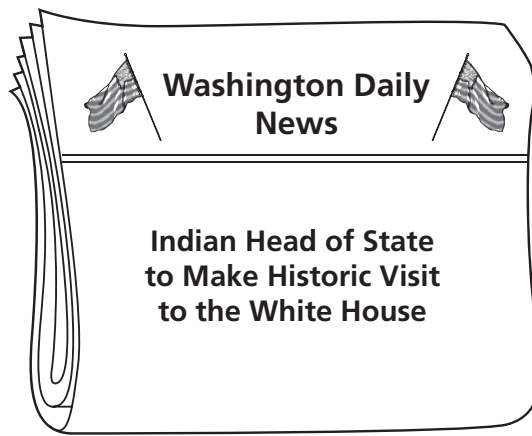
Use the map below and your own knowledge to do Number 5.



**5** The northernmost line of latitude shown on the map is known as the

- A** equator.
- B** prime meridian.
- C** Tropic of Cancer.
- D** Tropic of Capricorn.

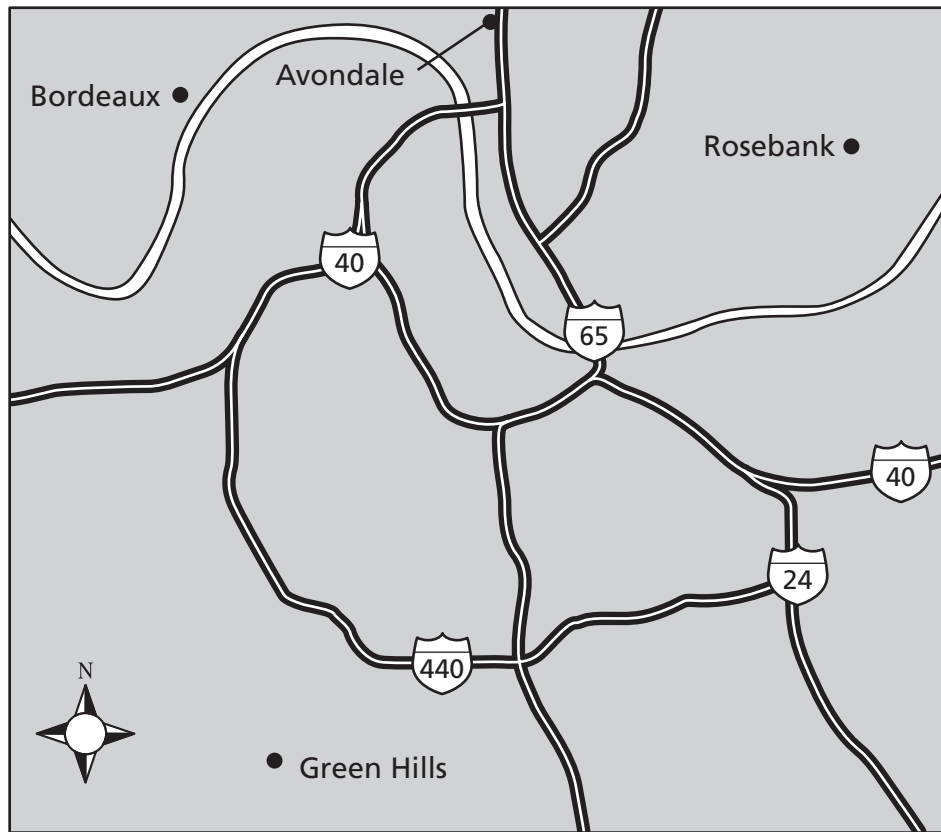
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**6** Based on the headline above, which official from India will meet the president of the United States?

- F** crown prince
- G** chancellor
- H** dictator
- J** prime minister

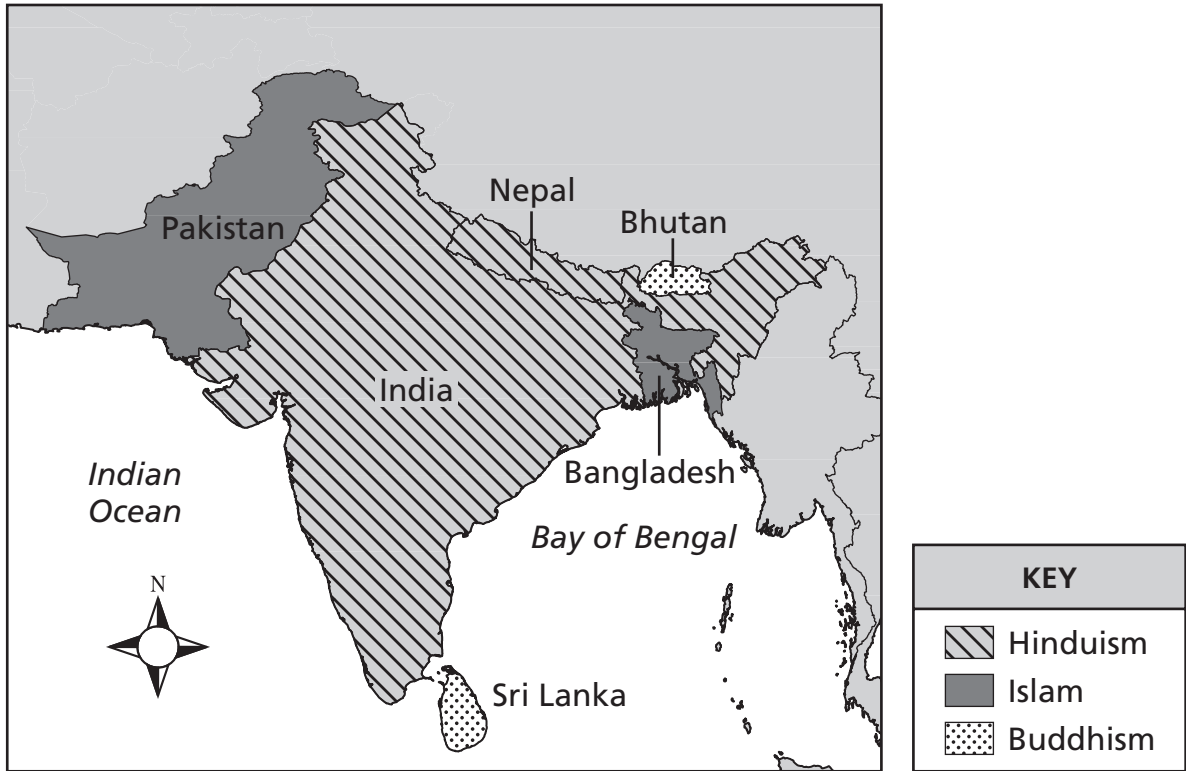
## Nashville Metropolitan Area



**7** A person wishing to move to a community close to a major highway would most likely choose to live in which community?

- A** Rosebank
- B** Green Hills
- C** Bordeaux
- D** Avondale

## The Major Religion of Six Countries



**8** What religion is most widely practiced in India?

- F** Buddhism
- G** Christianity
- H** Hinduism
- J** Islam

**9** Which term describes the average number of people in a square mile?

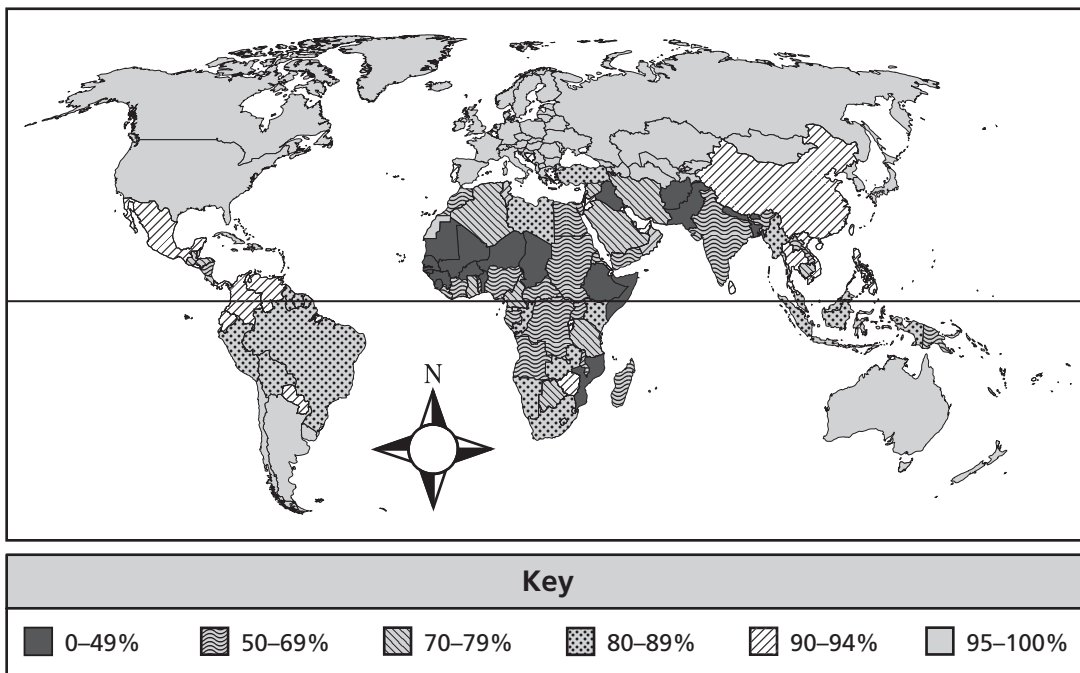
- A** population density
- B** family size
- C** growth rate
- D** mortality rate

**10** Which of these government events takes place when there has been a population shift within Tennessee during a 10-year period?

- F** The state sales tax is adjusted.
- G** The state constitution is revised by the legislature.
- H** The state congressional district boundaries are redrawn.
- J** The number of state senators either increases or decreases.

*Go On* ►

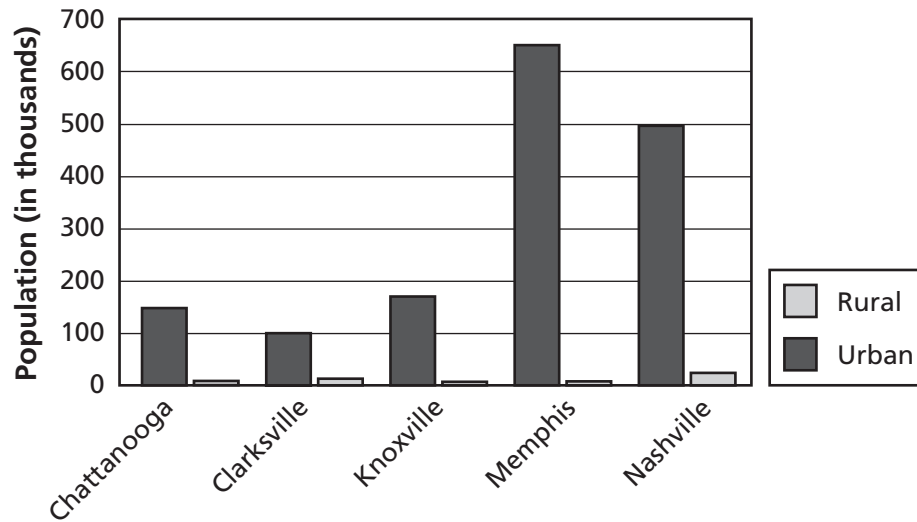
## World Literacy Rates



**11** Which continent has the highest literacy rate?

- A** South America
- B** Europe
- C** Asia
- D** Africa

Urban and Rural Populations  
of Five Tennessee Cities, 2000



**12** Which city on the graph above has the most people living in a rural environment?

- F** Memphis
- G** Clarksville
- H** Chattanooga
- J** Nashville

**Directions**

Use the quotation below and your own knowledge to do Number 13.

It is our job to ensure that globalization provides benefits, not just for some, but for all; that opportunities exist, not merely for the privileged, but for every human being everywhere.

—Kofi Annan, speaking at a summit meeting of the United Nations, 2000

**13** Which of these global issues is most directly addressed by the quotation above?

- A** environmental pollution
  - B** national defense
  - C** agricultural regulations
  - D** economic development
- 

**14** Inflation can be defined as

- F** a decrease in money supply.
- G** a shortage of consumer goods.
- H** a prolonged rise in prices.
- J** a shortage of government aid.



## Directions

Use the map below and your own knowledge to do Number 15.



**15** If a person in Nairobi traveled by airplane to Madrid, in which direction would she travel?

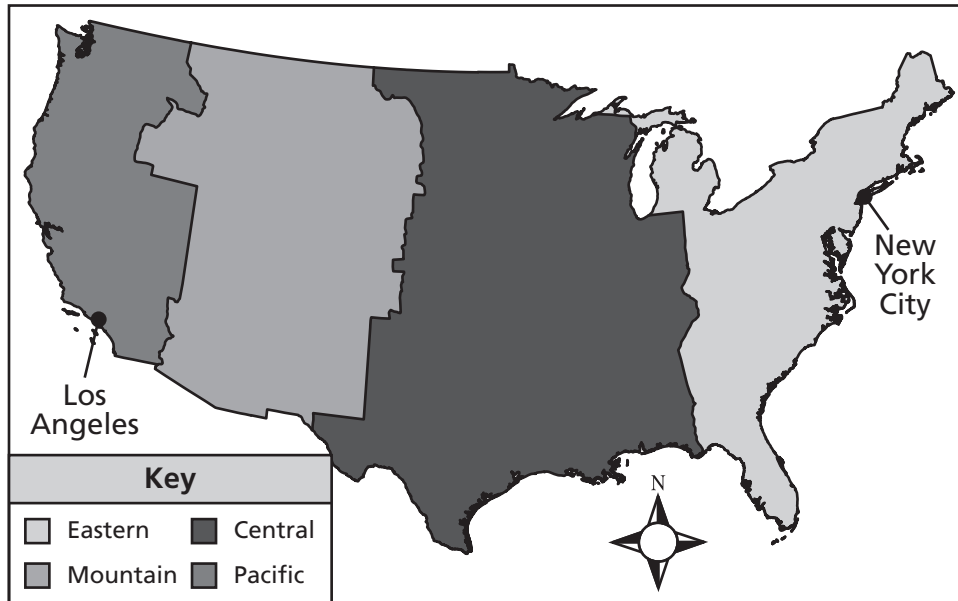
- A** northeast
- B** northwest
- C** southeast
- D** southwest

*Go On* ►

**16** Which environmental consequence is the most direct result of the process of clear-cutting?

- F** air pollution
- G** global warming
- H** deforestation
- J** desertification

**U.S. Time Zones**



**17** According to the map above, if it is 7:00 A.M. in New York City, what time is it in Los Angeles?

- A** 3:00 A.M.
- B** 4:00 A.M.
- C** 10:00 A.M.
- D** 11:00 A.M.

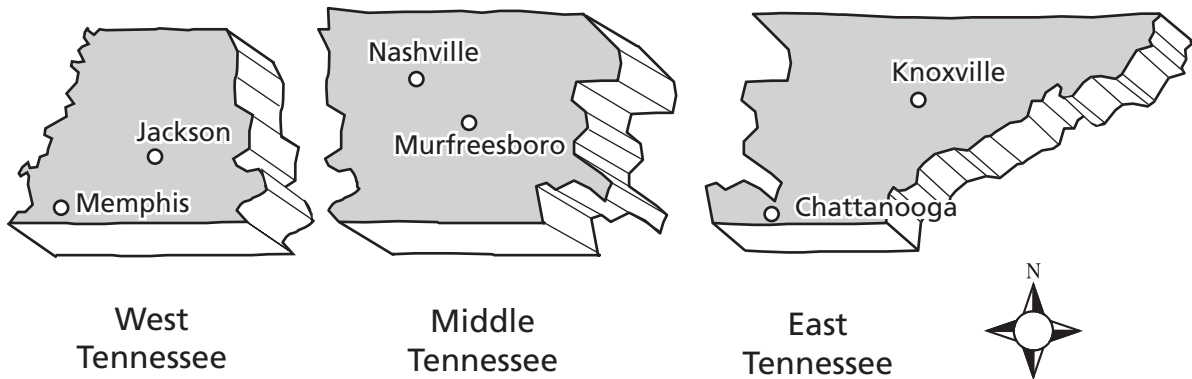
### Description of a Country

- There is only one branch of government.
- The leader of the government decides what is legal and what is illegal.
- The government closely monitors the citizens.

**18** Which of these situations would most likely occur in the country described above?

- F** Citizens become reluctant to protest against the government.
- G** Citizens participate in fair and open elections.
- H** The press publishes articles that openly criticize the government.
- J** The government allows citizens to exit and enter the country freely.

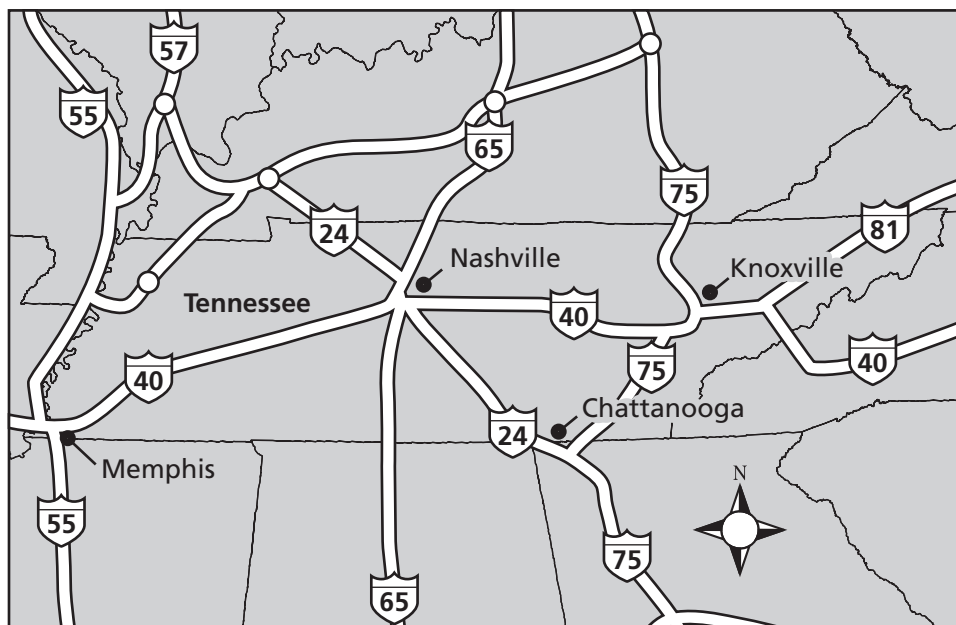
### The Three Grand Divisions of Tennessee



**19** Which of these industries is largest in Middle Tennessee?

- A** raising livestock
- B** extracting oil
- C** harvesting nuts
- D** mining coal

### Interstate Highways in Tennessee



**20** Which interstate highway provides the most direct route between Nashville and Memphis?

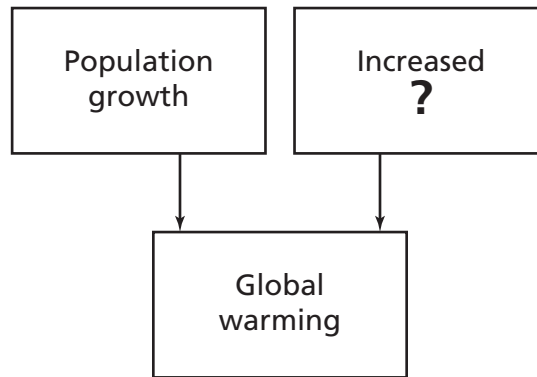
- F** I-55
- G** I-40
- H** I-24
- J** I-65

**21** What term defines a government in which one person has complete and unlimited power?

- A** a democracy
- B** a republic
- C** an oligarchy
- D** a dictatorship

**22** Which statement explains why oil is a nonrenewable resource?

- F** Oil has been found in many different environments.
- G** Oil is consumed faster than it is replenished by nature.
- H** Oil is a source of pollution that is unhealthy for people.
- J** Oil has been used as a fossil fuel for many decades.



**23** Which phrase best completes the diagram above?

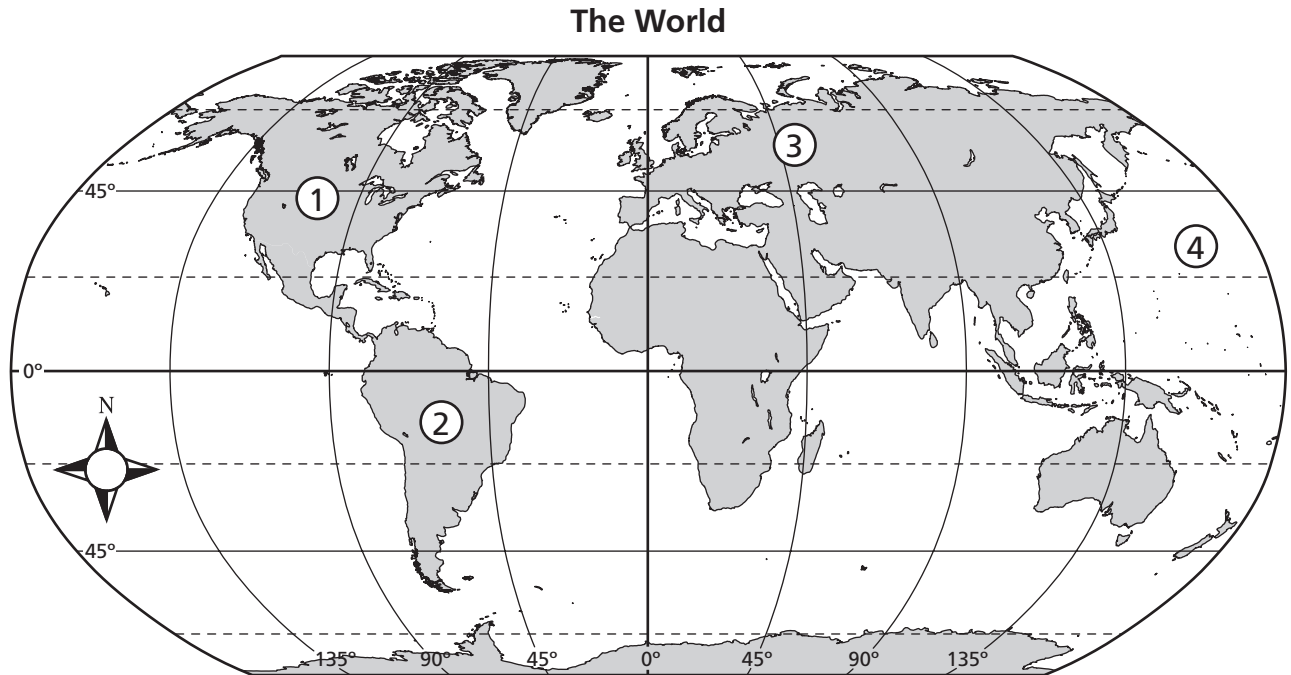
- A** educational opportunity
- B** fuel consumption
- C** electronic technology
- D** cultural diversity

**24** Which statement below defines urbanization?

- F** the adoption of new cultural values
- G** the sharing of economic wealth
- H** the shifting of the planet's crust
- J** the movement of people to cities

**Directions**

Use the map below and your own knowledge to do Numbers 25 through 27.



**25** Which geographic feature is nearest Number 2?

- A** the Amazon River
- B** the Volga River
- C** the Rocky Mountains
- D** the Himalaya Mountains

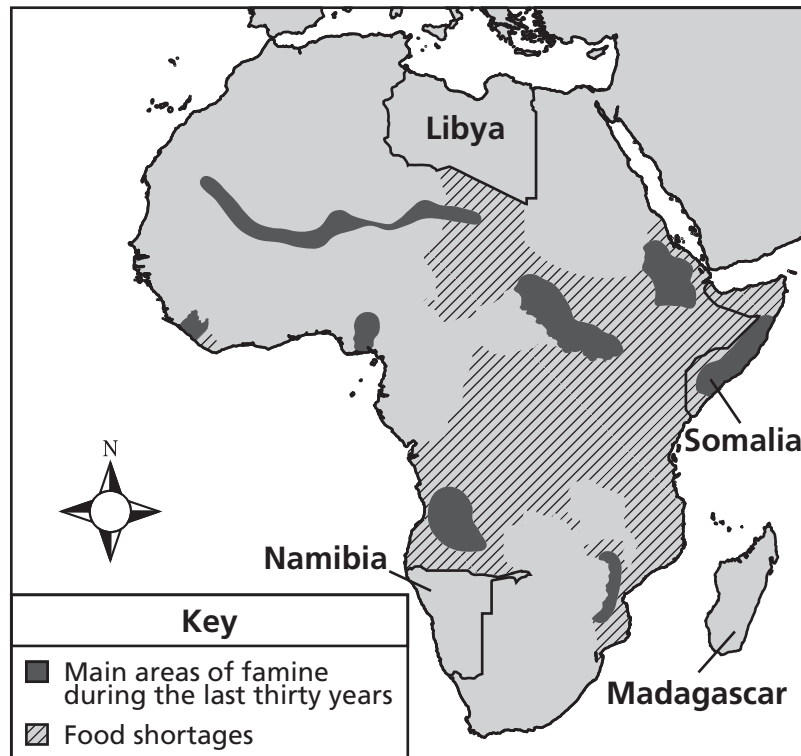
**26** Which ocean is indicated by Number 4?

- F** Arctic
- G** Atlantic
- H** Indian
- J** Pacific

**27** Which of these statements describes the landmass labeled Number 1?

- A** The equator runs through it.
- B** The prime meridian runs through it.
- C** It is located in the Northern Hemisphere.
- D** It is located in the Eastern Hemisphere.

**African Food Shortages, 1990s**



Source: *Human Development Report*, UNDP, 1996

**28** Based on the map above, which country most likely experienced human migration in the 1990s resulting from food shortages?

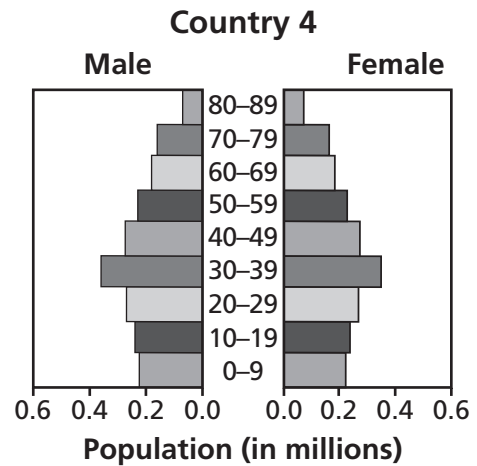
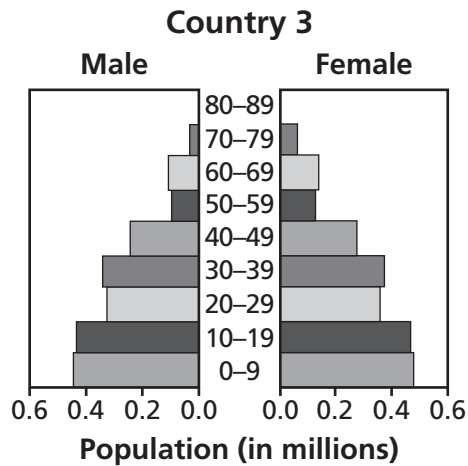
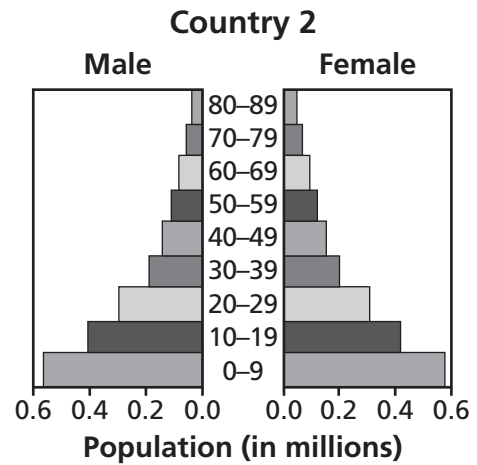
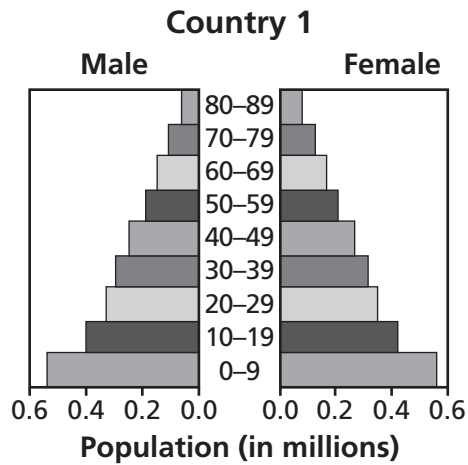
- F** Libya
- G** Namibia
- H** Somalia
- J** Madagascar

Go On ►

**29** Which action supports the right to worship freely?

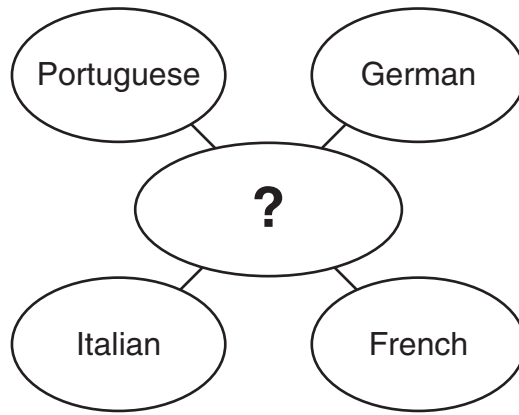
- A** using tax money to support religious schools
- B** respecting the religious beliefs of others
- C** requiring attendance at religious services
- D** requiring religious education in schools





**30** Based on the graphs above, which country has the greatest number of people over age 60?

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



**31** Which of these best completes the diagram above?

- A** Languages
- B** Continents
- C** Climates
- D** Religions

This region of Tennessee is part of a large fertile area of land that stretches along the Mississippi River from southern Illinois to the Gulf of Mexico.

**32** Which region is described by the passage above?

- F** Central Basin
- G** Valley and Ridge
- H** Gulf Coastal Plain
- J** Cumberland Plateau

**33** Population growth in American cities during the 20th century was most influenced by

- A** the mild climate.
- B** job opportunities.
- C** freedom of assembly.
- D** the abundance of unsettled land.

**34** Which religion is based on the belief that its founder was the last prophet sent by Allah?

- F** Islam
- G** Judaism
- H** Buddhism
- J** Christianity

**35** An export is a good that has been

- A** sold to another country.
- B** repossessed by the bank.
- C** taxed by a local government.
- D** manufactured from raw materials.

## Part 2

**36** Which of these is most likely the consequence of deforestation?

- F** water shortages
- G** loss of mining jobs
- H** destruction of wildlife habitats
- J** decrease in available farmland

**37** Which ocean separates South America from Africa?

- A** Indian Ocean
- B** Arctic Ocean
- C** Pacific Ocean
- D** Atlantic Ocean

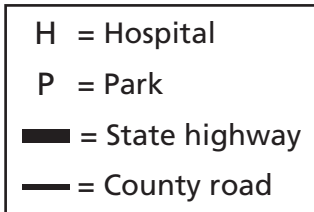
A city increases in population by 20 percent during a 10-year period.

**38** The information above is an example of which concept?

- F** growth rate
- G** mortality rate
- H** population density
- J** population distribution

**39** Which of these resources is produced mainly in East Tennessee?

- A** copper
- B** corn
- C** beef
- D** wheat



**40** Which part of a map is represented by the illustration above?

- F** symbol
- G** scale
- H** key
- J** index

## Turkey



**41** What is the approximate distance from Ankara to Istanbul?

- A** 150 miles
- B** 200 miles
- C** 250 miles
- D** 300 miles

## South American Time Zones



**42** According to the map above, what is the time difference between Lima and Rio de Janeiro?

- F** 1 hour
- G** 2 hours
- H** 3 hours
- J** 4 hours

*Go On* ►

North Korea, one of the world's most centrally directed and least open economies, faces chronic economic problems. . . . [T]he population continues to suffer from prolonged malnutrition and poor living conditions. Large-scale military spending draws off resources needed for investment and civilian consumption. Firm political control remains the Communist government's overriding concern.

— CIA World Factbook

**43** According to the excerpt above, an individual in North Korea

- A** has many economic opportunities.
- B** has strictly limited political rights.
- C** is well protected by the military.
- D** is strongly encouraged to start a business.

**44** Rapid population growth will most likely result in which consequence?

- F** reduced demand for fossil fuels
- G** reduced emission of carbon dioxide
- H** expansion of the world's oil reserves
- J** increased demand for natural resources



## Scandinavia

Denmark  
Finland  
Iceland  
Norway  
Sweden

- 45** What common characteristics do countries in the Scandinavian region have?
- A** near the Arctic Circle, cold weather
  - B** by the Mediterranean Sea, dry weather
  - C** agricultural economy, Buddhist religion
  - D** part of the United Kingdom, English-speaking
- 46** Which of these is most associated with an economic depression?
- F** increased consumer spending
  - G** higher prices for manufactured goods
  - H** increased business failures
  - J** higher average salaries for factory workers
- 47** Which world religion believes in the concepts of karma and the Four Noble Truths?
- A** Buddhism
  - B** Judaism
  - C** Islam
  - D** Christianity

**48** A government ruled by a few people is

- F** an oligarchy.
- G** a republic.
- H** a monarchy.
- J** an autocracy.

**49** A major river of Middle Tennessee is the

- A** Mississippi River.
- B** Ohio River.
- C** Cumberland River.
- D** Holston River.

## Africa



**50** Which type of map is shown above?

- F** climatic
- G** topographic
- H** physical
- J** political

*Go On* ►

The most alarming of all man's assaults . . . is the contamination of our earth, rivers and seas with dangerous and even lethal materials. The pollution is for the most part irrecoverable . . . chemicals are the sinister and little recognized partners . . . in changing the nature of the world.

— Rachel Carson, *Silent Spring*, 1962

**51** The passage above describes the effects of

- A** pesticide use.
- B** population growth.
- C** suburban sprawl.
- D** global warming.

**Directions**

Use the chart below and your own knowledge to do Number 52.

**United States Exports and Imports, 1996–2002**  
(in millions of dollars)

Year	Exports	Imports
1996	850,877	953,746
1997	933,873	1,040,920
1998	932,558	1,095,711
1999	957,146	1,219,383
2000	1,070,054	1,445,438
2001	1,007,580	1,365,399
2002	974,107	1,392,145

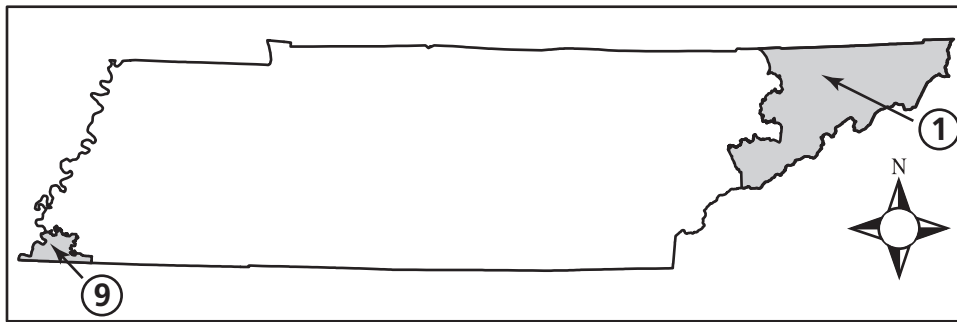
Source: United States Census Bureau,  
Foreign Trade Division

**52** The information shown in the chart illustrates the

- F** long-term effects of high unemployment rates.
- G** government regulation of United States businesses.
- H** costs to businesses of producing goods and services.
- J** economic interdependence between the United States and other nations.

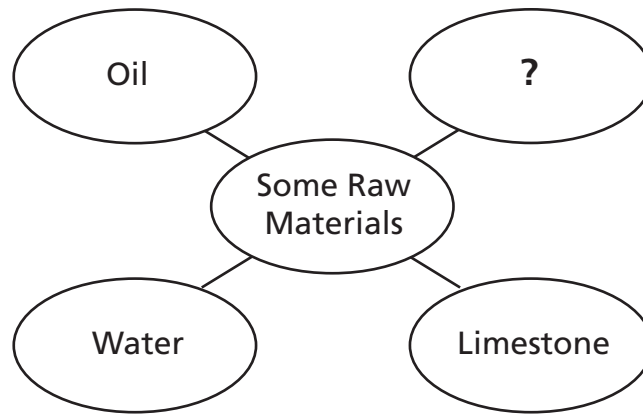
*Go On* ►

### Some Tennessee Congressional Districts



**53** Which of these statements explains why District 1 is larger in land area than District 9?

- A** District 1 has more industries than District 9.
- B** District 1 has a cleaner environment than District 9.
- C** District 9 has a denser population than District 1.
- D** District 9 has more farmers than District 1.

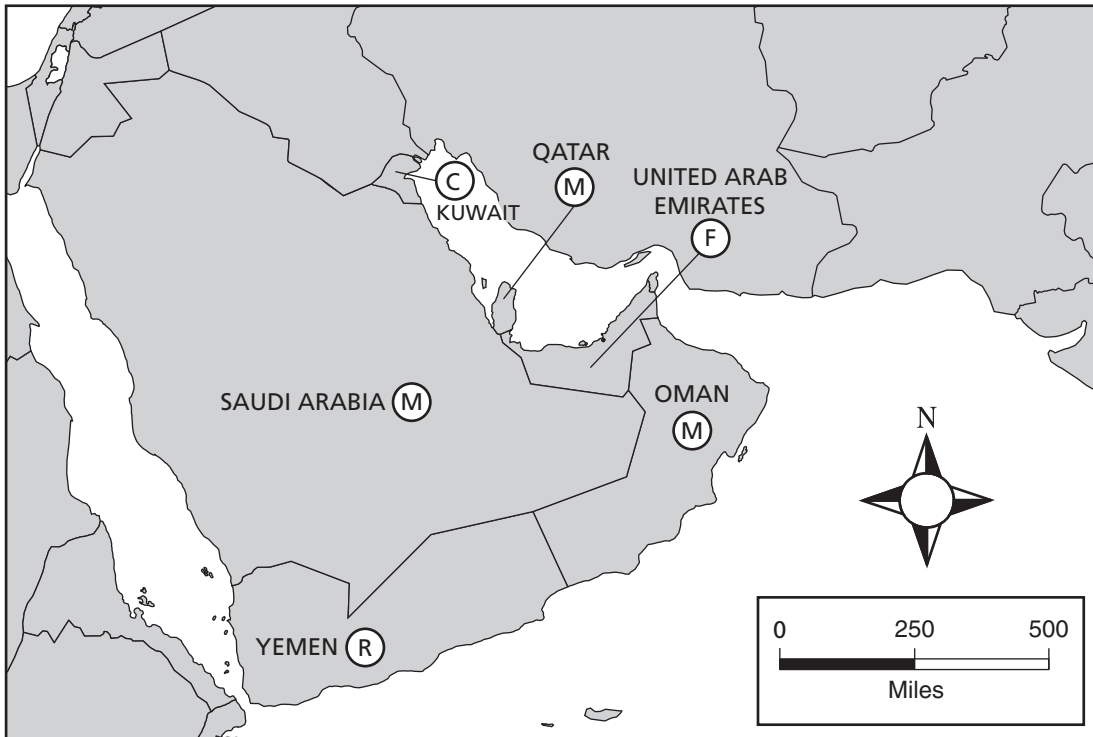


**54** Which of these best completes the diagram?

- F** Flour
- G** Clothes
- H** Steel
- J** Timber

**Directions**

Use the map below and your own knowledge to do Numbers 55 and 56.

**The Arabian Peninsula, 2004**

KEY	
(C)	Constitutional Monarchy
(F)	Federation
(M)	Monarchy
(R)	Republic

**55** Which country shown on the map has a constitutional monarchy?

- A Kuwait
- B Saudi Arabia
- C United Arab Emirates
- D Yemen



**56** Which of these resources was most likely of greatest importance to early settlers in the area shown on the map?

- F** lumber
- G** gold
- H** oil
- J** water

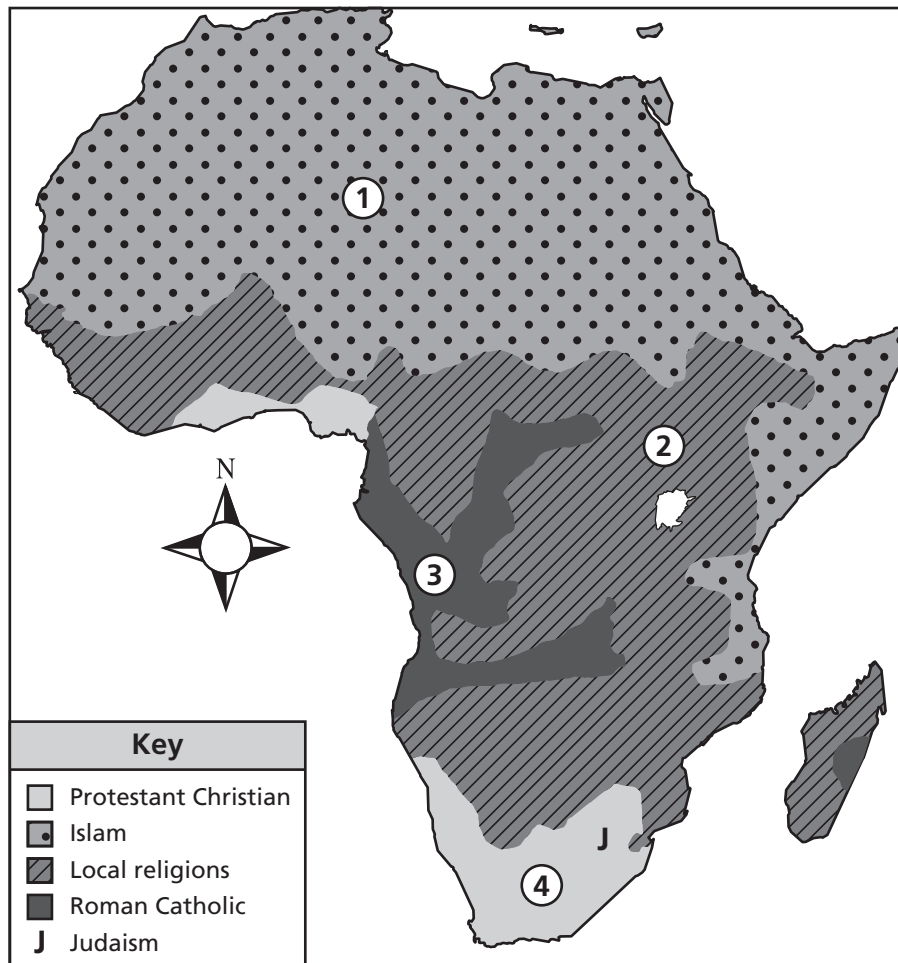
Duke Ellington was born in Washington D.C., and from an early age he loved music. When he was four years old, he listened to his mother play a popular piano tune called "The Rosary" and he cried, saying, "It was so pretty. So pretty." Not long after that, at the age of seven, he began to play piano himself. It seems that he knew he was going to go places. He told his next door neighbor, Mr. Pinn, "One of these days I'm going to be famous."

— Duke Ellington's Early Years

**57** Based on the excerpt above, what was the main influence on Duke Ellington's decision to become a musician?

- A** being born in Washington, D.C.
- B** listening to his mother play the piano
- C** living next door to Mr. Pinn
- D** growing up in a wealthy family

## Religions of Africa



**58** According to the map above, which is the dominant religion in Area 1?

- F** Protestant Christian
- G** Judaism
- H** Roman Catholic
- J** Islam

**59** Which statement best describes a negative effect of rapid and uncontrolled urbanization?

- A** decrease in jobs
- B** increase in crimes
- C** increased inflation rates
- D** decreased transportation options

Rhine River Danube River Thames River
---

**60** The rivers listed in the box above are on the continent of

- F** Asia.
- G** Australia.
- H** Europe.
- J** South America.

**61** Which Tennessee region is made up of flat-topped mountains and V-shaped valleys?

- A** Central Basin
- B** Highland Rim
- C** Gulf Coast Plain
- D** Cumberland Plateau

Causes of  
?

---

- Wind
- Water
- Ice
- Waves

**62** Which term best completes the title to the list above?

- F** Erosion
- G** Continental Drift
- H** Earthquakes
- J** Glacier Formation

## Societal Improvements

- Automobile safety regulations instituted
- Reforms in the meat-packing industry established
- Reports on the safety of baby food published

**63** Which concern most influenced the actions on the list above?

- A** civil rights
- B** environmental quality
- C** consumer protection
- D** public education

**64** Overgrazing by livestock can affect the environment by

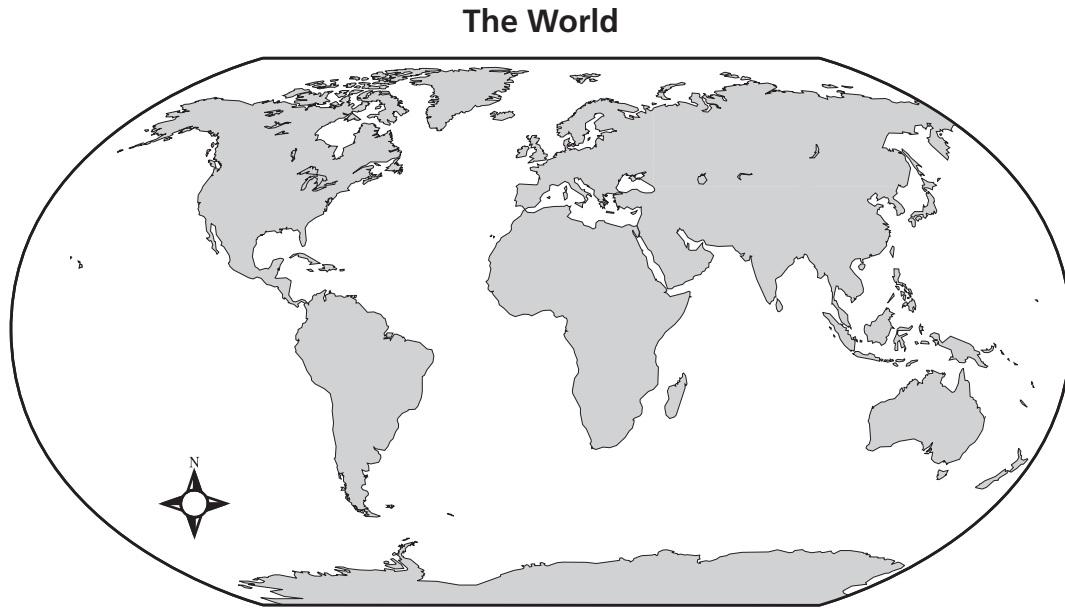
- F** leading to deforestation.
- G** leading to desertification.
- H** decreasing the regional temperature.
- J** decreasing the amount of drinking water.

**65** Which of these religions is polytheistic?

- A** Hinduism
- B** Christianity
- C** Judaism
- D** Islam

**Directions**

Use the map below and your own knowledge to do Number 66.



**66** Which of these two continents are joined together?

- F** Asia and Europe
- G** Antarctica and North America
- H** Africa and Australia
- J** Australia and South America

Foods Americans Eat	Cultural Influence
Tacos	Mexican
Hamburgers	German
Macaroni	Italian

**67** Which statement is best supported by the information in this table?

- A** Many different cultures eat only American foods.
- B** American food culture has little variety.
- C** Many different cultures influence what Americans eat.
- D** Americans avoid foods from other cultures.

**68** Which demographic statistic measures the way people are spread out over a specific area?

- F** population survey
- G** infant mortality
- H** primary occupation
- J** population distribution

**69** Why is solar energy classified as a renewable resource?

- A** The supply of solar energy will not run out.
- B** Solar energy can be used to produce a new power source.
- C** Using solar energy has no effect on the environment.
- D** Solar energy costs less than other power sources.

## Reading/Language Arts Answer Key

1	D
2	G
3	A
4	F
5	C
6	J
7	C
8	H
9	D
10	G
11	B
12	J
13	C
14	G
15	C
16	J
17	B
18	G
19	C
20	J
21	B

22	F
23	D
24	H
25	A
26	J
27	C
28	G
29	C
30	H
31	A
32	G
33	D
34	G
35	D
36	G
37	A
38	J
39	A
40	G
41	B
42	F

43	A
44	J
45	A
46	J
47	C
48	H
49	C
50	F
51	C
52	J
53	A
54	F
55	C
56	J
57	B
58	H
59	D
60	G
61	C
62	F
63	B

64	J
65	D
66	G
67	D
68	G
69	D
70	F
71	A
72	G
73	C
74	J
75	C
76	F
77	B
78	J
79	A
80	H
81	C
82	H
83	D



# Mathematics Answer Key

1	D
2	H
3	C
4	G
5	D
6	F
7	B
8	H
9	D
10	J
11	C
12	J
13	A
14	J
15	C
16	F
17	B
18	F

19	D
20	H
21	B
22	J
23	C
24	G
25	D
26	F
27	C
28	F
29	C
30	H
31	A
32	J
33	D
34	G
35	A
36	J

37	B
38	G
39	D
40	G
41	C
42	J
43	B
44	G
45	C
46	G
47	B
48	J
49	A
50	J
51	B
52	F
53	D
54	G

55	A
56	F
57	D
58	F
59	B
60	F
61	C
62	G
63	A
64	F
65	C
66	G
67	C
68	F
69	C

# Science Answer Key

1	A
2	J
3	C
4	G
5	C
6	H
7	B
8	H
9	B
10	J
11	B
12	G
13	C
14	F
15	A
16	F
17	D
18	G

19	A
20	J
21	C
22	F
23	B
24	F
25	D
26	J
27	A
28	J
29	D
30	H
31	D
32	F
33	A
34	G
35	B
36	F

37	A
38	J
39	C
40	J
41	B
42	F
43	D
44	G
45	D
46	F
47	A
48	G
49	D
50	G
51	C
52	J
53	C
54	G

55	C
56	J
57	C
58	H
59	A
60	H
61	C
62	F
63	D
64	F
65	C
66	G
67	B
68	H
69	D

## Social Studies Answer Key

1	B
2	H
3	A
4	G
5	C
6	J
7	D
8	H
9	A
10	H
11	B
12	J
13	D
14	H
15	B
16	H
17	B
18	F

19	A
20	G
21	D
22	G
23	B
24	J
25	A
26	J
27	C
28	H
29	B
30	J
31	A
32	H
33	B
34	F
35	A
36	H

37	D
38	F
39	A
40	H
41	B
42	G
43	B
44	J
45	A
46	H
47	A
48	F
49	C
50	J
51	A
52	J
53	C
54	J

55	A
56	J
57	B
58	J
59	B
60	H
61	D
62	F
63	C
64	G
65	A
66	F
67	C
68	J
69	A











# Tennessee Comprehensive Assessment Program

## Achievement Test ~ Grade 7

### Practice Test



TN00003394