

Student Name _____

Teacher Name _____

School _____

System _____

ACH



TENNESSEE

Tennessee Comprehensive Assessment Program
Achievement Test ~ Grade 7
Practice Test
Version B



PEARSON

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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?

All 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 and Language Arts



Part 1

Directions Read the story. Then answer Numbers 1 through 8.



Unexpected Outcome

- 1 Keesha sighed as she reached Mrs. Sampson's front steps. Climbing them slowly, she tried to shake off her disappointment. She had planned to spend her day at the library researching ideas for her history project. Keesha loved learning and could not wait to sit down in front of the computer and find inspiration. Instead, she was spending the day with her neighbor, Mrs. Sampson, because her mother was called to work unexpectedly. Keesha did not want to hurt Mrs. Sampson's feelings, but it was difficult to imagine how the two of them would pass the time.
- 2 Before Keesha could knock, the door opened and Mrs. Sampson stood before her, smiling widely. Though stooped with age, her brown eyes twinkled with warmth as she welcomed her young visitor. Stepping aside, Mrs. Sampson invited Keesha into her warm and cozy living room.
- 3 "Hello, dear," Mrs. Sampson said in a voice that reminded Keesha of warm honey. "I am so happy you are going to spend the day with me. What fun to have a young visitor!"
- 4 "Yes," Keesha replied, offering a smile that did not quite reach her eyes. "What fun?"
- 5 Mrs. Sampson chuckled knowingly, causing Keesha's cheeks to redden with embarrassment. "Now, I know this is not the way you had planned to spend your Saturday, but I bet we can find something to keep you occupied."

Go On ►

6 Mrs. Sampson turned and shuffled off toward the kitchen. “Sit right here in the living room,” she called over her shoulder. “I’ll be right back.”

7 Instead of sitting, Keesha walked slowly around the living room, scanning the trinkets and collectibles lining the shelves and tables. As she turned, a basket sitting on the mantle above the fireplace caught Keesha’s eye. The basket appeared to be intricately woven out of some type of grass, and the result was a beautiful and complex design. It was wide and round at the base, had an impossibly narrow neck that rose up several inches, and was topped with a tiny lid. Keesha was fascinated by how the artist had been able to weave the grass in such a tight pattern. She was still examining the piece when Mrs. Sampson returned with a tray of cookies and two glasses of milk.



8 Keesha pointed out the basket and asked Mrs. Sampson where she had gotten it.

9 “Oh, I made it,” Mrs. Sampson replied in a tone that almost concealed the pride in her voice.

10 Keesha turned and stared open-mouthed at her neighbor. “You made *this*?” she inquired. “How? When?”

11 Mrs. Sampson threw back her head and laughed long and hard. When she had finally caught her breath, she said, “Well, now, don’t look so surprised, honey. My family has been weaving these sweetgrass baskets for generations. Sweetgrass grows to be more than a foot tall and can be found along the South Carolina coast where I grew up. My mother taught me how to make the baskets. Her mother taught her, and so on.”

12 The two sat in the living room, and for the next half-hour, Mrs. Sampson shared with Keesha the tradition of sweetgrass basket weaving. Keesha sat entranced, nibbling cookies while Mrs. Sampson told her how she began weaving when she was a little girl, much younger than Keesha was now. As she talked, Mrs. Sampson pointed to various examples of her work that were hidden throughout the room: a decorative bowl sitting on a table, several small pieces that looked like vases, and finally, a large basket that sat on the floor next to her rocking chair. Inside, Keesha could see pieces of loose grass waiting to be woven.

13 When Mrs. Sampson paused for a sip of milk, Keesha asked timidly, “Do you think you could teach me how to weave?”

14 Mrs. Sampson was not able to hide the surprise in her eyes. “Why, I would love to do that, and there is no time like the present.”

15 Keesha watched as Mrs. Sampson collected her supplies and then positioned herself next to Keesha. She handed Keesha a small disk of woven grass.

16 “This is the base of a basket I started. Why don’t you finish it up for me?” Mrs. Sampson handed
Keesha a pointed tool and showed her how to twist, roll, and poke the grass around the base of the
basket. Keesha worked diligently to make her grass rolls as tight as the ones she’d seen on Mrs. Sampson’s
baskets, but she found herself having to go very slowly in order to maintain the proper technique. As the
two worked together, Mrs. Sampson shared stories of her family and spoke with pride about this unique
tradition that had been passed down in her family through generations.

17 Keesha had doubled the size of her basket base when she was startled by a knock at the door. Looking
up, she saw her mother and was stunned when she realized that nearly three hours had passed since she
had arrived. Keesha’s mother thanked Mrs. Sampson and then motioned for Keesha to do the same.

18 “Thank you for letting me stay with you and for showing me how to weave,” Keesha said formally.
Then, grinning shyly, she asked, “Do you think I could come over next Saturday and learn how to build
the sides of my basket?”

19 Mrs. Sampson smiled happily. “Well, now, I think that would be just fine.”

20 After they said their goodbyes, Keesha and her mother walked back across the lawn toward their
house.

21 “How about I take you to the library so you can research ideas for your history project topic?” Mom
asked.

22 Keesha smiled and put an arm around her mother’s waist. “I definitely need to go to the library, but
not for a topic.”

23 Keesha laughed at her mother’s puzzled look. “I need to find sources on the history of basket weaving.”

1 Read this sentence from Paragraph 7.

The basket appeared to be intricately woven out of some type of grass, and the result was a beautiful and complex design.

In the sentence, the word intricately means

- A** not long past; recently.
- B** in a complicated or elaborate way.
- C** without a defined plan or course of action.
- D** in a rapid manner; hurriedly.

2 Based on the story, what can the reader infer about Keesha's personality?

- F** Keesha is curious.
- G** Keesha is cautious.
- H** Keesha is humorous.
- J** Keesha is adventurous.

3 If the story continued, what is Keesha most likely to do next?

- A** Keesha will stay with Mrs. Sampson every Saturday.
- B** Keesha will write a report about what she learned with Mrs. Sampson.
- C** Keesha will ask Mrs. Sampson to show her more baskets.
- D** Keesha will teach her mother what Mrs. Sampson taught her.

4 What is the main idea of Paragraphs 11 and 12?

- F** Mrs. Sampson explains to Keesha that many people want to learn to make sweetgrass baskets.
- G** Mrs. Sampson shares with Keesha that many people in South Carolina make sweetgrass baskets.
- H** Mrs. Sampson lets Keesha know how much she enjoys displaying sweetgrass baskets in her home.
- J** Mrs. Sampson tells Keesha about the historical tradition of making sweetgrass baskets.

5 Which event is part of the rising action?

- A** Keesha arrives at Mrs. Sampson's house.
- B** Keesha asks Mrs. Sampson about a basket.
- C** Keesha's mother knocks at the door.
- D** Keesha mother offers to take her to the library.

6 Which sentence from the story best helps the reader place the setting in current times?

- F** Keesha loved learning and could not wait to sit down in front of the computer and find inspiration.
- G** Keesha was fascinated by how the artist had been able to weave the grass in such a tight pattern.
- H** Then, grinning shyly, she asked, "Do you think I could come over next Saturday and learn how to build the sides of my basket?"
- J** "How about I take you to the library so you can research ideas for your history project topic?" Mom asked.

7 In the story, Keesha's character traits are best revealed by what

- A** Mrs. Sampson says to Keesha.
- B** Mrs. Sampson thinks to herself.
- C** Keesha says to Mrs. Sampson.
- D** Keesha's mother says about Keesha.

8 Which literary element is present in this story?

- F** a flashback to Mrs. Sampson's childhood days
- G** foreshadowing of Keesha weaving her own baskets
- H** the irony that Keesha enjoys what she was dreading
- J** symbolism of a basket representing the family

Directions

Brian gave this speech in his social studies class. Read the speech and answer Numbers 9 through 21.

Taking a Break from Technology

- 1 For many people, being without any electronic devices creates an uneasy feeling. I recently experienced a weekend without electronics. I am now convinced that all people can benefit from turning off their electronics from time to time. Allow me to share my experience.
- 2 Last month, my family and I drove to my Aunt Nan's home, which is in a remote mountain village. My aunt was preparing to move closer to where we live. The purpose of our visit was to help her pack her belongings. During the long car ride, my dad informed us that Aunt Nan's style of living was more primitive than we were accustomed to. We wouldn't hear cell phones ring because signals for electronic devices are not reliable in the mountains. My dad also told us that Aunt Nan had a television but received very few channels. My mother added that my aunt doesn't own a computer and that I would need to write my English paper on Aunt Nan's typewriter. I felt panic rising at the thought of having to write without spell check.
- 3 Once we finally arrived at Aunt Nan's house, there was plenty of work to do. We organized books, packed household items, and moved boxes into the garage. Very quickly, however, I realized that it was difficult to figure out what to do in my free moments. I was used to watching television or DVD movies in my spare time. I was becoming restless.
- 4 I'm sure that adults you know have shared anecdotes about when they were kids. They frequently tell us stories about the games they played and how they had time to think quietly when they were our age. I had never understood why thinking quietly was a good thing. Our parents grew up at a time when electronic devices were not advanced, so instant communication with friends and family wasn't even possible. Cordless phones and cell phones hadn't been invented. Even stranger is the fact that until the 1980s, most computers were bigger than refrigerators. E-mail was extremely rare and instant messaging had yet to be invented.
- 5 Once the packing was finished, there seemed to be nothing else to do. All the quiet thinking time made me uncomfortable, so I began writing my English paper using my aunt's typewriter. A story idea popped into my head right away. I wrote about a futuristic fantasy world that was suddenly deprived of all electronic devices. The old typewriter was fun to use, but I had to be a lot more careful about making typing mistakes since there was no delete key. The best part of using the typewriter was hearing the clacking sound that the keys made and the dinging of a bell when I finished typing every line.



Go On ►

6 I soon finished my paper. Reflecting on some of the stories my parents had shared with me helped me write my own story. My characters had time to hike, draw, make unusual crafts, and design original games using everyday objects—much like my parents and grandparents did. The process of putting these ideas on paper made me think that our dependence on electronics has dulled our creativity.



7 On the last night of our trip, my family gathered on my aunt’s porch and regarded the mountain view for the last time. I entertained everyone by reading my story to them. At the end of the story, everyone clapped and cheered. Even I grinned sheepishly; I understood the irony of borrowing their stories to write my own. With my paper I was admitting that life and even fun are possible without telephones, or televisions, or movies.

8 I must admit that the temporary loss of electronic devices was a positive experience. I learned that having time to think quietly is refreshing. I also learned that I didn’t miss the constant interruptions from phone calls or texts during conversations with my family. Spending time without television or instant messages actually seemed to enhance my creativity. As further proof of the benefits of time without modern devices, I was able to complete my school assignment easily. Happily, I got an “A” on my short story.

9 I hope my speech convinces you that there are advantages to turning off electronic devices once in a while. In short, I think that our reliance on electronics limits our ability to concentrate and think creatively. I challenge you to spend a Saturday, or even a whole weekend, without turning on any electronic devices. Maybe you will discover the benefit of thinking quietly as well.

9 Read this excerpt from Paragraph 2.

During the long car ride, my dad informed us that Aunt Nan's style of living was more primitive than we were accustomed to. We wouldn't hear cell phones ring because signals for electronic devices are not reliable in the mountains. My dad also told us that Aunt Nan had a television but received very few channels. My mother added that my aunt doesn't own a computer and that I would need to write my English paper on Aunt Nan's typewriter.

What does primitive mean?

- A quiet
- B miserable
- C self-centered
- D old-fashioned

10 Read this sentence from Paragraph 7.

On the last night of our trip, my family gathered on my aunt's porch and regarded the mountain view for the last time.

What does the underlined word mean?

- F discussed
- G photographed
- H appreciated
- J remembered

11 Brian gives this speech in order to

- A** describe daily life without modern-day electronics for listeners.
- B** persuade others to turn off their technology periodically.
- C** explain to others how life now compares to life before instant communication.
- D** entertain listeners with a story about a weekend in the mountains.

12 Who is Brian mainly targeting in his speech?

- F** his peers at school
- G** history teachers
- H** a group of parents
- J** a computer company

13 Which sentence from the speech is the thesis statement?

- A** For many people, being without any electronic devices creates an uneasy feeling.
- B** I am now convinced that all people can benefit from turning off their electronics from time to time.
- C** Our parents grew up at a time when electronic devices were not advanced, so instant communication with friends and family wasn't even possible.
- D** The process of putting these ideas on paper made me think that our dependence on electronics had dulled our creativity.

14 What can Brian do to best engage his audience?

- F** speak in a soft tone of voice
- G** look at the back wall of the room
- H** pronounce words clearly
- J** read directly from notecards

15 Before writing his speech, Brian organized his ideas.

Introduction Time without Technology Closing Remarks
--

Where should he place “Results of the Experience”?

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

16 The organizational structure Brian uses in Paragraph 5 is mainly

- F** sequential.
- G** comparison-contrast.
- H** problem-solution.
- J** cause-effect.

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17 Which paragraph is a critique of the speech?

- A** Brian spends a weekend without access to electronics. He finds that he can write a paper quicker without the constant interruptions, as well as help his aunt pack for her move. He even enjoys his break from electronics.
- B** In a world of instant communication, tremendous importance is placed on a person's electronic devices. Brian would like to change this dependence. He proposes that people give up electronics for a day and realize the benefits that an electronic-free day has to offer.
- C** Texting, using the Internet, and playing video games are relaxing activities for some people. As a result, for many, the thought of a day without cell phones, e-mails, or television is a day full of anxiety. However, Brian believes that people may find the opposite is true.
- D** Brian makes some interesting points, but he presents no research findings to support his recommendation. Brian's experience seems to have convinced him, but listeners may want a second opinion. Some people think that electronics make them more creative.

18 After listening to the speech, a student wants to research Brian's claims about the use of electronic devices. Choose the most focused research topic.

- F** why students use cell phone applications
- G** how cell phone use affects concentration
- H** the impact of computer use in schools
- J** the effect of computers on everyday life

19 Which excerpt from the speech is an opinion?

- A** My aunt was preparing to move closer to where we live.
- B** The purpose of our visit was to help her pack her belongings.
- C** My characters had time to hike, draw, make unusual crafts, and design original games . . .
- D** . . . life and even fun are possible without telephones, or televisions, or movies.

20 Which picture could Brian use to make the speech more effective?

- F** a person texting on a cell phone
- G** a person carrying packing boxes
- H** a photograph of him with his family
- J** a person enjoying a scenic view

21 Brian most likely included the picture of him on his aunt's porch to show

- A** how easy it was for him to write the story for class.
- B** the mountainous area in which she lived.
- C** the family having fun without computers and video games.
- D** why the story he wrote was so successful.

Directions

Felicity wrote this report. It contains mistakes. Read the report and answer Numbers 22 through 34.

How Chameleons Change Color

- 1 No lizard is as interesting, or as misunderstood, as the chameleon. One myth about chameleons seems almost universally believed: they change color to blend in with their environment. People may believe this myth because they usually see a green chameleon perched on a green leaf however this myth is not true. Chameleons don't change their skin color in order to match their environments; they change color depending on light and temperature. They also use color to express their moods.
- 2 Approximately one hundred different species of chameleons exist. Although these different species of chameleons live in a variety of environments and are many different colors, they do share common skin characteristics. They have very thin skin, and underneath their skin are several layers of cells called chromatophores, which can be stimulated to produce many different shades of color. There are two layers of chromatophores just underneath the skin. The upper layer has red and yellow chromatophores, and the lower layer has blue and white chromatophores. These three primary colors, red, blue, and yellow, plus white, can produce many shades of color, from green to orange to black.
- 3 In contrast, if the weather is cold, the chameleon's brain sends a message to the skin to activate the blue and red cells. The blue and red cells grow more large and show through the lizard's thin skin. This makes the color of the chameleon darker and allows the lizard to absorb heat more from the sun.
- 4 Chameleons fascinate people because they change color, but how they change color is just as amazing. The stimulation of chromatophores located below the skin creates these colors. Although they don't change color to blend in with their environments, they do change color in response to their own feelings. Chameleons might change their color just to feel more comfortable. Many people may still believe that chameleons change color to conform to their environments.
- 5 In hot weather, the chromatophores with the lighter yellow and white colors grow larger, reflecting the sun and the heat. Chameleons can also change color to show anger; some change to black, while others become yellow.

22 Read this sentence from Paragraph 3.

The blue and red cells grow more large and show through the lizard's thin skin.

Choose the correct way to write the underlined part of the sentence.

- F** most larger
- G** more largest
- H** larger
- J** largest

23 Read this sentence from Paragraph 3.

This makes the color of the chameleon darker and allows the lizard to absorb heat more from the sun.

Choose the sentence that shows the correct use of prepositional phrases.

- A** This makes the color of the chameleon darker from the sun and allows the lizard to absorb of heat more.
- B** This makes the color of the chameleon darker and allows the lizard to absorb more heat from the sun.
- C** This makes the color of the chameleon darker from the sun and allows the lizard to absorb heat more.
- D** This makes the color of the chameleon darker and allows the lizard to absorb more of the sun from the heat.

Go On ►

- 24** The author's purpose for writing this report is to
- F** entertain readers with a story about chameleons.
 - G** persuade readers to purchase chameleons as pets.
 - H** inform readers about the areas where chameleons live.
 - J** describe to readers how chameleons blend into environments.

- 25** Which would make the best subtitle for this report?
- A** The effects of light, temperature, and mood
 - B** Making blue, red, and yellow cells visible
 - C** Not just active, but adaptable too
 - D** They are interesting creatures

- 26** This report is an example of which type of writing?
- F** descriptive
 - G** persuasive
 - H** narrative
 - J** technical

- 27** Who would most likely be interested in reading this report?
- A** a gardener researching reptiles who eat plants
 - B** a student studying different types of reptiles
 - C** a teacher searching for an article about reptiles
 - D** a scientist investigating areas where reptiles live

28 Paragraph 5 is incorrectly placed in the report. Where should it be moved?

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

29 Read these sentences from Paragraph 5.

In hot weather, the chromatophores with the lighter yellow and white colors grow larger, reflecting the sun and the heat. _____, chameleons can also change color to show anger; some change to black, while others become yellow.

Choose the transition word or phrase that belongs in the blank.

- A** Nevertheless
- B** Accordingly
- C** Therefore
- D** Likewise

30 Which sentence from the report is the thesis statement?

- F** One myth about chameleons seems almost universally believed: they change color to blend in with their environment.
- G** Chameleons don't change their skin color in order to match their environments; they change color depending on light and temperature.
- H** Although these different species of chameleons live in a variety of environments and are many different colors, they do share common skin characteristics.
- J** These three primary colors, red, blue, and yellow, plus white, can produce many shades of color, from green to orange to black.

Go On ►

31 Read this sentence from Paragraph 4.

Chameleons fascinate people because they change color, but how they change color is just as amazing.

Choose the correct way to spell the underlined word.

- A fascinate
- B facsenate
- C fascinate
- D fascenate

32 Which sentence is the best conclusion for Paragraph 1?

- F So it is most important to find out about how changes in chameleons' bodies can produce such a variety of colors.
- G People often create myths to explain things they don't understand in the natural environment.
- H Temperature has a profound effect on the current color of a chameleon, and it is important to study this.
- J The mood of most lizards causes interior as well as exterior changes, so this must be determined.

33 Which fact would make the best addition to Paragraph 2?

- A** Other types of lizards, such as geckos, also have very thin skin.
- B** Although all chameleons change color, some can only display brown tones, whereas others can create vibrant hues.
- C** Like lizards, fish have interesting cellular activity, but their skin cells also function as added insulation.
- D** Chameleons are interesting pets to own because they turn so many different colors.

34 Which sentence from Paragraph 4 is unnecessary?

- F** The stimulation of chromatophores located below the skin creates these colors.
- G** Although they don't change color to blend in with their environments, they do change color in response to both their environments and their own feelings.
- H** Chameleons might change their color just to feel more comfortable.
- J** Many people may still believe that chameleons change color to conform to their environments.

Directions

Read and answer Numbers 35 through 42.

35 Read these steps for applying a coat of varnish to a bench.

1. *Apply the coat of varnish uniformly, following the grain of the wood to ensure a good result.*
2. *Make sure the surface is clean and ready to varnish. Use a light sandpaper to remove any minor imperfections.*
3. *Begin with a light first coat of varnish. It is better to apply several thin coats than one thick coat.*
4. *Allow the coat of varnish to dry for at least twenty-four hours before applying a second coat.*

Which is the best way to order the steps?

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

36 Read this paragraph from an essay.

People sometimes complain that a product might be on the cutting edge one minute and seem hopelessly out of date the next. One can certainly see the influence of technological change with the history of telephones. Just as cell towers have replaced landlines, satellite telephones will replace cell phones and few people will use them, either. Changes in technology seem to influence our lives constantly.

Which sentence from the paragraph is an example of false premise?

- F** People sometimes complain that a product might be on the cutting edge one minute and seem hopelessly out of date the next.
- G** One can certainly see the influence of technological change with the history of telephones.
- H** Just as cell towers have replaced landlines, satellite telephones will replace cell phones and few people will use them, either.
- J** Changes in technology seem to influence our lives constantly.

37 Which sentence correctly uses quotation marks?

- A** “Yes,” he said with a nod of agreement, “the park should stay open until 9:00 p.m.”
- B** Mrs. Crandall proclaimed with excitement, “Today is the day that we begin our masterpieces”!
- C** “Darla patted her friend on the back and assured her that Everything will work out.”
- D** “I want to know why you are so late?” Mr. Grieg “began impatiently.”

38 Read this sentence.

Essays and speeches written during the Revolutionary War often called for government to protect three basic ideas life, liberty, and property.

How should the underlined part of the sentence be revised to correctly use a colon?

- F** for government to protect: three basic ideas life, liberty, and property
- G** for government: to protect three basic ideas life, liberty, and property
- H** for government to protect three basic ideas: life, liberty, and property
- J** for government to protect three basic: ideas life, liberty, and property

39 Which sentence is written incorrectly?

- A** Some people feel that the speaker's use of the word *monstrous* to describe the painting is extreme.
- B** Writing a paper about a creative work such as a poem or essay is itself an act of *creation*.
- C** Examining *Chart 3* should have been enough to convince even the strictest critic.
- D** Stevens' novel *Chance or Choice* is one of those books many people read again and again.

40 Read this paragraph from a radio advertisement.

Light, flaky, and utterly delicious. Those words aptly describe “Mother Samuelson’s Homemade Pie Crusts.” Add any kind of fruit or cream filling to make a fragrant and fresh pie for your family. These exclusive pie crusts ship directly from our kitchen to your kitchen table. Sometimes people ask us, “How do you make those crusts so flaky?” Well, Mother Samuelson stands for exceptional flavor and quality, and Mother Samuelson wouldn’t have it any other way.

Which persuasive device is used most in the advertisement?

- F** loaded terms
- G** name-calling
- H** bandwagon
- J** plain folks

41 Laura is creating a website for the Chess Club to help recruit new members. Which medium would be best for Laura to include?

- A** a timeline showing the history of the game of chess
- B** a website with instructions for a virtual game of chess
- C** a video of the club president accepting an award at a chess competition
- D** a slideshow of photographs showing club members at chess competitions

Go On ►

42 Read this paragraph from a student speech.

Students identify with older students more than with teachers, so it makes sense to have high school mentors at the middle school. Our middle school now has high school students serving as mentors in every grade and in every subject. We have mentors helping students with reading assignments, math homework, and even with physical education classes. If teachers have their way, the mentoring program will only increase.

Which sentence from the paragraph shows an example of deductive reasoning?

- F** Students identify with older students more than with teachers, so it makes sense to have high school mentors at the middle school.
- G** Our middle school now has high school students serving as mentors in every grade and in every subject.
- H** We have mentors helping students with reading assignments, math homework, and even with physical education classes.
- J** If teachers have their way, the mentoring program will only increase.

**DO NOT
MARK
ON THIS
PAGE**

Part 2

Directions Read the poem. Then answer Numbers 43 through 50.

Save My Place

Save my place, would you?
I hate being in line,
Though everyone says that this show is so fine,
I don't want to be here until I'm one hundred-nine.
5 So please be kind and save my place!

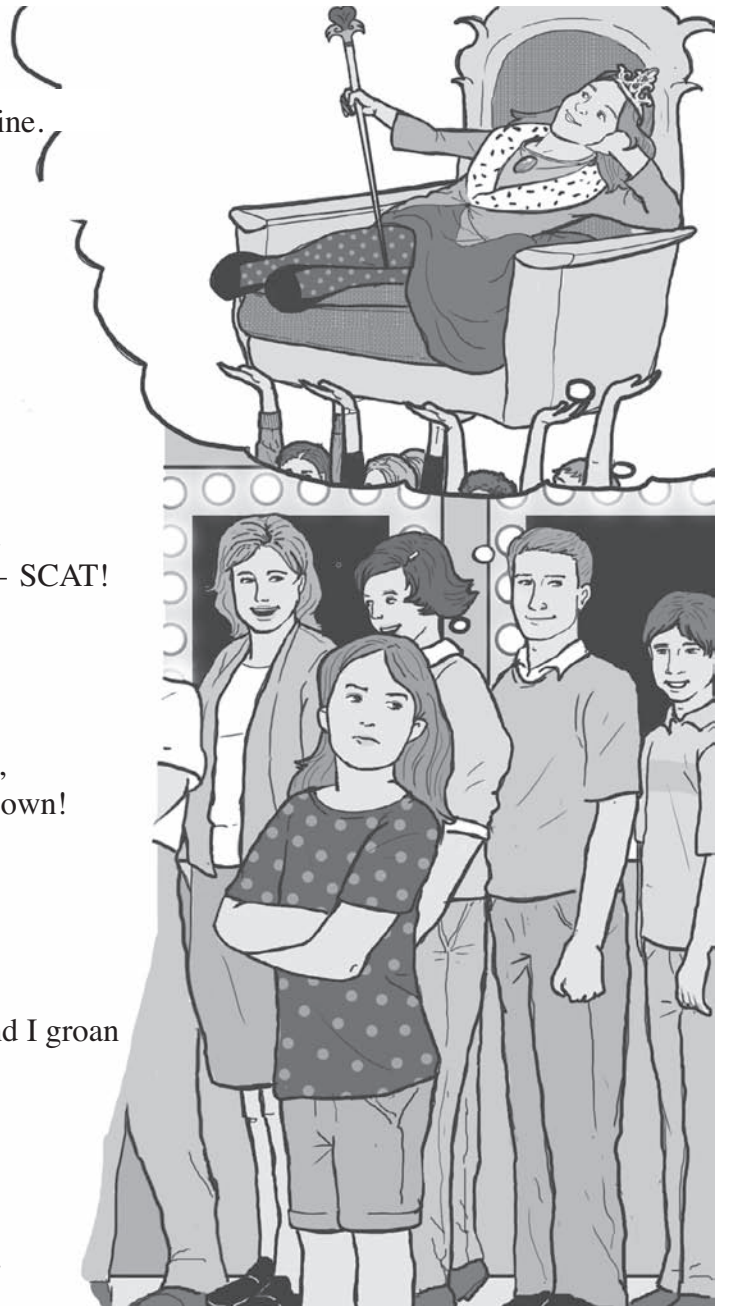
Save my place, would you?
I just need a drink,
It's as dry and dusty as a desert, I think.
They should put up an awning, or install a sink.
10 I need to cool off but am coming right back!

Save my place, won't you?
I must get a hat
To protect me from overhead birds that go splat
When they twitter and flutter above our heads — SCAT!
15 There they are! Just please save my place!

Save my place, will you?
I need to sit down,
For my legs are all shaky from standing around,
And I've wrinkled my glittery, pretty princess gown!
20 I'm the Queen, so you must save my place!

Save my place, servants!
A queen needs her throne!
You others can stand here, but I sit alone.
While you work at the waiting game, I moan and I groan
25 "Hurry UP! Why can't we go in?"

Save my place — what happened?
Now where is that line
To get into the show that they say is so fine?
Do you have your ticket? I think I've lost mine.
30 I thought you were saving my place!



43 Read Line 20.

I'm the Queen, so you must save my place!

The author uses metaphor in this line to

- A show the conceit of the speaker.
- B show the acting skills of the speaker.
- C explain why others follow the speaker's orders.
- D explain the speaker's reasons for making requests.

44 The author wrote this poem to

- F persuade readers to attend special performances.
- G inform readers about proper etiquette while waiting in line.
- H describe for readers what it is like to obtain tickets to a special show.
- J entertain readers with a funny situation involving the speaker.

45 Which line from the poem indicates that it is told from a first-person point of view?

- A Though everyone says that this show is so fine,
- B They should put up an awning, or install a sink.
- C For my legs are all shaky from standing around,
- D A queen needs her throne!

Go On ►

46 “Save My Place” is identified as a poem because it

- F** utilizes an everyday setting.
- G** uses imagery and a rhythmical pattern.
- H** tells an imaginary story that is believable.
- J** tells a true anecdote about real people and events.

47 This poem is similar to a drama because it

- A** lacks a clear resolution.
- B** employs multiple settings.
- C** emphasizes plot over theme.
- D** contains a speaking character.

48 Which sentence best states the theme of the poem?

- F** Some people believe they are better than others.
- G** Waiting patiently demonstrates courteous behavior.
- H** There are many ways to deal with difficult people.
- J** Making demands of others shows confidence.

49 Read Lines 27 through 29.

*Now where is that line
To get into the show that they say is so fine?
Do you have your ticket? I think I've lost mine.*

The sound effect used most in these lines is

- A** accent to stress the thoughts of the speaker.
- B** rhyme to emphasize a sense of playfulness.
- C** alliteration to add excitement to the speaker's feelings.
- D** onomatopoeia to share the concern in the speaker's voice.

50 What is the speaker's main conflict?

- F** person vs. environment
- G** person vs. technology
- H** person vs. person
- J** person vs. self

Go On ►

Directions

Read the passage. Then answer Numbers 51 through 58.

Lumberjack Art

1 When people think of an artist, they probably do not imagine a lumberjack cutting down trees with a chainsaw. People are more likely to imagine a sculptor working with clay and marble. Yet many lumberjacks consider themselves to be artists. Instead of patiently chipping away at a large block of marble, however, lumberjacks use chainsaws to carve their masterpieces from wood.

Folk Art

2 Wooden sculptures created with chainsaws are perfect examples of folk art. Everyday tools are used to create art that focuses on subjects found in nature, such as bears or other forest animals. Modern lumberjacks work in forested areas and use chainsaws daily, so they are inspired on a regular basis to carve their wooden sculptures. Not all lumberjacks are artists, but some chainsaw artists have been lumberjacks.

3 A lumberjack who is also an artist might cut down a tree during a workday. If the stump, or the bottom of the tree, is a good size, the artist might be motivated to sculpt the stump into the shape of a forest animal. The chainsaw artist might also carve other large blocks of wood. Sometimes a homeowner might cut down a tree in the yard and then hire a chainsaw artist to create an outdoor sculpture from the stump. So, this art owes its origins to everyday tasks and nature.



© Keith morris/Alamy #BC56NK

Artist carving an owl

Artistic Variety

4 The origins of chainsaw art may be humble, but the practice has expanded well beyond turning a backyard stump into a pretty memory of the tree that once stood there. Chainsaw artists today often purchase the wood they use. In some ways they are like traditional woodcarvers. One artist said that using chainsaws is simply more practical. This person began his work as a traditional woodcarver — that is, he used hand tools to carve the wood into the shapes he wanted. To save time, he began using a chainsaw to remove some portions of the wooden block. This artist realized that the chainsaw not only trimmed down large pieces of wood quickly, but it also produced a distinctive and beautiful pattern on the wood. These patterns would not be seen in other pieces of art. Eventually, the artist began using the chainsaw for nearly all of his carvings.

5 Because these chainsaw artists use large sections of trees, they like to create outdoor wildlife sculptures. Moose are popular subjects, as are wolves and raccoons. One popular sculpture is the mascot of the National Forest Service, Smokey Bear. People sometimes want mascots of their favorite sports teams too.

Potential Pitfalls

6 Chainsaw artists must be aware of several potential problems in their work. Possible challenges involve the limitations of the wood they use. Some blocks of wood have knots, or hard dark circles, in them, and the artist has to take these flaws into consideration when planning a design. Dealing with such pitfalls is important to completing a beautifully finished product.

7 The age of the wood after it is cut is another challenge for the artist to consider. Experienced chainsaw artists do not waste their time carving wood that has not cured or dried out. Such wood is referred to as “green” or “raw.” If an artist carves a green log, the sculpture is more likely to crack and split as it dries. Using dried wood helps prevent this problem, and once the sculpture is finished, wood oil or varnish can be used to protect it. Careful treatment is particularly important with chainsaw art. After all, these sculptures are typically intended to be displayed outdoors in all kinds of weather.



Bear chainsaw sculpture

© craft images/Alamy #BAYTKP

Art Events

8 Chainsaw art is not only displayed outdoors; it is often created in very public outdoor places as well. Some sculptors carve on the street or directly in front of their shops. These exhibitions of their skill help them draw customers. Indeed, people often appreciate the art more when they are aware of the process used to create it. Each year, there are many gatherings of chainsaw artists at which they can demonstrate their techniques as well as show off their artwork. These events, like Pennsylvania’s annual Ridgeway Chainsaw Carver’s Rendezvous, give artists a chance to impress onlookers with skills such as speed, subject matter, and artistry. Tens of thousands of spectators attend the Rendezvous annually.

Go On ►

The Art of the Chainsaw

- 9 However unusual it may seem, chainsaw art is here to stay. People who use tree trunks and their work tools to create art may not fit our image of typical artists. However, it is good to remember that even sculptors who create masterpieces from marble use power tools these days. Of course, the ultimate test of success for any type of art is the enthusiasm and acceptance of the public. That verdict is in: people love watching chainsaw artists work, and people love the sculptures they create.

51 Read this sentence from Paragraph 8.

These exhibitions of their skill help them draw customers.

What does the underlined word mean as used in this sentence?

- A sketch
- B extend
- C compose
- D attract

52 Read this excerpt from Paragraph 4.

This artist realized that the chainsaw not only trimmed down large pieces of wood quickly, but it also produced a distinctive and beautiful pattern on the wood. These patterns would not be seen in other pieces of art.

Choose a synonym for the underlined word.

- F smooth
- G fancy
- H ideal
- J unusual

53 Which source would provide the most reliable information about where lumberjack artists display their work?

- A** an online article discussing a lumberjack artist
- B** an advertisement for upcoming lumberjack art exhibitions
- C** a newspaper feature about the techniques used by a lumberjack artist
- D** an eyewitness account of the judging process for a lumberjack art competition

54 After reading this passage, a student wants to learn more about lumberjack art. Which would be a primary source for her research?

- F** an online video showing lumberjack art
- G** a magazine article about lumberjack art
- H** an interview with a lumberjack artist
- J** a biography about a lumberjack artist

55 Which statement from the passage is an opinion?

- A** The chainsaw artist might also carve other large blocks of wood.
- B** Chainsaw artists today often purchase the wood they use.
- C** Eventually, the artist began using the chainsaw for nearly all of his carvings.
- D** Dealing with such pitfalls is important to completing a beautifully finished product.

- 56** Which statement from the passage best supports the idea that chainsaw art is gaining more appreciation?
- F** One popular sculpture is the mascot of the National Forest Service, Smokey Bear.
 - G** Some sculptors carve on the street or directly in front of their shops.
 - H** Each year, there are many gatherings of chainsaw artists at which they can demonstrate their techniques as well as show off their artwork.
 - J** Of course, the ultimate test of success for any type of art is the enthusiasm and acceptance of the public.

- 57** In which section will the reader find out what subjects are commonly used in lumberjack art?
- A** Artistic Variety
 - B** Potential Pitfalls
 - C** Art Events
 - D** The Art of the Chainsaw

- 58** Lydia is preparing a presentation on lumberjack art for her art class. Which visual image will best enhance her report?
- F** a picture of a lumberjack cutting down a tree
 - G** a video showing lumberjack artists working
 - H** a cartoon drawing of a lumberjack at work
 - J** a poster with pictures of known lumberjack artists

Directions

Thea wrote this report for her science class. It contains mistakes. Read the report and then answer Numbers 59 through 68.

Green Jeans

(1) Many people concerned with keeping Earth clean choose to act in a way that helps grass and trees stay green and healthy. (2) So people recycle or work to help the environment, they are “going green.” (3) Now a person can even go green while they purchase a pair of jeans. (4) The Levi Strauss Company a leader in the clothing industry has started using all-natural materials to create its new line of jeans. (5) These all-natural, or organic, materials used in the product benefit Earth because they are grown using less pesticide. (6) Therefore, fewer harsh chemicals enter Earth’s soil and water supply. (7) Additionally, even the process the company uses to make these jeans are minimizing damage to Earth. (8) The new jeans reflect the companys plans to protect the environment.

(9) The materials used for the new Levi’s® jeans come from nature, the denim cloth is made from 100 percent organic cotton. (10) The wasteband buttons are fashioned from coconut shells. (11) All-natural products such as, potatoes mimosa flowers starch and a special French soap are mixed together to give the jeans a blue color. (12) The materials used are safe for the environment and protect the planet. (13) These materials produced a great pair of pants.

(14) The way the Levi Strauss Company makes jeans is as important as using natural products. (15) The company uses a new process that avoids wasting natural resources. (16) For example, a study showed that about 920 gallons of water was needed when each pair of Levi’s jeans was produced. (17) That water is like running for 106 minutes through a garden hose. (18) With this new process, 28 percent less water is used while manufacturing Levi’s “Water<Less”™ jeans.

(19) Levi Strauss is not the first company to make Earth-friendly clothing. (20) However, among all major brands, it’s the first company to offer fully organic denim jeans. (21) It is hoped that more companies will follow the example of the Levi Strauss Company. (22) This could mean that consumers will stop wearing “blue jeans” and start wearing “green jeans.”

59 Read Sentence 3.

Now a person can even go green while they purchase a pair of jeans.

Which sentence corrects the pronoun-antecedent agreement error?

- A** Now a person can even go green while we purchase a pair of jeans.
- B** Now people can even go green while he or she purchases a pair of jeans.
- C** Now people can even go green while they purchase a pair of jeans.
- D** Now a person can even go green while you purchase a pair of jeans.

60 Read Sentence 4.

The Levi Strauss Company a leader in the clothing industry has started using all-natural materials to create its new line of jeans.

Which revision uses an appositive phrase correctly?

- F** The Levi Strauss Company a leader in the clothing industry, has started using all-natural materials to create its new line of jeans.
- G** The Levi Strauss Company a leader in the clothing industry has started using, all-natural materials, to create its new line of jeans.
- H** The Levi Strauss Company, a leader in the clothing industry, has started using all-natural materials to create its new line of jeans.
- J** The Levi Strauss Company, a leader in the clothing industry has started using all-natural materials to create its new line of jeans.

61 Read Sentence 16.

For example, a study showed that about 920 gallons of water was needed when each pair of Levi's® jeans was produced.

Which revision of the sentence uses an infinitive?

- A** For example, a study showed that about 920 gallons of water was needed to produce each pair of Levi's® jeans.
- B** For example, a study demonstrated to experts that about 920 gallons of water was needed for producing each pair of Levi's® jeans.
- C** For example, a study showed that close to 920 gallons of water was needed in the production of each pair of Levi's® jeans.
- D** For example, the most effective study up to the present found that about 920 gallons of water was needed so that each pair of Levi's® jeans could be produced.

62 Read Sentence 7.

Additionally, even the process the company uses to make these jeans are minimizing damage to Earth.

Choose the best revision of the underlined words.

- F** minimize
- G** minimizes
- H** have minimized
- J** correct as is

63 Read Sentence 2.

So people recycle or work to help the environment, they are “going green.”

Which subordinating conjunction best replaces the underlined word?

- A Before
- B When
- C How
- D Unless

64 Read Sentence 17.

That water is like running for 106 minutes through a garden hose.

What is the best way to write this sentence?

- F That is like running water through a garden hose for 106 minutes.
- G That is, running water through a garden hose for like 106 minutes.
- H Through a garden hose, that water is like running for 106 minutes.
- J Correct as is

65 Read Sentence 11.

All-natural products such as, potatoes mimosa flowers starch and a special French soap are mixed together to give the jeans a blue color.

Choose the revision that shows correct comma usage in the sentence.

- A** All-natural products, such as potatoes, mimosa, flowers, starch, and a special French, soap are mixed together to give the jeans a blue color.
- B** All-natural products such as potatoes, mimosa flowers, starch and a special French soap are mixed together to give the jeans a blue color.
- C** All-natural products, such as, potatoes mimosa flowers starch and a special French soap are mixed together to give the jeans a blue color.
- D** All-natural products, such as potatoes, mimosa flowers, starch, and a special French soap, are mixed together to give the jeans a blue color.

66 Read Sentence 9.

The materials used come from nature for the new Levi's® jeans, the denim cloth is made from 100 percent organic cotton.

What is the best way to correct this run-on sentence?

- F** The materials used come from nature for the new Levi's® jeans; and the denim cloth is made from 100 percent organic cotton.
- G** The materials used come from nature for the new Levi's® jeans, since the denim cloth is made from 100 percent organic cotton.
- H** The materials used come from nature for the new Levi's® jeans; the denim cloth is made from 100 percent organic cotton.
- J** The materials used come from nature for the new Levi's® jeans, but with denim cloth made from 100 percent organic cotton.

Go On ►

67 Read Sentences 12 and 13.

The materials used are safe for the environment and protect the planet. These materials produced a great pair of pants.

What is the best way to combine these sentences?

- A** Because both protecting the planet and producing a great pair of pants are safe for the environment, these materials are used.
- B** The materials used are safe for the environment and protect the planet, or a great pair of pants is produced from these materials.
- C** The materials used are safe for the environment and protect the planet a great pair of pants is produced from these materials.
- D** Using materials that are safe for the environment protects the planet; it produces a great pair of pants too.

68 Which sentence, if added, would best support the ideas presented in the third paragraph?

- F** More than just one company can save money by conserving water.
- G** The company now saves more than one million gallons of water annually.
- H** When a company makes small changes in production it can have a positive impact on the environment.
- J** This company is conserving water in a way that customers can copy by simply washing their jeans in cold water.

Directions

Read the flier. Then answer Numbers 69 through 76.

Announcing Hamilton School District's Annual Creative Writing Contest

Are you the next J.K. Rowling, Judy Blume, E.B. White, or Dr. Seuss?
If you think so, start writing!

Deadline: February 14, 2012

Awards: One award per grade and category	
First prize*	\$50 gift card: Bound to Be Read Bookstore
Second prize	\$25 certificate: Page-Turner's Used Books
Third prize	One-year subscription: <i>Kids Write Magazine</i>



*First-place winners will also receive invitations (for themselves and a guest) to the awards luncheon. Winners will be invited to read their winning entries.

Contest Details



- Students in Grades 4 through 12 are encouraged to participate.
- Categories for submissions include fiction, poetry, and nonfiction.
- Prizes will be awarded in EACH category for every grade level.
- Student writing must be based on the specific themes outlined below.
- All entries must be original and follow the submission guidelines.
- Students may submit only one entry.

Creative Writing Categories



Fiction: These original stories should be no more than 1500 words in length. Common fictional elements such as setting, plot, and character development, as well as traditional literary devices should be included. The theme should center on overcoming a challenge.

Poetry: Rhyming or non-rhyming poetry that tells a story (narrative) or describes feelings, impressions, and thoughts (lyric) must not exceed 250 words. The theme should center on a season (winter, spring, summer, fall).

Go On ►

Nonfiction: Prose that contains facts but is written with literary devices and original style must be limited to 1000 words. The theme should center on an important event in your life.

Submission Guidelines



- Each school will set up a submission drop-off box in the school office.
- Submissions will be accepted from January 20 until 3:30 P.M. on February 14.
- Winners will be announced at each school on April 2.

Submission Instructions



1.) Format:

- Times New Roman font, point size 12
- Fiction and Nonfiction, double-spaced
- Poetry, single-spaced

2.) Heading on the upper left corner of each page should include:

- Contestant's full name
- Grade
- School's name
- Category of the work (Fiction, Poetry, Nonfiction)

3.) All copies should be grammatically correct and contain no spelling errors.

4.) Keep a copy of your submission because the work will not be returned.

5.) Use one large manila envelope to submit the entry form with the entry.
Label the outside front of the envelope with the following information:

- Contestant's full name
- Grade
- School name

6.) Place your envelope in your school's drop-off box by the stated deadline.

Follow the guidelines closely, and good luck!



69 Presenting the flier to students will most likely cause them to

- A** experiment with different literary features in their writing.
- B** model their writing after that of their favorite authors.
- C** consider publishing more of their writing in the future.
- D** become excited about writing for a genuine purpose.

70 Read the analogy.

Narrative is to story as lyric is to _____.

Which word best completes the analogy?

- F** rhyming
- G** poetry
- H** feelings
- J** theme

71 According to the awards chart, the creator of the contest believes that

- A** students who write also enjoy reading.
- B** different competitions appeal to different students.
- C** winners should be able to select their prizes.
- D** interested students will be able to write well.

Go On ►

72 Which question is answered in the section “Submission Guidelines”?

- F** What is the appropriate heading for each page?
- G** What is expected of entries in each writing category?
- H** When will entries be accepted for award consideration?
- J** When is the award luncheon for the first-place winners?

73 Based on the flier, which information is important for students to include in submissions for the fiction category?

- A** a description of a personal experience
- B** the characters’ reactions to difficulty
- C** a setting that clearly defines a season
- D** the point of view of an all-knowing narrator

74 Under which heading from the flier would students find eligibility requirements?

- F** Contest Details
- G** Creative Writing Categories
- H** Submission Guidelines
- J** Submission Instructions

75 According to the prizes on the chart, the reader can conclude that

- A** more second- and third-place prizes will be distributed than first-place prizes.
- B** more first-place prizes will be awarded to Grade 12 students than Grade 4 students.
- C** a certificate for Page-Turner's Used Books is more appealing than a gift card for the Bound to Be Read Bookstore.
- D** a one-year subscription to *Kids Write Magazine* costs less than the certificate to Page-Turner's Used Books.

76 The primary purpose of the flier is to

- F** share information about some famous authors.
- G** describe the different types of creative writing.
- H** explain how participation can improve writing skills.
- J** provide information necessary to enter the writing contest.

Directions Read and answer Numbers 77 through 83.

77 Choose the sentence that uses the underlined word correctly.

- A** My sister set at her desk in homeroom surrounded by her friends.
- B** “Peter,” said Ms. Smith, “you can sit the book on the table by the door.”
- C** Mr. Washington likes to sit at his workbench in the evenings.
- D** Connie said, “You will all have to set very still for the photographer.”

78 Cheryl calls on other members of her project group to find out what their progress has been. She is most likely the group’s

- F** leader.
- G** recorder.
- H** timekeeper.
- J** information gatherer.

79 The bus routes and pickup times for a school district will change when the new school year begins. What is the best way for the superintendent to convey this information to families in the school district?

- A** announce instructions over the school loudspeaker
- B** post changes on a bulletin board at the school
- C** send a letter to parents in the school district explaining the new plan
- D** present a speech about the changes at a school board meeting

80 Read this paragraph from an essay about the life cycle of dragonflies.

Dragonflies have a variety of shapes and dazzling colors, but all experience the same life cycle. So beloved are dragonflies that many countries feature them on stamps. Beginning as eggs, they hatch and enter a larval stage spent in the water. At this point in its development, the dragonfly is called a “nymph.” As the nymph grows, it becomes more like an adult dragonfly. In fact, near the end of the nymph stage, dragonflies look much like wingless dragonflies. Finally, the wings emerge, and the adult dragonfly achieves the familiar form most people recognize.

Which sentence should not be included in the paragraph?

- F** Dragonflies have a variety of shapes and dazzling colors, but all experience the same life cycle.
- G** So beloved are dragonflies that many countries feature them on stamps.
- H** As the nymph grows, it becomes more like an adult dragonfly.
- J** Finally, the wings emerge, and the adult dragonfly achieves the familiar form most people recognize.

81 The response to accept or decline an invitation is called the

- A** *du jour*.
- B** *faux pas*.
- C** *bon voyage*.
- D** RSVP.

Go On ►

82 An interactive website allows users to use the mouse to point toward parts of digital cameras and learn what they do, how to adjust them, and how they produce the digital image. The main purpose of this website is most likely to

- F** persuade users to purchase the camera.
- G** inform users about the features of digital cameras.
- H** entertain users by allowing them to play with digital cameras.
- J** describe for users how fun digital cameras can be.

83 Look at this photograph.



A public service group is using this photograph in a poster promoting the health benefits of eating fruits and vegetables. Which caption would be best for the poster?

- A** Just What the Doctor Ordered!
- B** An Apple a Day!
- C** Time to Eat Your Vegetables!
- D** Fresh from the Garden!

STOP 

**DO NOT
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Mathematics



Part 1

- 1** The table below shows how the 2009 population of Tennessee was represented by different age groups.

Tennessee Population in 2009

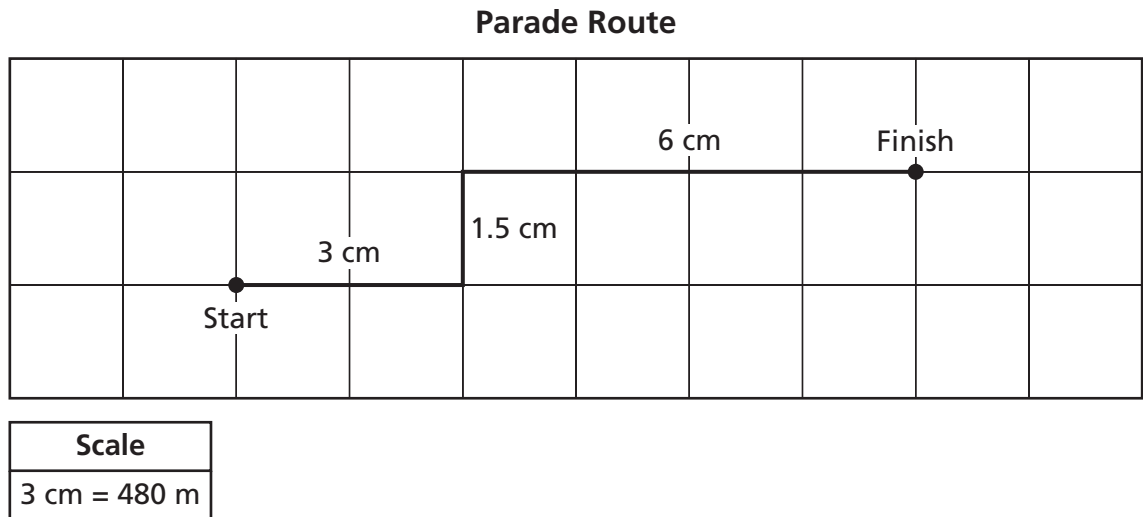
Age Group	Percent of Total Population
0 to 4	7
5 to 18	17
19 to 64	63
65 and over	13

Based on this information, which ratio represents the percent of the total population who were in the 65 and over age group to the percent of the total population who were in the 0 to 18 age group in Tennessee in 2009?

- A** 1:8
- B** 1:5
- C** 13:24
- D** 13:17

Go On ►

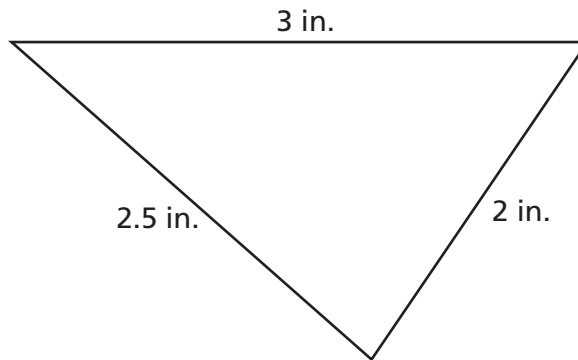
- 2** The map below shows a proposed parade route. The scale shown on the map relates centimeters (cm) to meters (m).



According to the scale, what is the actual length of the proposed parade route?

- 3** An empty water bottle has a weight of 1.2 pounds. When full, the bottle holds about 1.11 pounds of water. Which equation best represents the relationship between x , the number of these bottles that are filled with water, and y , the total weight, in pounds, of the filled bottles?
- A** $y = 1.2x + 1.11$
 - B** $y = 1.11x + 2.31$
 - C** $y = 1.2x$
 - D** $y = 2.31x$

- 4** The logo for a bank is in the shape of a triangle. The side lengths of the logo used on the bank's business letters are labeled below in inches.



A similarly shaped logo will appear on billboards. The longest side of the triangle on the billboard will be 36 feet. What will be the length of the shortest side of the triangle on the billboard?

- F** 24 ft
- G** 26 ft
- H** 30 ft
- J** 35 ft

- 5** Which inequality is true?

- A** $\frac{4}{20} < \frac{3}{25}$
- B** $\frac{7}{20} > \frac{8}{25}$
- C** $\frac{12}{25} < \frac{9}{20}$
- D** $\frac{13}{25} > \frac{11}{20}$

6 David filled his fish tank by pouring pitchers of hot and cold water into the fish tank until it was full. He used h pitchers of hot water. The number of pitchers of cold water he used was 1 less than 2 times the number of pitchers of hot water he used. If David used a total of 17 pitchers of water to fill the fish tank, which equation can be used to find h ?

F $2h + 1 = 17$

G $2h - 1 = 17$

H $h + 2h + 1 = 17$

J $h + 2h - 1 = 17$

7 The rectangular floor of Jacob's bedroom and the rectangular floor of Jacob's closet are similar in shape. Each dimension of the bedroom floor is $2\frac{3}{4}$ times the corresponding dimension of the closet floor. The area of the closet floor is 20 square feet. Which measurement is closest to the area of the bedroom floor?

A 55 square feet

B 110 square feet

C 151 square feet

D 165 square feet

8 Terri played a card game with some friends. She started the game with a score of 0 points. On each of her first 5 turns, Terri lost 2 points. On her sixth turn, Terri won 6 points. Which integer best represents Terri's score after her sixth turn?

F -4

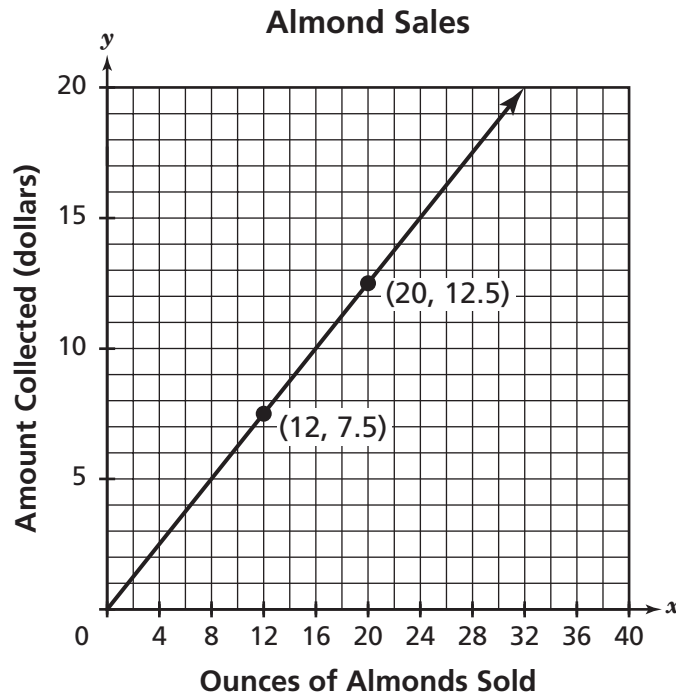
G -1

H 4

J 16

9

Dan sells almonds. The graph below shows the relationship between the number of ounces of almonds Dan sells and the amount he collects in dollars.



Which statement is best supported by the slope of this graph?

- A** When Dan sells 4 ounces of almonds, he collects \$5.
- B** When Dan sells 5 ounces of almonds, he collects \$8.
- C** Dan collects \$5 for every 8 ounces of almonds he sells.
- D** Dan collects \$4 for every 5 ounces of almonds he sells.

Go On ►

10 Sandy mixes 8 ounces of cream cheese with 12 ounces of salsa to make a dip for vegetables. She wants to use this mixture to make 48 ounces of dip. Exactly how many ounces of cream cheese should she use?

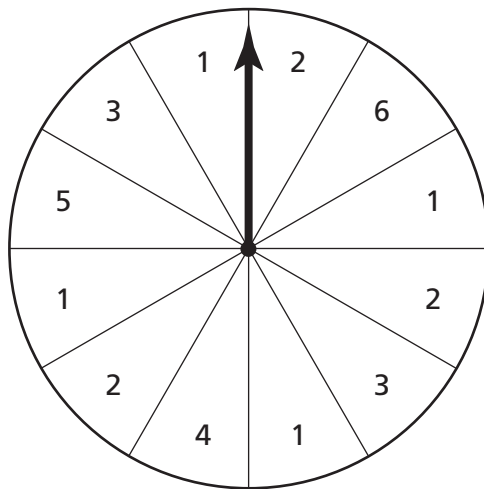
F $3\frac{1}{3}$ ounces

G $19\frac{1}{5}$ ounces

H 32 ounces

J 72 ounces

11 Ronald has a spinner with 12 equal sections, as shown below.



Ronald will spin the arrow on the spinner 60 times. Based on theoretical probability, what is the total number of times he should expect the arrow to land on an even number?

A 5

B 15

C 25

D 30

12 What is the value of the expression shown below?

$$10.8 - \sqrt{16} + 4\frac{1}{4}$$

- F** 2.55
- G** 6.30
- H** 7.05
- J** 11.05

13 Mr. O'Connor bought 5 large pizzas. After receiving a \$4 discount, he paid a total of \$55 for these pizzas. The equation below can be used to find p , the original cost, in dollars, of each pizza.

$$5p - 4 = 55$$

- A** \$10.20
- B** \$11.80
- C** \$12.50
- D** \$15.00

Go On ►

- 14** The table below shows corresponding values for t and w .

t	w
-3	11
0	2
3	-7
6	-16

Which equation best represents the pattern shown by the data in the table?

- F** $w = 9t + 2$
- G** $w = 3t + 20$
- H** $w = -3t + 2$
- J** $w = -9t + 20$

- 15** What is the value of $\frac{3}{4}x - \frac{1}{2}y$ when $x = 64$ and $y = 24$?

- A** 60
- B** 36
- C** 14
- D** 12

- 16** The table below shows the total distance run by each of five people last week.

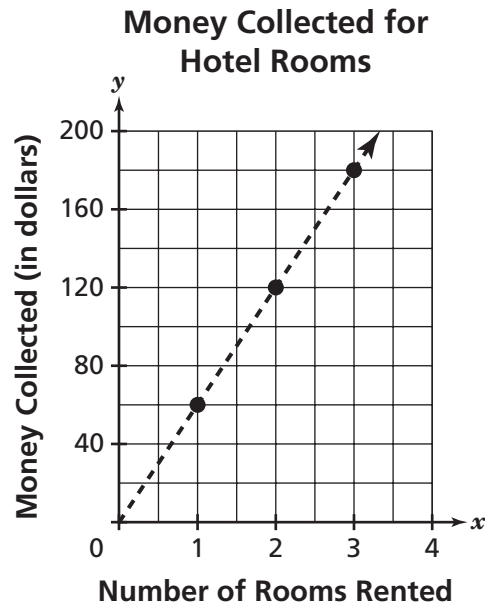
Distance Run Last Week

Name	Total Distance (in miles)
Albert	15
Jennifer	17
Lynda	25
Renee	18
Salvador	15

Which person ran a total distance that is equal to the median of this data set?

- F** Jennifer
 - G** Lynda
 - H** Renee
 - J** Salvador
- 17** For every 50 boxes of cereal a company produces, 3 boxes contain toys. The company produced 3,000 boxes of cereal on Wednesday. Exactly how many boxes of cereal containing toys were produced by this company on Wednesday?
- A** 20
 - B** 60
 - C** 100
 - D** 180

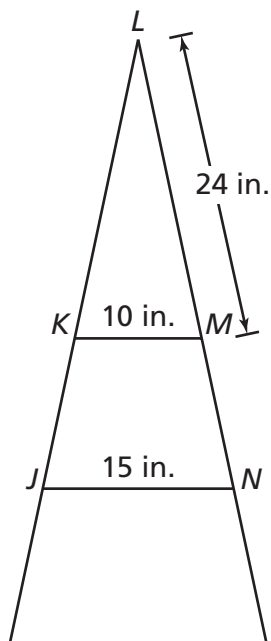
- 18** The graph below shows the relationship between the number of rooms that were rented at a hotel and the total amount of money collected by the hotel.



Based on the graph, exactly how many rooms were rented if the hotel collected a total of \$2,400?

- F** 40
- G** 45
- H** 48
- J** 60

- 19** The diagram below represents the side view of a ladder.



Triangle JLN is similar to Triangle KLM . What is the length of \overline{MN} ?

- A** 5 inches
- B** 12 inches
- C** 29 inches
- D** 36 inches

20 What value of x is the solution to the equation $\frac{1}{6} = \frac{3}{8}x - \frac{1}{3}$?

F $\frac{1}{12}$

G $\frac{3}{16}$

H $\frac{16}{27}$

J $\frac{4}{3}$

21 Which table represents a linear relationship between x and y ?

A

x	y
2	5
3	8
6	17
8	23
9	26

B

x	y
2	9
3	6
6	3
9	2
18	1

C

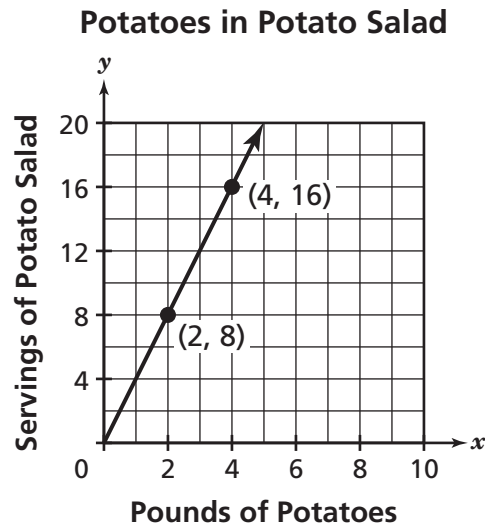
x	y
2	4
4	7
6	11
8	16
10	22

D

x	y
2	5
4	10
6	15
8	20
9	25

Go On ►

- 22** Mrs. Williams is making potato salad. The graph below shows the relationship between the number of servings of potato salad she makes and the number of pounds of potatoes she uses.



Which statement is supported by the slope of this graph?

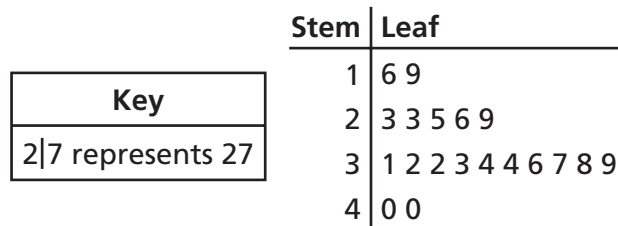
- F** To make 2 servings of potato salad, Mrs. Williams uses 1 pound of potatoes.
- G** To make 4 servings of potato salad, Mrs. Williams uses 1 pound of potatoes.
- H** To make 1 serving of potato salad, Mrs. Williams uses 12 pounds of potatoes.
- J** To make 3 servings of potato salad, Mrs. Williams uses 12 pounds of potatoes.

23 Heath mixes gasoline and oil to make fuel for his motorbike. He adds 16 fluid ounces of oil for every 2 gallons of gasoline. Exactly how many fluid ounces of oil does Heath need to add to

$3\frac{1}{4}$ gallons of gasoline to make this fuel?

- A** 14 fluid ounces
- B** $17\frac{1}{4}$ fluid ounces
- C** $24\frac{1}{4}$ fluid ounces
- D** 26 fluid ounces

24 The stem-and-leaf plot below shows the number of words each student in Mrs. Cook's class spelled correctly last month on a spelling test.



What is the interquartile range of this data set?

- F** 5
- G** 12
- H** 25
- J** 37

25 Sharla drew two similar triangles using a scale factor of $1\frac{1}{2}$. The area of the larger triangle is 36 square inches. What is the area of the smaller triangle?

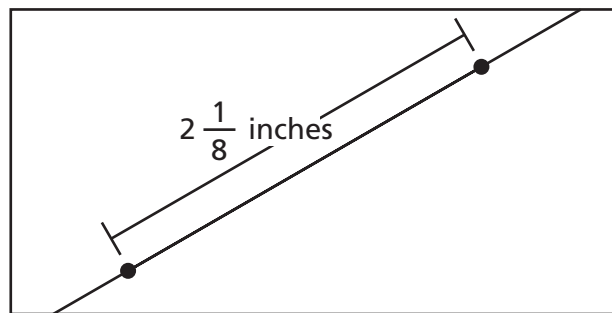
- A** 12 square inches
- B** 16 square inches
- C** 18 square inches
- D** 24 square inches

26 The scale on a map is shown below.

Scale

$$\frac{1}{4} \text{ inch} = 10 \text{ miles}$$

Patricia measured the distance between two points on this map, as shown below.



According to the scale shown, what is the actual distance between the two points?

- F** 5 miles
- G** 19 miles
- H** 24 miles
- J** 85 miles

27 Robert wrote a story. The introduction was 3 pages long, and each chapter was 6 pages long. Robert's story had a total of 99 pages. Which equation can be used to find c , the total number of chapters in Robert's story?

A $3c + 6 = 99$

B $3c - 6 = 99$

C $6c + 3 = 99$

D $6c - 3 = 99$

28 What is the value of the expression $\frac{1}{2}(4.5) + 3 \div \frac{3}{4}$?

F 7

G $6\frac{1}{4}$

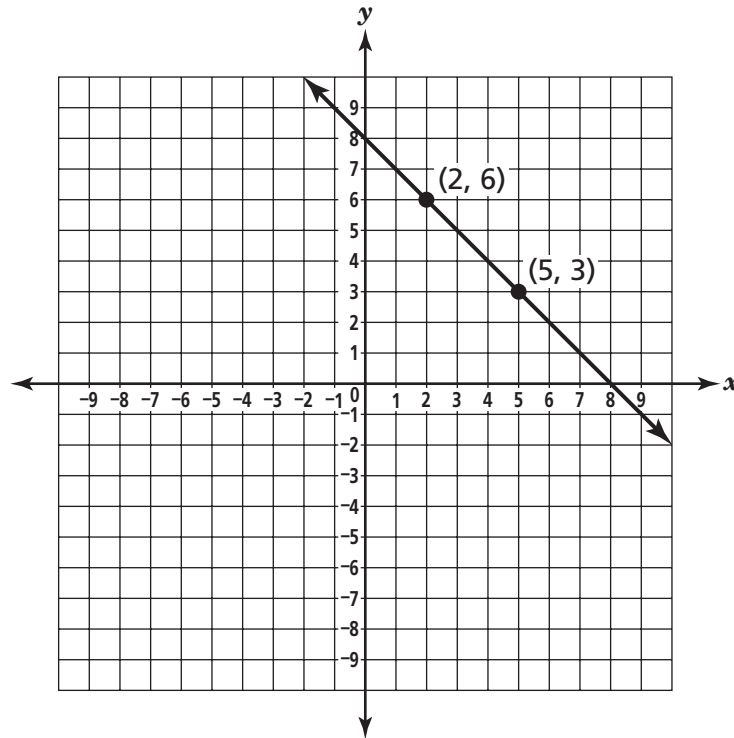
H 5

J $2\frac{1}{2}$

STOP 

Part 2

29 The graph below shows a linear relationship between x and y .



Based on the graph, which equation best represents the relationship between x and y ?

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

30 Frank needs to purchase cans of soda for a picnic. At the grocery store, he can purchase two 12-packs of soda for a total cost of \$5.99. At this rate, what will be the total cost to purchase 144 cans of soda?

- F** \$35.94
- G** \$71.88
- H** \$125.99
- J** \$143.76

31 Which inequality is true?

- A** $\frac{7}{12} < 0.8 < \frac{2}{3}$
- B** $\frac{7}{12} < 0.7 < \frac{2}{3}$
- C** $\frac{7}{12} < 0.6 < \frac{2}{3}$
- D** $\frac{7}{12} < 0.5 < \frac{2}{3}$

32 A large cylinder has a volume of about 5,400 cubic centimeters. A small cylinder is similar in shape to the large cylinder with a scale factor of $\frac{2}{3}$. Which measurement is closest to the volume of the small cylinder?

- F** 1,600 cubic centimeters
- G** 2,400 cubic centimeters
- H** 2,700 cubic centimeters
- J** 3,600 cubic centimeters

33 What is the value of $h - \frac{g+5}{6}$ when $g = 4$ and $h = 2\frac{2}{9}$?

A $\frac{13}{3}$

B $\frac{11}{3}$

C $\frac{13}{18}$

D $\frac{11}{18}$

34 Sharon owes her mother \$42. She borrows \$18 more from her mother to buy a DVD. Sharon will repay her mother in 4 equal payments. If Sharon has \$12, which statement is true?

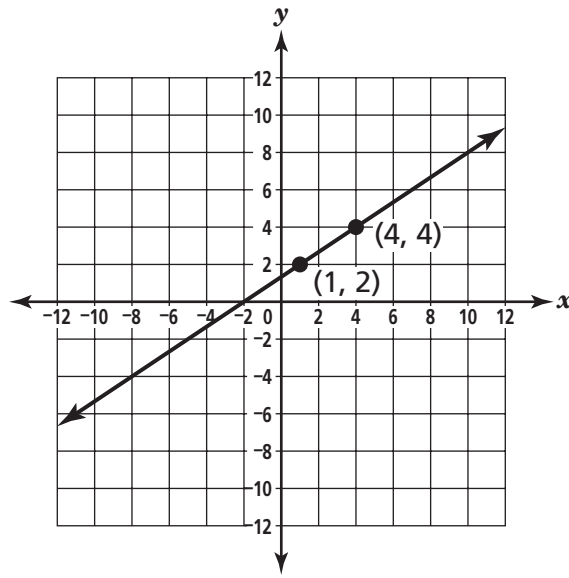
F Sharon has enough money for her first payment with no money left over.

G Sharon needs \$3 more in order to have enough money for her first payment.

H Sharon needs \$4 more in order to have enough money for her first payment.

J Sharon has enough money for her first two payments with no money left over.

- 35** The graph below represents a linear equation.



What value of x makes this equation true when $y = -2$?

- A** -5
- B** 0
- C** 1
- D** 3

36 Which table represents a relationship between x and y that is directly proportional?

F

x	y
2	$\frac{1}{4}$
4	$\frac{1}{8}$
6	$\frac{1}{12}$
8	$\frac{1}{16}$
10	$\frac{1}{20}$

H

x	y
3	$\frac{15}{7}$
6	$\frac{12}{7}$
9	$\frac{9}{7}$
12	$\frac{6}{7}$
15	$\frac{3}{7}$

G

x	y
2	7
4	11
6	15
8	19
10	23

J

x	y
3	8
6	16
9	24
12	32
15	40

37 Lila bought some fabric online for \$318. This amount included a \$6 shipping fee, and each yard of fabric cost \$12. Which equation can be used to find x , the number of yards of fabric Lila bought?

- A** $12x - 6 = 318$
- B** $12x + 6 = 318$
- C** $12(x - 6) = 318$
- D** $12(x + 6) = 318$

38 Jordan read in a newspaper that about 26% of households in the United States have one dog as a pet. Which best represents the fraction of households in the United States that have one dog as a pet?

F $\frac{13}{50}$

G $\frac{13}{37}$

H $\frac{13}{32}$

J $\frac{13}{25}$

39 Ben is drawing a series of regular polygons. Every side in every polygon is the same length. The table below shows the relationship between the number of sides in the polygon and the perimeter of the polygon.

Regular Polygon Perimeters

Number of Sides	Perimeter (in centimeters)
3	21
5	35
6	42
8	56

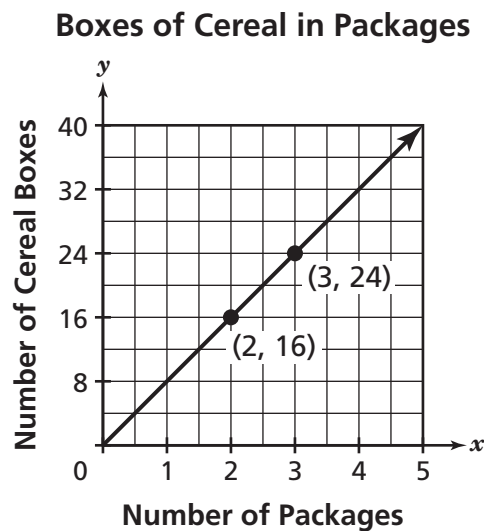
Ben will draw a regular polygon with 12 sides that are all the same length as the sides in the other polygons. What will the perimeter of the 12-sided polygon be?

- A** 63 inches
- B** 77 inches
- C** 84 inches
- D** 98 inches

40 An airplane is descending at a rate of 450 feet every 30 seconds. At this rate, which is closest to the number of feet the airplane will descend in 6 minutes?

- F** 1,350 feet
- G** 2,250 feet
- H** 5,400 feet
- J** 8,100 feet

41 A restaurant owner is buying packages of single-serving boxes of cereal. The graph below shows the relationship between the number of packages and the number of cereal boxes.



Which statement best describes the slope of this graph?

- A** The slope of the graph represents the number of cereal boxes in each package.
- B** The slope of the graph represents the number of packages of cereal boxes that the restaurant bought.
- C** The slope of the graph represents the number of cereal boxes in the packages that the restaurant bought.
- D** The slope of the graph represents the number of packages of cereal boxes that the restaurant uses each week.

42 Gary has a stack of 20 cards that are the same size and shape. Each card has a different number from 1 through 20 written on it. Gary will select a card at random from the stack, record the number on the card, and replace the card in the stack. He repeats this process a total of 300 times. Based on theoretical probability, what is the total number of times he should expect to record a number that is odd and a multiple of 3?

F 15

G 45

H 53

J 90

43 Amy spent \$42 for 3 gallons of paint and some paintbrushes. Amy spent \$7.50 for the paintbrushes. The equation below can be used to find g , the total cost, in dollars, of each gallon of paint.

$$3g + 7.5 = 42$$

What is g , the total cost of each gallon of paint?

A \$5.20

B \$6.00

C \$11.50

D \$16.50

Go On ►

44 Joseph is mixing cleaning solution with water to clean his kitchen floor. He should use 1 fluid ounce of cleaning solution for every $\frac{1}{2}$ gallon of water. If Joseph fills a bucket with $4\frac{1}{2}$ gallons of water, exactly how many fluid ounces of cleaning solution should he use?

- F** 9 fluid ounces
- G** 5 fluid ounces
- H** $2\frac{2}{5}$ fluid ounces
- J** $2\frac{1}{4}$ fluid ounces

45 The heights, in inches, of the five starting players on a basketball team are listed below.

73, 79, 76, 74, 73

What is the mean of this data set?

- A** 73 inches
- B** 74 inches
- C** 75 inches
- D** 76 inches

46 What is the value of the expression $\frac{3}{8} + 0.75(2.2) - \frac{2}{5}$?

F $1\frac{5}{8}$

G $1\frac{29}{40}$

H $1\frac{39}{50}$

J $2\frac{3}{40}$

47 The lowest point in Tennessee has an elevation of 178 feet. The lowest point in the United States has an elevation of -282 feet. Michelle plans to drive from the lowest point in Tennessee to the lowest point in the United States. Which integer best represents the overall change in elevation for Michelle's trip?

A 460 feet

B 104 feet

C -104 feet

D -460 feet

Go On ►

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

x	y
-2	5
0	1
2	-3

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

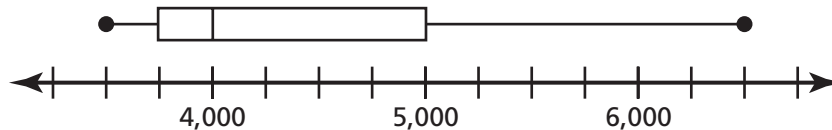
- F** $y = -5x - 5$
- G** $y = -2x + 1$
- H** $y = x - 5$
- J** $y = x + 1$

- 49** What value of x makes the equation below true?

$$2\left(\frac{2}{5}x + 3\right) = 14$$

- A** $\frac{10}{3}$
- B** $\frac{25}{3}$
- C** 10
- D** 25

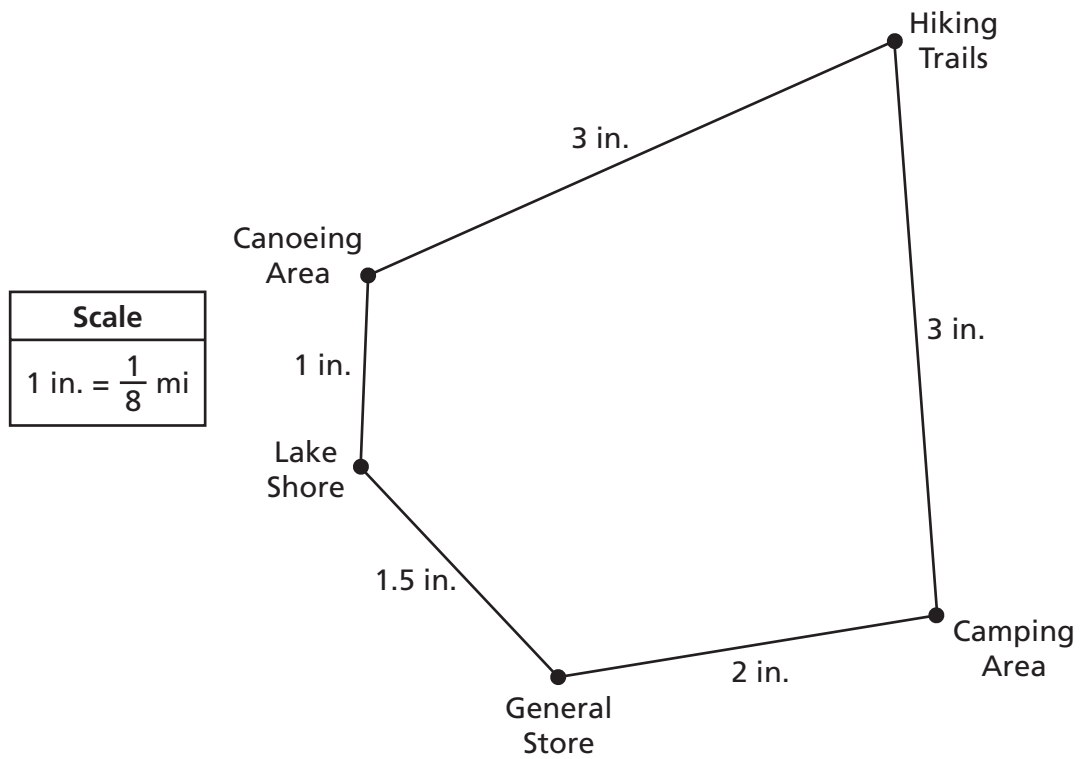
- 50** There are 19 people working at a business. The box-and-whisker plot shows information about the monthly salaries of these 19 people.



If each of the 19 people earns a different monthly salary, which statement must be true, based on the box-and-whisker plot?

- F** Exactly 4 people earn \$5,000 or more each month.
- G** Exactly 5 people earn less than \$3,500 each month.
- H** Exactly 8 people earn less than \$4,000 each month.
- J** Exactly 10 people earn \$4,000 or more each month.

- 51** The map below shows locations and paths in a state park where Joshua is camping. The scale shown on the map relates inches (in.) to miles (mi).



According to the scale, what is the shortest distance that Joshua can walk from the camping area to the canoeing area and then back to the camping area using the trails shown?

- A** $\frac{9}{16}$ mile
- B** $\frac{3}{4}$ mile
- C** $1\frac{1}{8}$ miles
- D** $1\frac{1}{2}$ miles

52 What is the value of $2j \div 3k$ when $j = \frac{3}{4}$ and $k = \frac{5}{6}$?

F $\frac{3}{5}$

G $\frac{33}{46}$

H $3\frac{3}{4}$

J $10\frac{13}{24}$

53 Which inequality is not true?

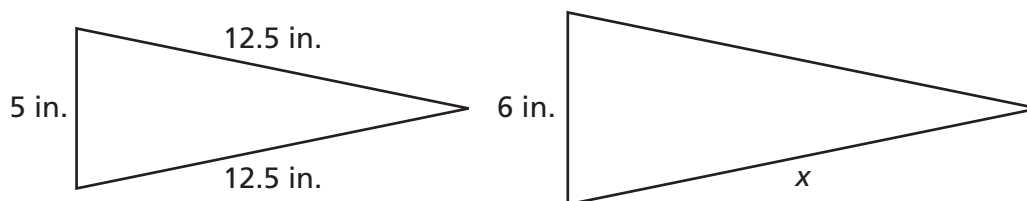
A $1\frac{3}{4} \leq 1.75$

B $2\frac{3}{8} \leq 2.38$

C $3\frac{3}{7} \geq 3.38$

D $4\frac{2}{5} \geq 4.52$

- 54** Shawn has the two flags shown below.



The flags are similar in shape. What is the value of x , if it represents one of the longer sides of the larger flag?

- F** 12.6 inches
 - G** 13.5 inches
 - H** 14 inches
 - J** 15 inches
- 55** In Leah's art class, 7 students are in the seventh grade, and the other 18 students are in the eighth grade. What percent of the students in Leah's art class are in seventh grade?
- A** 39%
 - B** 28%
 - C** 25%
 - D** 11%

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Part 1

- 1** A student has an unidentified mineral. The student wants to identify the mineral using information from the Mohs hardness scale, shown below. The student has a mineral identification kit that includes a piece of plastic, a copper coin, a glass plate and a steel file.

Mohs Hardness Scale

Mineral	Hardness	
Talc	1	← Piece of plastic, 1
Gypsum	2	
Calcite	3	← Fingernail, 2.5
Fluorite	4	
Apatite	5	← Copper coin, 4.5
Orthoclase	6	← Glass plate, 5.5
Quartz	7	← Steel file, 6.5
Topaz	8	
Corundum	9	
Diamond	10	

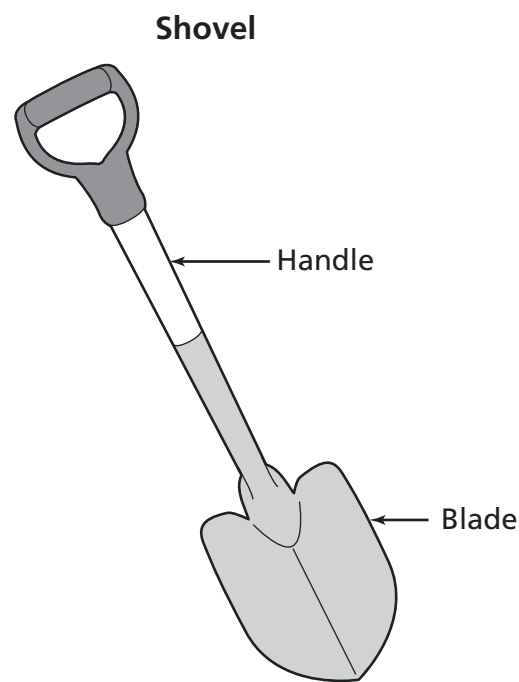
Based on these hardness values, which result could identify the mineral as apatite?

- A** The mineral can be scratched by both a fingernail and a piece of plastic.
- B** The mineral can be scratched by a glass plate, but not by a copper coin.
- C** The mineral can be scratched by a steel file but not by a glass plate.
- D** The mineral can be scratched by both a copper coin and a glass plate.

2 Which is a function of the nucleolus of a cell?

- F** producing ribosomes
- G** forming lysosomes
- H** digesting proteins
- J** packaging wastes

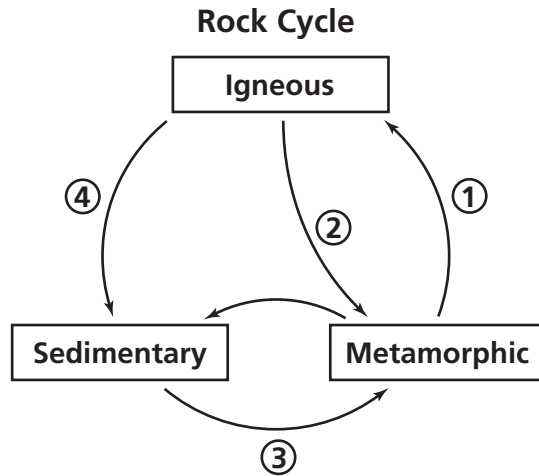
3 A shovel is shown below. A shovel is made up of two different simple machines.



The blade of the shovel acts as one type of machine as it separates soil when it enters the ground. The handle of the shovel acts as a second type of machine when the person using it lifts the soil. What two simple machines make up a shovel?

- A** pulley and wedge
- B** screw and inclined plane
- C** lever and pulley
- D** wedge and lever

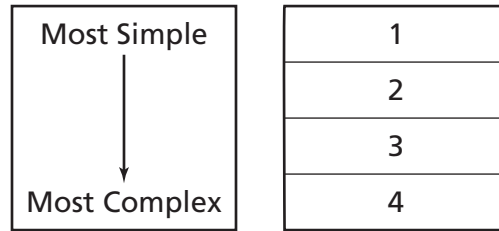
- 4** A student made a diagram of the rock cycle, as shown below. The arrows represent processes that transform one type of rock into another.



Which numbered arrow in the diagram most likely includes weathering?

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

- 5** A student is making a chart of different levels of organization in the body of an organism.



Which term belongs in Level 1?

- A** Heart Muscle
- B** Circulatory System
- C** Blood Cell
- D** Cardiac Muscle Tissue

- 6** A student uses a lever to apply a 20-newton force to a box while moving the box a distance of 0.5 meter.

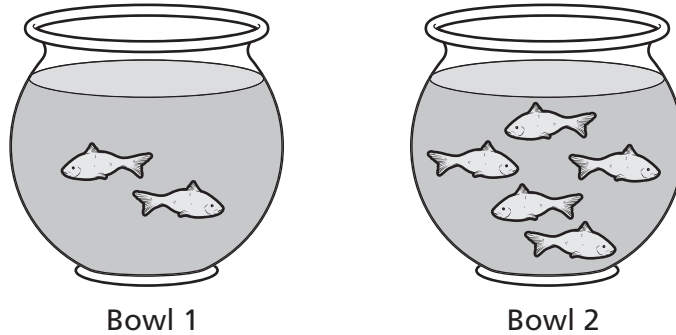
$$\text{Work}(w) = \text{Force}(F) \times \text{Distance}(d)$$

How much work did the student do while moving the box?

- F** 10 joules
- G** 40 joules
- H** 100 joules
- J** 400 joules

7

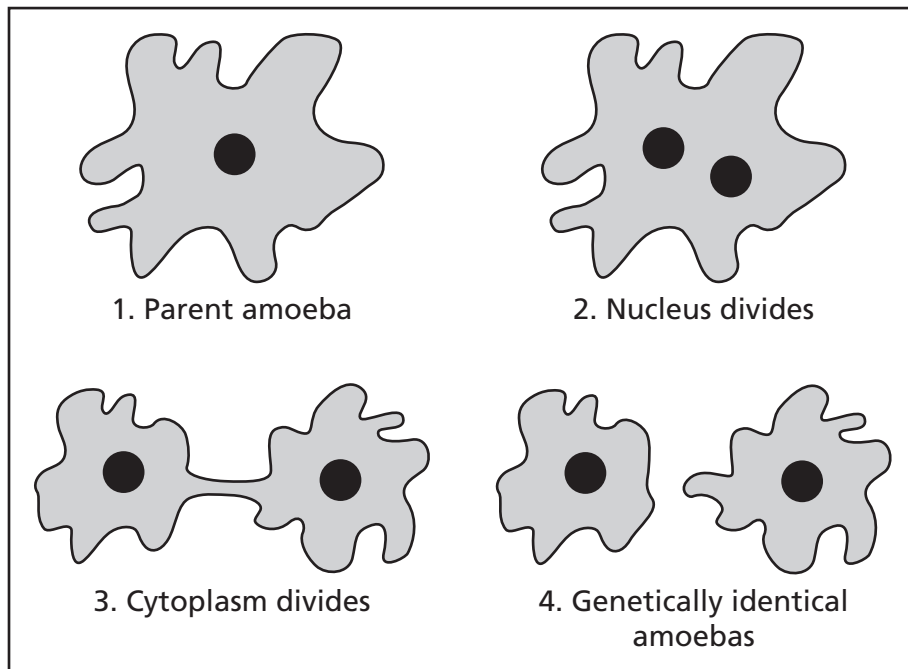
Students design an experiment to find out if goldfish grow larger if fewer fish live in a bowl. The students measured the lengths of seven goldfish and placed them in identical bowls. Two goldfish were placed in Bowl 1 and five goldfish in Bowl 2, as shown below.



The students plan to feed the fish the same amount of food and keep the water conditions the same for six months. Then the students will measure the lengths of all the fish and compare their growth. What is the dependent variable in this investigation?

- A** lengths of the fish
- B** number of fish per bowl
- C** amount of food per fish
- D** condition of the water

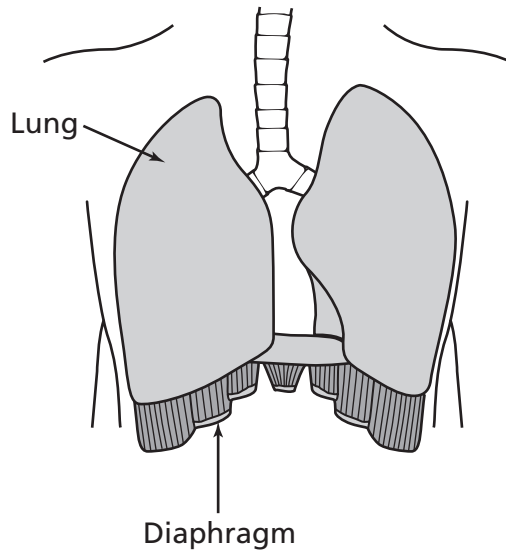
- 8** The diagram below shows one parent amoeba forming two daughter amoebas.



What term best describes this process?

- F** incomplete metamorphosis
 - G** fertilization
 - H** asexual reproduction
 - J** diffusion
- 9** Small rock particles roll downhill into rivers and oceans and eventually become cemented together. This cemented material forms
- A** igneous rock.
 - B** metamorphic rock.
 - C** molten rock.
 - D** sedimentary rock.

10 The picture below shows human lungs and diaphragm.



Which two body systems work together when the diaphragm contracts and relaxes, causing air to move in and out of the lungs?

- F** muscular and respiratory
- G** circulatory and digestive
- H** nervous and immune
- J** excretory and skeletal

- 11** A high-speed train traveled at a rate of 120 kilometers per hour for 10 hours.

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

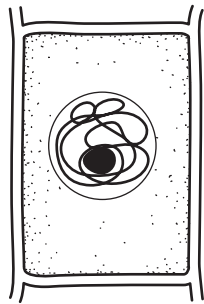
What distance did the train travel?

- A** 12 kilometers
- B** 20 kilometers
- C** 110 kilometers
- D** 1,200 kilometers

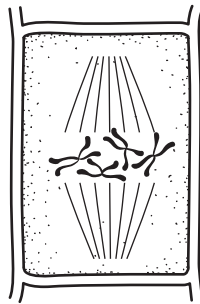
- 12** The thinnest layer of Earth ranges in thickness between 7 kilometers and 70 kilometers. Which layer is being described?

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

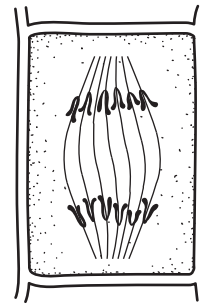
13 The diagrams below represent three stages of plant cell division.



Prophase



Metaphase



Anaphase

What occurs in the next stage of plant cell division?

- A** Sister chromatids become visible.
- B** Sister chromatids separate.
- C** The chromosomes move to the middle of the cell.
- D** A cell plate forms in the middle of the cell.

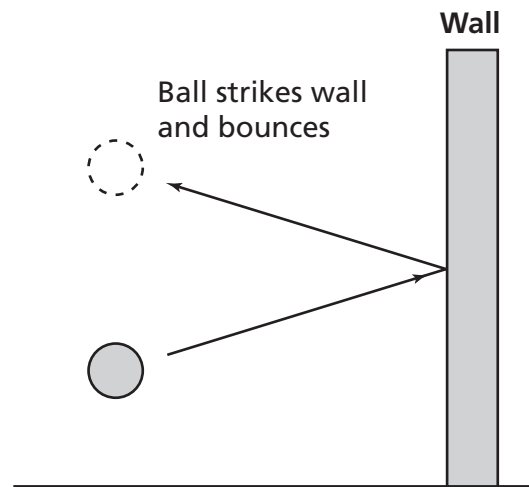
14 Which set of tools is best to observe the different stages of plant cell division?

- F** test tube and distilled water
- G** petri dish and metric ruler
- H** hot plate and Erlenmeyer flask
- J** light microscope and slides

15 What part of a flower produces female reproductive cells?

- A** anther
- B** ovary
- C** sepal
- D** filament

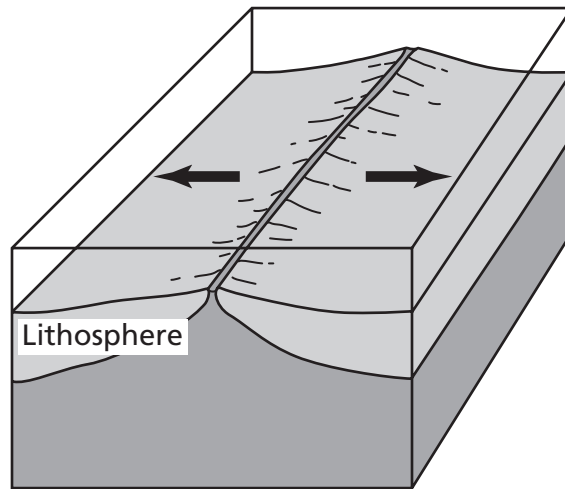
16 A student throws a ball against a wall as shown in the picture below.



Which statement best explains what is happening in the picture?

- F** The energy of the ball is destroyed as it strikes the wall.
- G** The energy of the ball becomes negative as it strikes the wall.
- H** The force from the wall on the ball is equal and opposite to the force from the ball on the wall.
- J** The force exerted by the wall on the ball is greater than the force exerted by the ball on the wall.

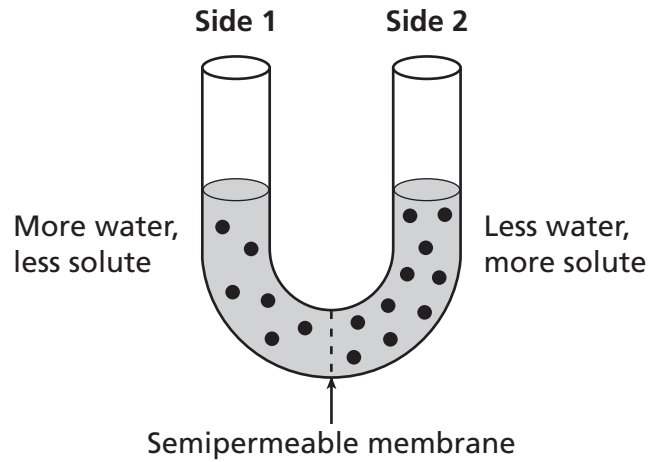
- 17** The diagram below shows two lithospheric plates moving away from each other.



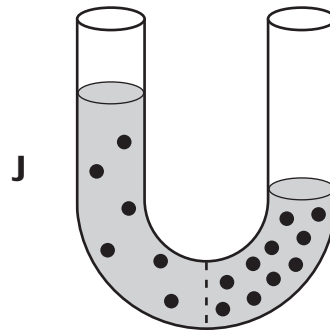
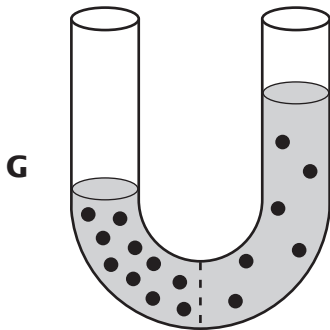
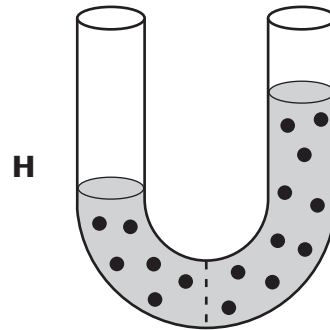
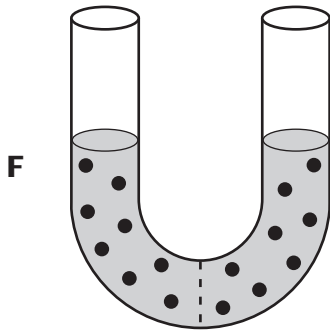
Which best describes plate movement rate?

- A** 50 kilometers per year
- B** 5 kilometers per year
- C** 50 meters per year
- D** 5 centimeters per year

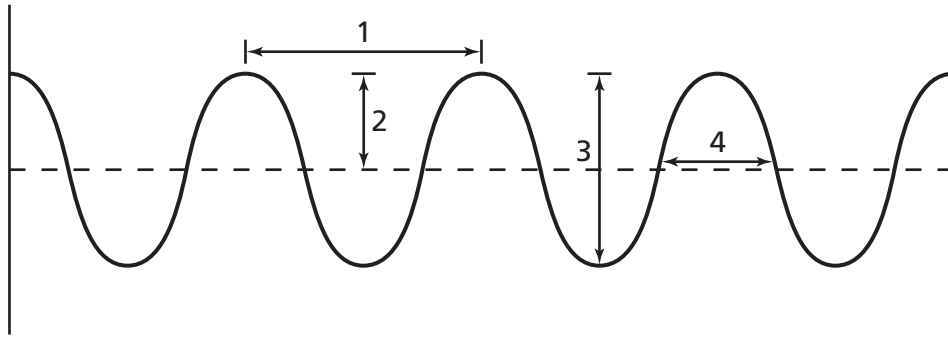
18 A teacher set up a lab investigation using a semipermeable membrane. Water can pass freely across the membrane but solute cannot.



How will the setup most likely appear after one hour if left undisturbed?



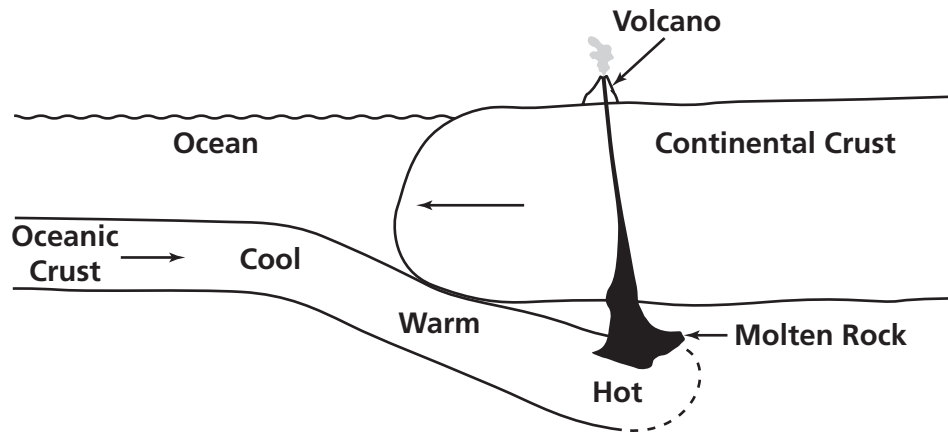
19 The diagram below shows a wave.



Which label represents the wavelength?

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

20 A student studied a diagram that was in a science book.



The diagram shows a volcano formed because

- F** one tectonic plate melted as it moved beneath another.
- G** there was a lack of ocean water over the continental crust.
- H** high tide changed to low tide along the coast line.
- J** there was difference in thickness between two tectonic plates.

21 Two siblings express different eye colors. The brother has brown eyes but the sister has blue eyes. Which statement explains why the siblings express different eye color?

- A** The siblings inherited a different number of chromosomes for eye color.
- B** The brother received traits only from his father, and the sister received traits only from her mother.
- C** The siblings each received a different combination of genetic information from their parents.
- D** The brother received fewer genes from his mother than his sister received.

22 Which substance is a product of photosynthesis and is used as a reactant in respiration?

- F** water (H_2O)
- G** carbon dioxide (CO_2)
- H** oxygen (O_2)
- J** hydrogen (H_2)

23 Which of these best describes an electromagnetic wave?

- A** An electromagnetic wave is transverse and can travel through a vacuum.
- B** An electromagnetic wave is longitudinal and can only travel through solids.
- C** An electromagnetic wave is transverse and can only travel through solids.
- D** An electromagnetic wave is longitudinal and can travel through a vacuum.

24 Human use of chemicals containing chlorofluorocarbons (CFCs) has contributed to a thinning of the ozone layer in the atmosphere. The ozone layer absorbs ultraviolet radiation from the sun. Which best describes a negative consequence of the thinning of the ozone layer?

- F** too many nutrients are available in oceans
- G** animal cells have become damaged
- H** less light is available for plant growth
- J** less precipitation happens in rain forests

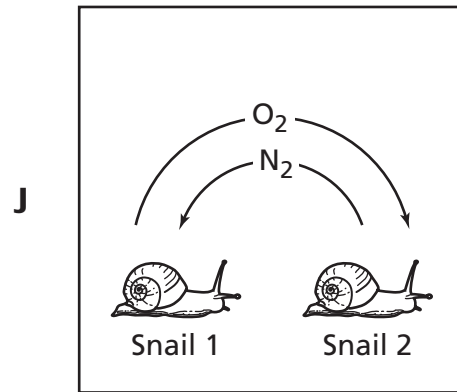
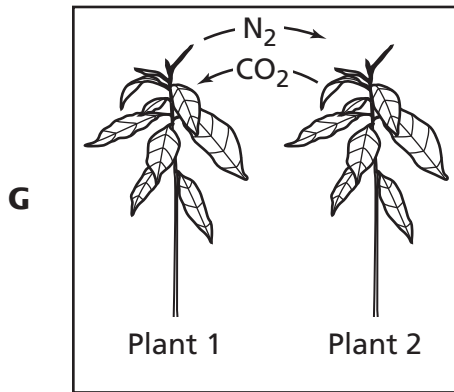
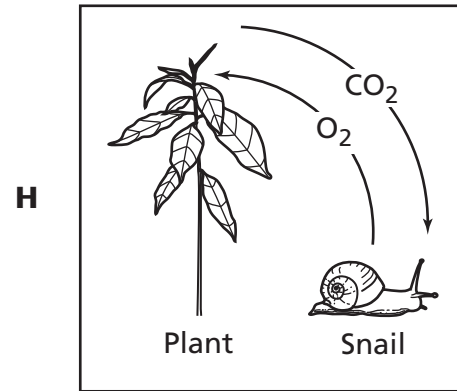
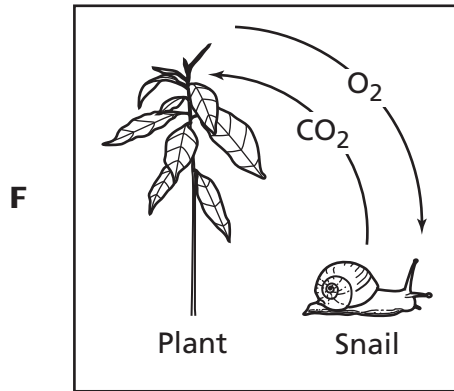
- 25** In a certain breed of dog, short hair (H) is dominant to long hair (h). A short-haired dog (Hh) is crossed with a long-haired dog (hh). A Punnett square of this cross is shown below.

	H	h
h		
h		

What is the probability that one of the puppies produced by these parents will have short hair?

- A** 0%
- B** 25%
- C** 50%
- D** 100%

26 Which diagram correctly shows the exchange of gases between two organisms?



27 A lever and an inclined plane are shown below.



Which of these best describes a function of these simple machines?

- A** They both can overcome friction with a rolling motion.
- B** They both can secure two parts of an object together.
- C** They both can separate two parts of an object.
- D** They both can help raise objects from the ground.

28 A student has an unidentified mineral sample. The mineral is gray and leaves a white streak. The student could scratch the mineral with a copper coin that has a hardness of 3.5, but not with a fingernail that has a hardness of 2.5.

Mineral Information

Name	Common Colors	Streak	Mohs Hardness
Graphite	Silver, gray, black	Gray	2
Talc	White, yellow, gray, green	White	1
Orthoclase	White, pink	White	6
Calcite	Clear, white, gray, brown, yellow, orange, pink, blue, green	White	3

Based on the information in the table, which mineral does the student have?

- F** Graphite
- G** Talc
- H** Orthoclase
- J** Calcite

29 Which statement about sexual reproduction is correct?

- A** Two gametes combine during sexual reproduction.
- B** Sexual reproduction is only used by organisms in the animal kingdom.
- C** An organism divides into two equal parts during sexual reproduction.
- D** Sexual reproduction is only used by single-cell organisms.

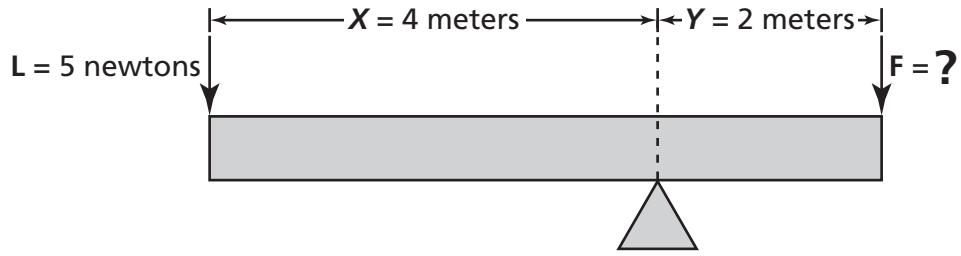
30 Engineers plan to develop a new drill for use on oil rigs. What should the engineers do first in order to develop the new drill?

- F** conduct research on features for the new drill
- G** build a prototype of the new drill
- H** determine the materials needed to build the new drill
- J** design a computer model of the new drill

31 Which of these best describes the function of the Golgi apparatus in a cell?

- A** converting oxygen and nutrients into energy for the cell
- B** modifying proteins and fats and preparing them to be moved out of the cell
- C** breaking down cellular waste products and moving them to the cytoplasm
- D** regulating the passage of molecules in and out of the cell

32 Work is performed by a lever when a load (L) of 5 newtons is applied at one end, as shown below.

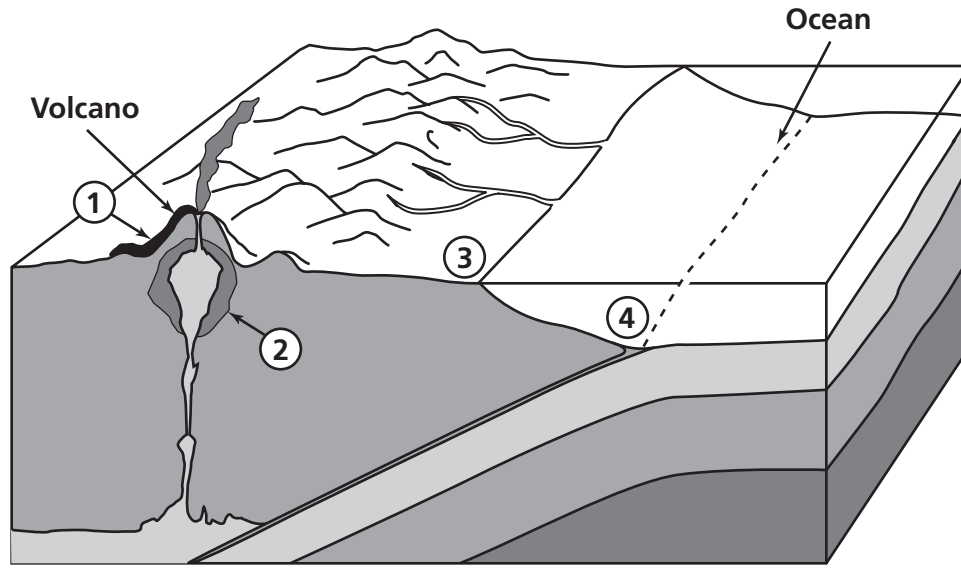


$$F = \frac{(L \times X)}{Y}$$

Using the formula, what force (F) is required to make the lever balanced?

- F** 5 newtons
- G** 10 newtons
- H** 20 newtons
- J** 40 newtons

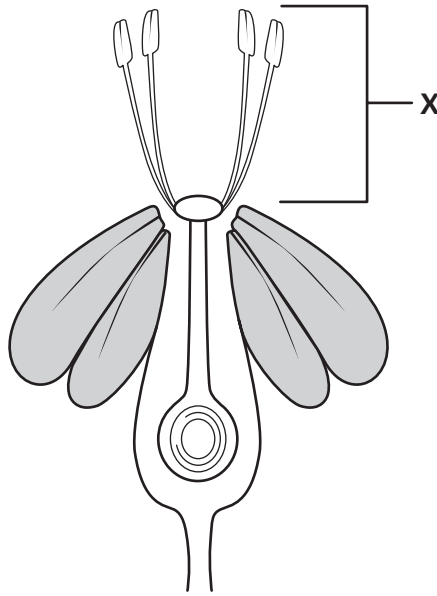
33 The diagram below shows some geological formations.



Which number shows the most likely location of metamorphic rock?

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

- 34** A cross section of a flower is shown below.



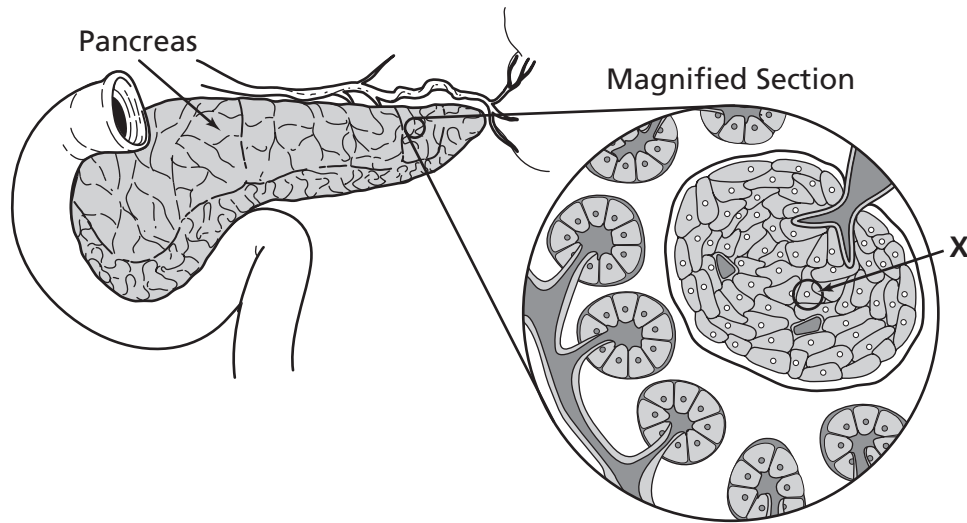
What structure is represented by X?

- F** ovary
 - G** pistil
 - H** stigma
 - J** stamen
-
- 35** Engineers designed a new construction material. When a strong enough force is applied to this material, the material turns red. This change in color is intended to warn people that the material has reached a breaking point. Which situation would best show that the new material provides a benefit?
- A** In a laboratory test, the material fails to change color.
 - B** At a construction site, the color change allows workers to move to a safe area.
 - C** When used in a building, the material changes colors in different levels of light.
 - D** When used in a bridge, the material remains for a long time without changing color.

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Part 2

- 36** The diagram below represents some levels of organization within the pancreas.



Which level of organization is represented by X?

- F** cell
 - G** organ
 - H** tissue
 - J** organ system
- 37** Under certain conditions, shale can form into a metamorphic rock called slate. Which conditions will cause shale to transform into slate?
- A** cooling and hardening of magma
 - B** application of heat and pressure
 - C** transportation and deposition of sediments
 - D** weathering and erosion of rocks

- 38** A ball traveled 35 meters at a speed of 5 meters per second.

$$\text{Time} = \frac{\text{Distance}}{\text{speed}}$$
$$t = \frac{d}{s}$$

How long did it take the ball to travel the 35 meters?

- F** 7 seconds
- G** 30 seconds
- H** 40 seconds
- J** 175 seconds
-
- 39** What organ system supports the body, protects the organs, and provides structure for movement?
- A** skeletal
- B** circulatory
- C** excretory
- D** reproductive
-
- 40** Which layer of Earth is composed of dense, liquid iron?
- F** crust
- G** mantle
- H** outer core
- J** inner core

41 The characteristic for having freckles (F) is dominant to the characteristic for not having freckles (f). Two parents who both have freckles have a child who does not have freckles (ff). In order to produce a child without freckles, which genomes must the parents have?

- A** FF and FF
- B** FF and Ff
- C** FF and ff
- D** Ff and Ff

42 A blood cell is placed in a salt solution that has twice the salt concentration of normal blood plasma. Which of these will most likely happen to the blood cell?

- F** The blood cell will shrink as water moves out through the cell membrane.
- G** The blood cell will expand as water enters through the cell membrane.
- H** The blood cell will expand as salt enters through the cell membrane.
- J** The blood cell will shrink as salt moves out through the cell membrane.

43 Scientists place devices for communicating with satellites on the edges of continents. Two devices were placed on continents where lithospheric plates are moving apart. If these lithospheric plates are moving at a typical rate, about how much farther apart from each other will the devices be in 10 years?

- A** 1 centimeter
- B** 100 centimeters
- C** 100 meters
- D** 1 kilometer

44 Object X has twice the mass of Object Y. Both objects are accelerating at the same rate. Which statement best describes the motions of Object X and Object Y?

- F** Object X is traveling at twice the speed as Object Y.
- G** Object X is traveling at half the speed as Object Y.
- H** Object X requires twice the force to accelerate at the same rate as Object Y.
- J** Object X requires half the force to accelerate at the same rate as Object Y.

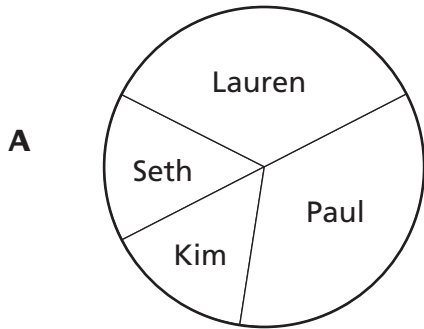
Four students read a total of 25 books over the summer, as shown in the table below.

Books Read over Summer

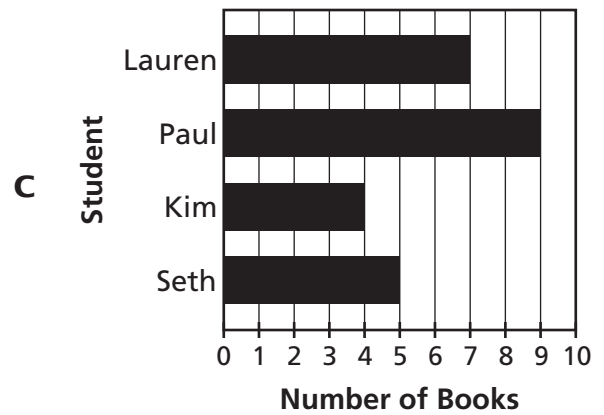
Student	Number of Books
Lauren	7
Paul	9
Kim	4
Seth	5

Which of these best displays the data from the table?

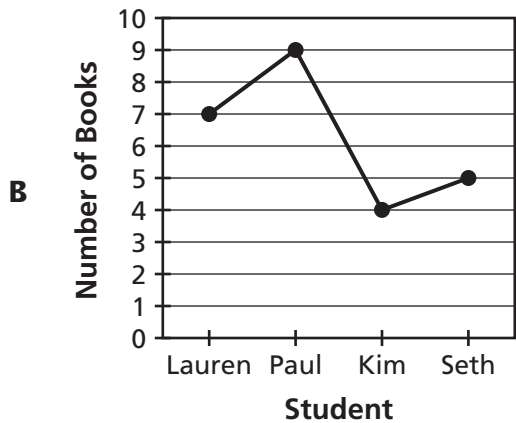
Books Read over Summer



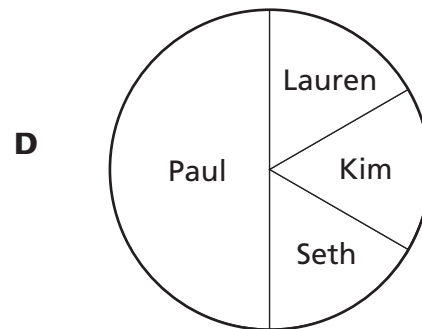
Books Read over Summer



Books Read over Summer



Books Read over Summer



46 Cellular respiration is a process that allows animals to use the energy stored in glucose. What is one of the products of cellular respiration?

- F** oxygen
- G** light
- H** water
- J** carbon

47 In a breed of rabbits, black fur (B) is dominant to brown fur (b). The Punnett square shows a cross between two black rabbits.

	B	b
B		
b		

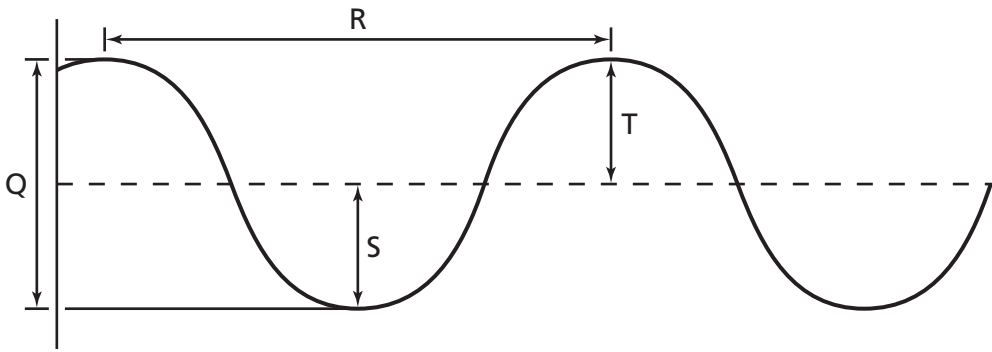
What is the probability of phenotypes that will result from this cross?

- A** 50% brown fur, 50% black fur
- B** 75% black fur, 25% brown fur
- C** 100% brown fur, 0% black fur
- D** 100% black fur, 0% brown fur

48 Which geological feature most likely forms when two continental tectonic plates collide?

- F** desert
- G** beach
- H** mountain range
- J** deep trench

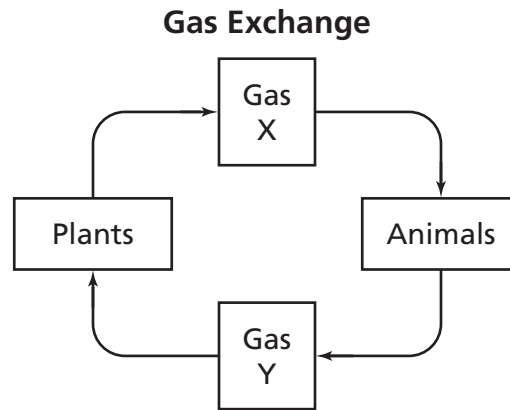
49 The diagram below shows a transverse wave.



Which equation applies to this transverse wave?

- A** $R = Q + S$
- B** $R = Q - T$
- C** $Q = S + T$
- D** $Q = R - T$

50 The diagram shows how plants and animals exchange gases.



What type of gas is represented by Gas Y?

- F** oxygen, O_2
- G** nitrogen, N_2
- H** methane, CH_4
- J** carbon dioxide, CO_2

51 Which example best describes asexual reproduction?

- A** An amphibian fertilizes eggs floating on water to produce tadpoles.
- B** A male flower on one tree pollinates a female flower on another tree and produces seeds.
- C** A runner from the roots of a parent plant produces genetically identical daughter plants.
- D** A gamete from one fungus fuses with the gamete of another fungus and produces a zygote.

Go On ►

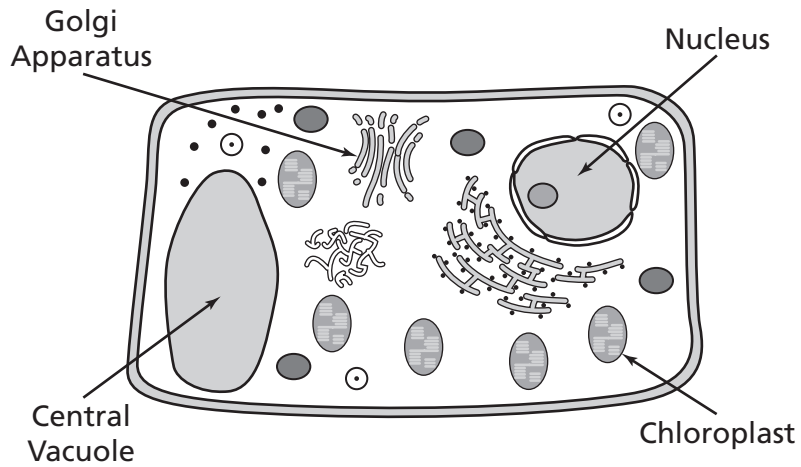
52 Most plastics are made using products manufactured at oil refineries. The recycling of plastics most impacts Earth by causing

- F** an increase in the amount of fuel used in cars.
- G** an increase in the amount of pollution in the oceans.
- H** a reduction in the amount of waste in landfills.
- J** a reduction in the amount of carbon dioxide in the atmosphere.

53 Which statement correctly identifies a sound wave?

- A** A sound wave is a transverse wave.
- B** A sound wave is a longitudinal wave.
- C** A sound wave can travel through a vacuum.
- D** A sound wave can produce a magnetic field.

54 Four organelles are identified in the cell diagram below.



In which organelle does photosynthesis take place?

- F** Golgi Apparatus
- G** Nucleus
- H** Chloroplast
- J** Central Vacuole

55 Students wanted to find out the effect sugar had on the boiling point of water. The students added different amounts of sugar to 1 liter of water. They recorded their data in the table below.

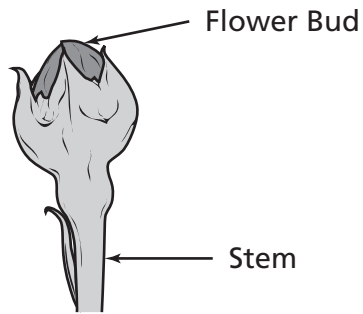
Effect of Sugar on the Boiling Point of Water

Mass of Sugar Added (grams)	Boiling Point (°C)
0	100.0
180	100.5
360	101.0
540	101.5
720	102.0
900	102.5

Which statement best describes a cause-and-effect relationship shown by the table?

- A** Water with added sugar comes to a boil more quickly than water without any added sugar.
- B** Higher water temperatures cause greater amounts of sugar to dissolve in the water.
- C** One liter of water at 102.5°C causes 900 grams of sugar to dissolve.
- D** Every 180 grams of sugar added to a liter of water causes the boiling point to increase by 0.5°C.

56 The picture below shows a flower.



What part of the flower surrounds and protects the bud?

- F** stamens
- G** anthers
- H** petals
- J** sepals

57 The Mohs hardness scale is shown below.

Mohs Hardness Scale

Mineral	Hardness
Talc	1
Gypsum	2
Calcite	3
Fluorite	4
Apatite	5
Orthoclase	6
Quartz	7
Topaz	8
Corundum	9
Diamond	10

← Fingernail, 2.5

← Window Glass, 5.5

Which mineral can be scratched by both a fingernail and window glass?

- A** Gypsum
- B** Fluorite
- C** Topaz
- D** Diamond

- 58** A car is traveling forward at an initial velocity of 10 meters per second. The car then accelerates forward at a rate of $\frac{1}{2}$ meter per second² for 20 seconds.

$$V_f = V_i + at$$

Velocity(final) = velocity(initial) + acceleration \times time

What is the final velocity of the car?

- F** 10 meters per second
- G** 20 meters per second
- H** 25 meters per second
- J** 30 meters per second

- 59** One of the functions of the circulatory system is to

- A** send signals throughout the body.
- B** carry oxygen and nutrients to body cells.
- C** protect the body from microorganisms.
- D** provide strength and support to the body.

- 60** Ethanol is an automobile fuel made from corn. Which of these is an unintended negative consequence of using ethanol instead of gasoline?

- F** reducing consumers' need for fossil fuels
- G** increasing the number of jobs available in agriculture
- H** increasing the demand for corn that leads to a rise in food prices
- J** reducing the amount of gases that could harm the environment

Go On ►

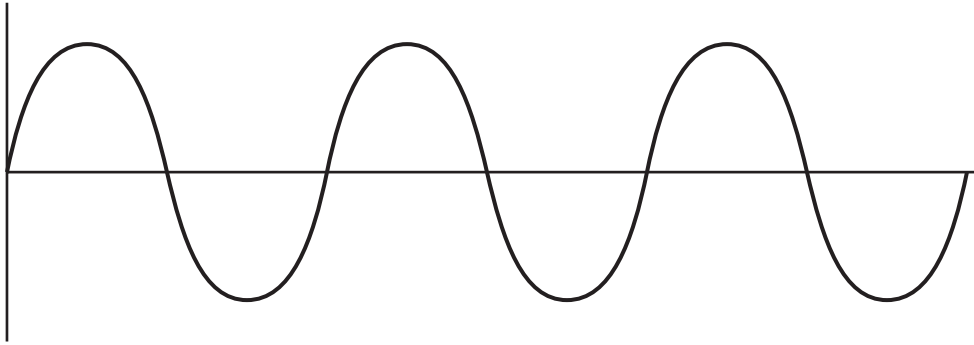
- 61** In humans, the trait for straight thumbs (T) is dominant to the trait for double-jointed thumbs (t). The Punnett square below shows a cross between two parents with straight thumbs.

	T	t
T		
t		

The probability that an offspring of this cross will have double-jointed thumbs is

- A** 1 out of 4.
 - B** 2 out of 4.
 - C** 3 out of 4.
 - D** 4 out of 4.
- 62** Which of these begins the process that changes metamorphic rock into sedimentary rock?
- F** cooling and crystallization
 - G** heating and pressure
 - H** folding and burial
 - J** weathering and erosion

63 A transverse wave is shown in the diagram below.



Which term represents the distance between two crests that are next to each other?

- A** amplitude
- B** frequency
- C** wavelength
- D** equilibrium

64 Which statement best describes particle movement during simple diffusion?

- F** Particles move out of a cell when the cell becomes full.
- G** Particles move in and out of a cell at a constant rate.
- H** Particles move from an area of high concentration to an area of low concentration.
- J** Particles move in a way that keeps them as close to each other as possible.

Go On ►

- 65** Which is the best example of an assistive technology that was designed to help a person overcome a disability?
- A** a mobile telephone with a ringer that can be turned off
 - B** a computer with a magnifier over the screen
 - C** a type of plant that is made to resist pests
 - D** a new type of fuel made from algae

- 66** Which of these is a female flower part that helps pollen reach the ovule?
- F** pistil
 - G** stamen
 - H** anther
 - J** petal

- 67** The thickest layer of Earth contains about 80% of the volume of Earth. What is this layer?
- A** inner core
 - B** outer core
 - C** mantle
 - D** crust

68 Which statement best explains a difference between transverse and longitudinal waves?

- F** Only transverse waves produce sound.
- G** Only longitudinal waves can travel through a solid.
- H** Only in transverse waves do particles move perpendicularly to the direction the energy travels.
- J** Only in longitudinal waves do particles travel in a circular pattern along the path of the wave.

69 What is the correct chemical equation for photosynthesis?

- A** $\text{CO}_2 + \text{H}_2\text{O} \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + \text{O}_2$
- B** $\text{CO}_2 + \text{C}_6\text{H}_{12}\text{O}_6 \rightarrow \text{H}_2\text{O} + \text{O}_2$
- C** $\text{CO}_2 + \text{O}_2 \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + \text{H}_2\text{O}$
- D** $\text{C}_6\text{H}_{12}\text{O}_6 + \text{H}_2\text{O} \rightarrow \text{CO}_2 + \text{O}_2$

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Social Studies



Part 1

1 Study the information below.

?

Common practices of people of the same cultural group

Which term best completes the blank?

- A** Regional Customs
- B** Environmental Issues
- C** Population Distribution
- D** Economic Development

2 Which element of a map shows directions in relation to landforms?

- F** compass rose
- G** scale
- H** legend
- J** contour line

Go On ►

3 Study the map below.

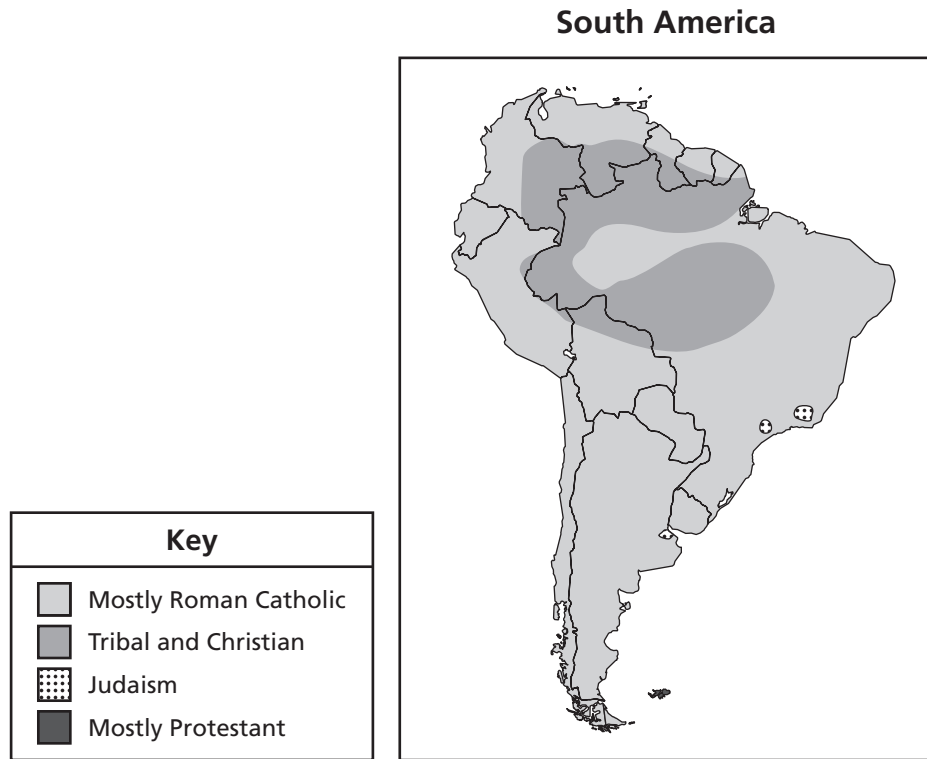
World Map



Which pair correctly matches a mountain range to its location?

- A** 1 — Andes
- B** 2 — Urals
- C** 3 — Rockies
- D** 4 — Himalayas

4 Study the map below.



Based on this map, which religion is most common in South America?

- F** Roman Catholic
- G** Tribal and Christian
- H** Judaism
- J** Protestant

5 Study the table below.

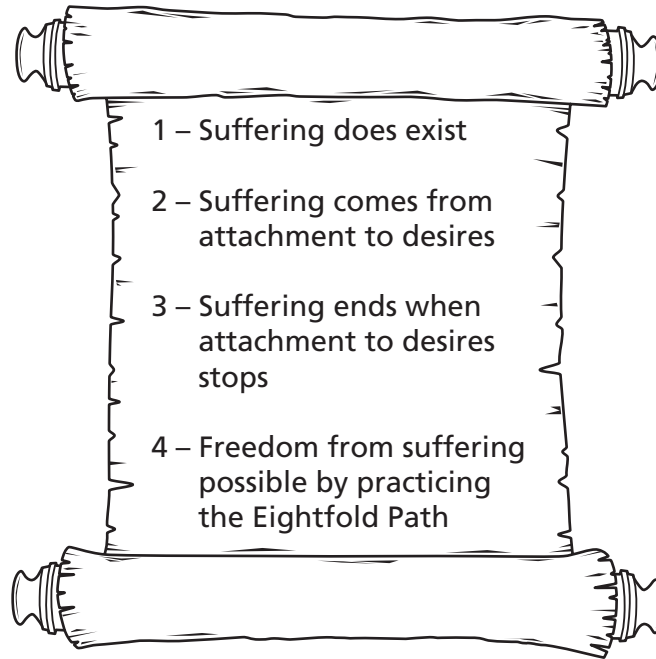
Rule by the People through Elections	Rule by Self-Chosen Leader
Representative Democracy	_____?

Which type of government would best complete the table?

- A** Autocracy
- B** Confederacy
- C** Anarchy
- D** Oligarchy

6 Study the picture below.

The Four Noble Truths



Which religion includes the beliefs described?

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

7 Study the information below.

Population _____ ?

The increase in a country's population during a period of time

Which term best completes the blank?

- A** Life Expectancy
- B** Density
- C** Growth Rate
- D** Distribution

8 Study the photograph below.

Memphis, Tennessee



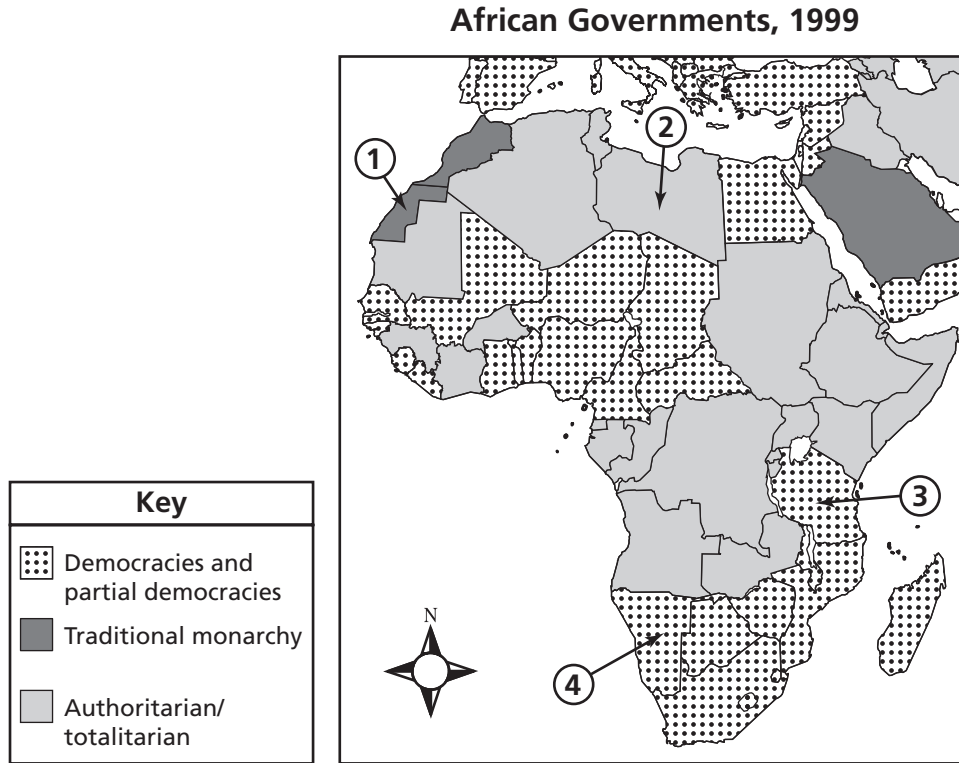
© Roger Cotton/iStockphoto #2144174

Which river is shown in the photograph?

- F** Mississippi River
- G** Duck River
- H** Holston River
- J** Cumberland River

Go On ►

9 Study the map below.



Which area would most likely be ruled by a king or a queen?

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

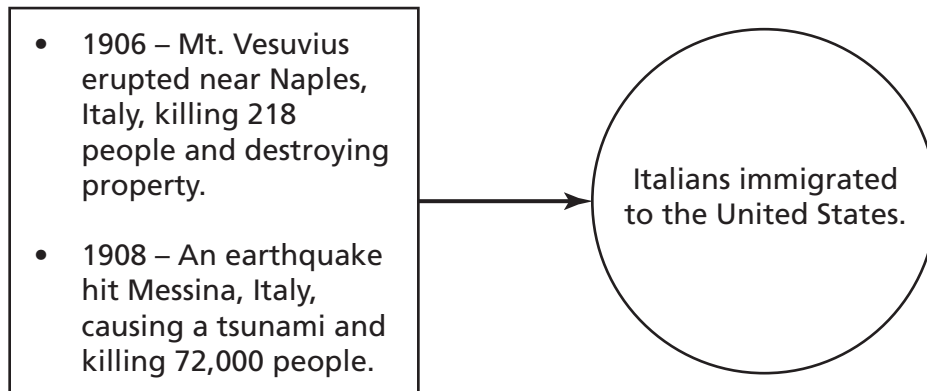
10 During the 21st century, an increase in immigration and cultural globalization will most likely lead to

- F** higher rural income tax rates.
- G** a greater need for religious toleration.
- H** reduced interest in technology.
- J** a slower rate of social change.

11 Which feature of East Tennessee supports the most varied types of wildlife?

- A** heavily forested mountains
- B** densely populated urban areas
- C** broad river valleys
- D** man-made reservoirs

12 Study the diagram below.



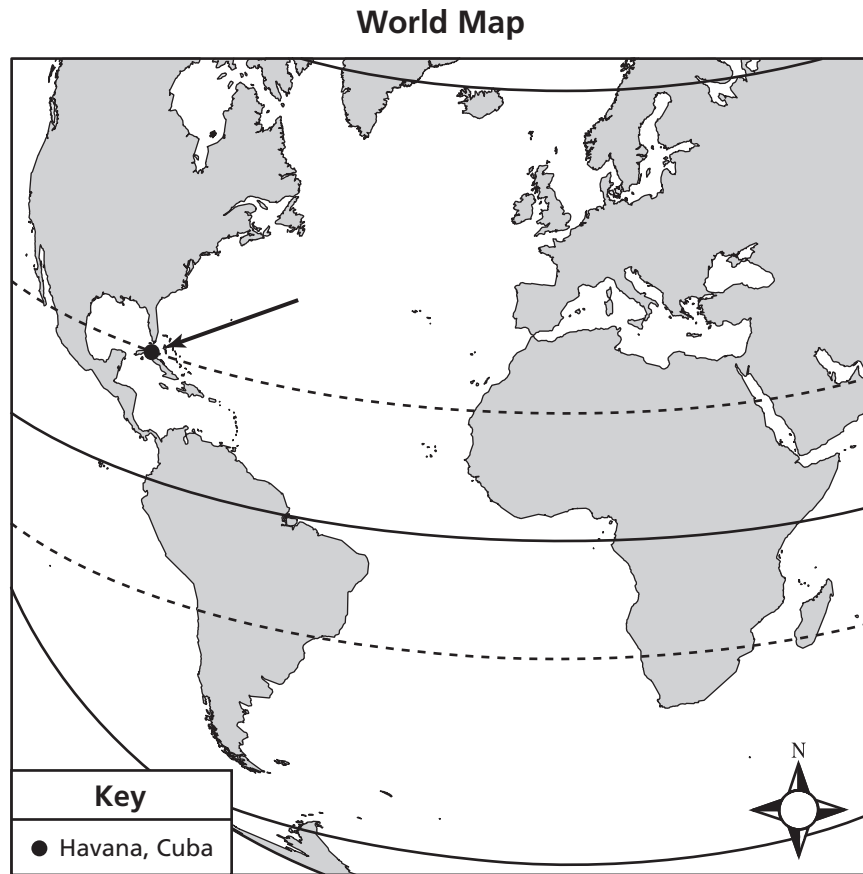
Which conclusion can be drawn based on the information in the diagram?

- F** Natural disasters contributed to migration to the U.S.
- G** Italians were the largest immigrant group in the U.S.
- H** Political negotiations encouraged people to emigrate to the U.S.
- J** Italian immigrants settled in the southern cities of the U.S.

13 Which demographic concept analyzes the numbers of births and deaths in a specific area?

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

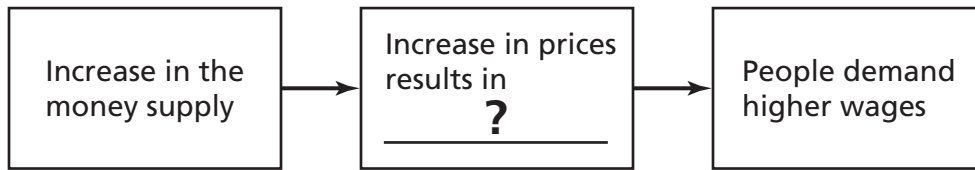
14 Study the map below.



Which line of latitude is closest to Havana, Cuba, on the map?

- F** Tropic of Cancer
- G** the Equator
- H** Arctic Circle
- J** Tropic of Capricorn

15 Study the diagram below.



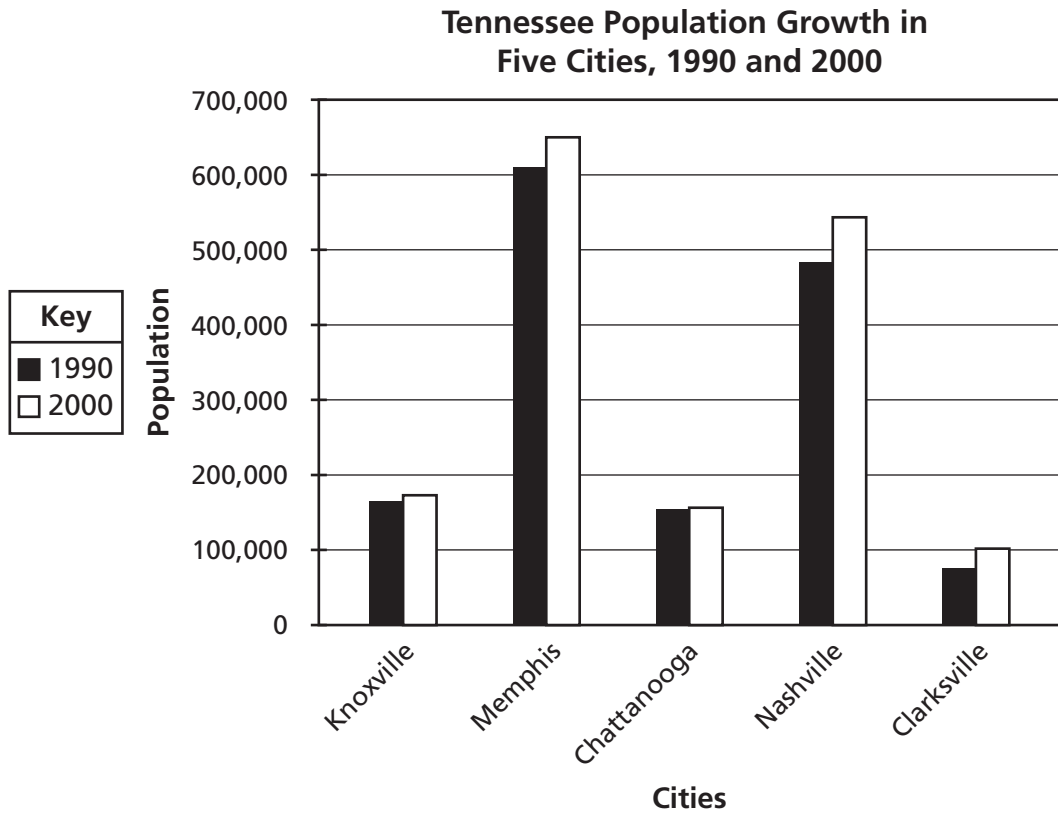
Which economic term best completes this diagram?

- A** inflation
- B** scarcity
- C** rationing
- D** specialization

16 Which condition most likely will occur due to rising amounts of greenhouse gases in the atmosphere?

- F** an increase in global warming alerts
- G** a decrease in tectonic plate movement
- H** a stabilization of weather patterns
- J** an expansion of the polar ice caps

17 Study the graph below.



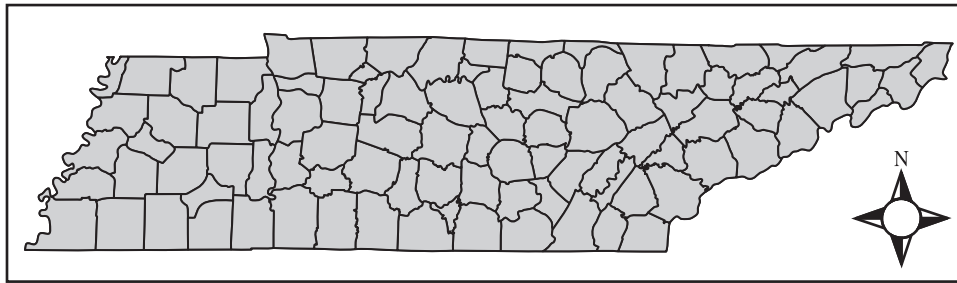
Source: census.gov

Based on the graph, which city had the least change in the number of residents between 1990 and 2000?

- A** Memphis
- B** Chattanooga
- C** Nashville
- D** Clarksville

18 Study the map below.

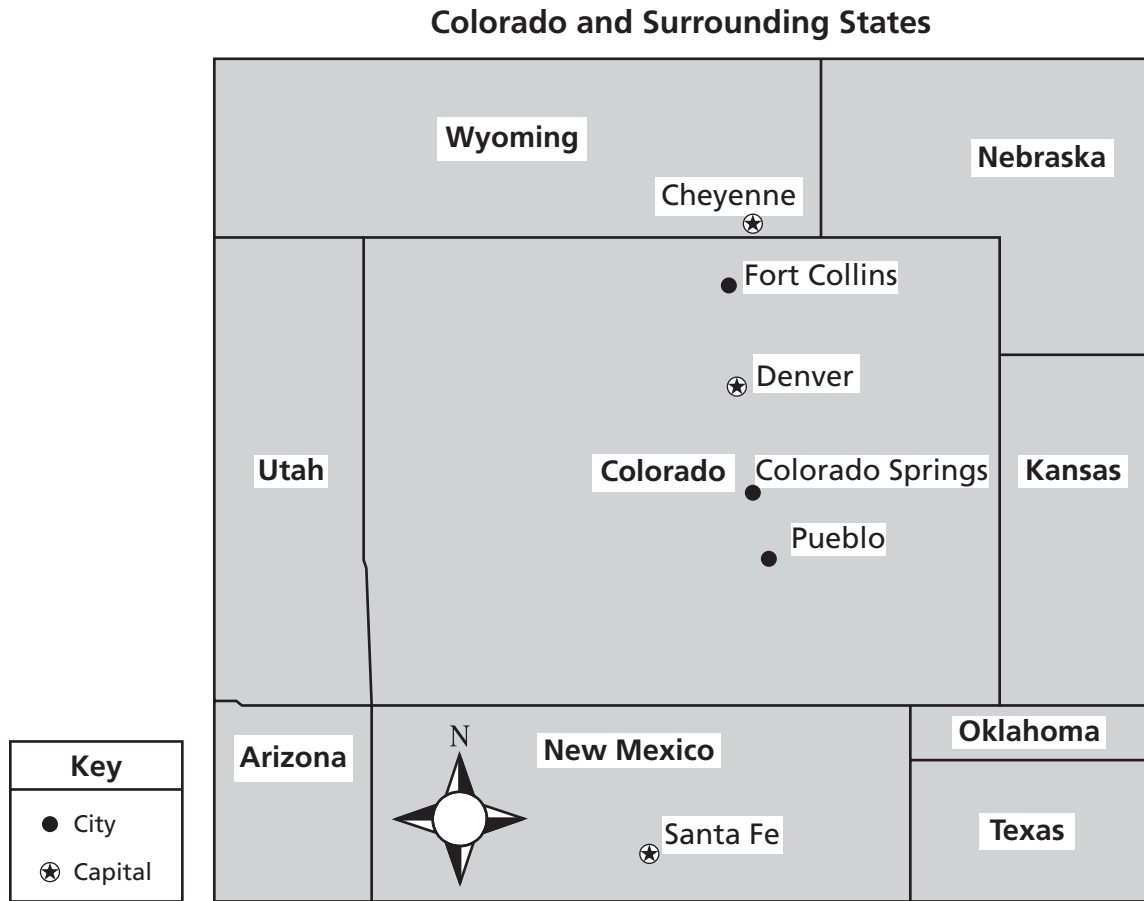
Tennessee Congressional Districts



A change in the boundaries outlined on the map would be the result of

- F** a request by the president.
- G** an order by the governor.
- H** a shift in the state population.
- J** an election in the state senate.

19 Study the map below.



What type of map is shown?

- A** political
- B** elevation
- C** climate
- D** resource

20 Which mountain range forms one boundary of the Amazon River Basin?

- F** Himalayas
- G** Andes
- H** Alps
- J** Rockies

21 Study the excerpt below.

One billion people, or one third of the world's population, is estimated to be living in either slum or squatter settlements. The largest proportion of population living in slums in the world is in the Asian region, which is also urbanizing at the fastest rate. In 2001, Asia had 554 million slum dwellers, or 60% of the world's total.

— The New York Academy of Medicine, 2007

Which statement is supported by the excerpt?

- A** Asian cities represent the smallest percentage of slum dwellers.
- B** Most Asian businesses avoid moving to areas with large urban populations.
- C** Citizens living in urban areas most likely emigrated from rural areas in Asia.
- D** Many urban residents in Asia have an unsatisfactory standard of living.

22 Which question would help determine whether a resource is renewable?

- F** How easy is it to reuse the resource?
- G** Can the resource be easily acquired?
- H** Can the resource be naturally replaced?
- J** Is the resource available in large quantities?

23 Study the chart below.

Life Expectancy of Literate People in India, 2005

State	Rural		Urban	
	Male	Female	Male	Female
Orissa	38.2	24.3	52.4	42.2
Kerala	62.2	59.5	61.3	62.9
Gujarat	41.0	27.0	53.8	44.9
Tamil Nadu	46.1	32.5	55.0	47.9
Himachal Pradesh	49.7	35.5	57.2	51.0
Bihar	33.4	14.5	44.2	28.6
National Average	38.3	22.9	52.8	42.7

Source: National Family Health Survey-3, India

Which factor best explains the difference between the life expectancy rates of literate people in the chart?

- A** Rural communities often lack access to health care and education.
- B** Urban communities rarely receive funding to build new hospitals.
- C** Increased population density often creates a lower quality of life in urban areas.
- D** Increased scarcity of resources causes a decline in rural standards of living.

24 Study the list below.

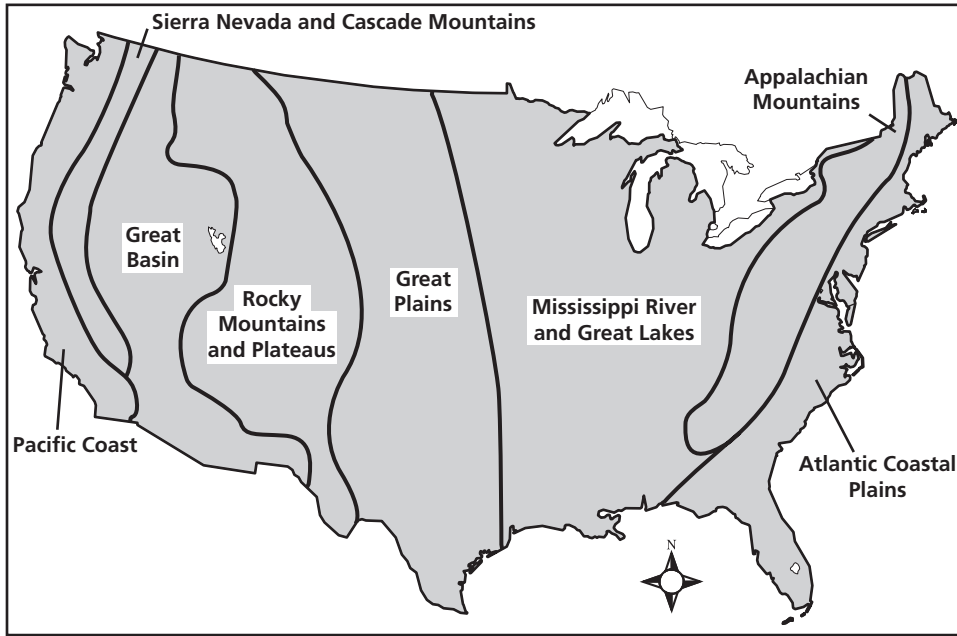
- Dense population
- Commercial hub
- Cultural center

Which type of community is best described by the list?

- F** urban
- G** suburban
- H** global
- J** rural

25 Study the map below.

Regions of the Continental United States

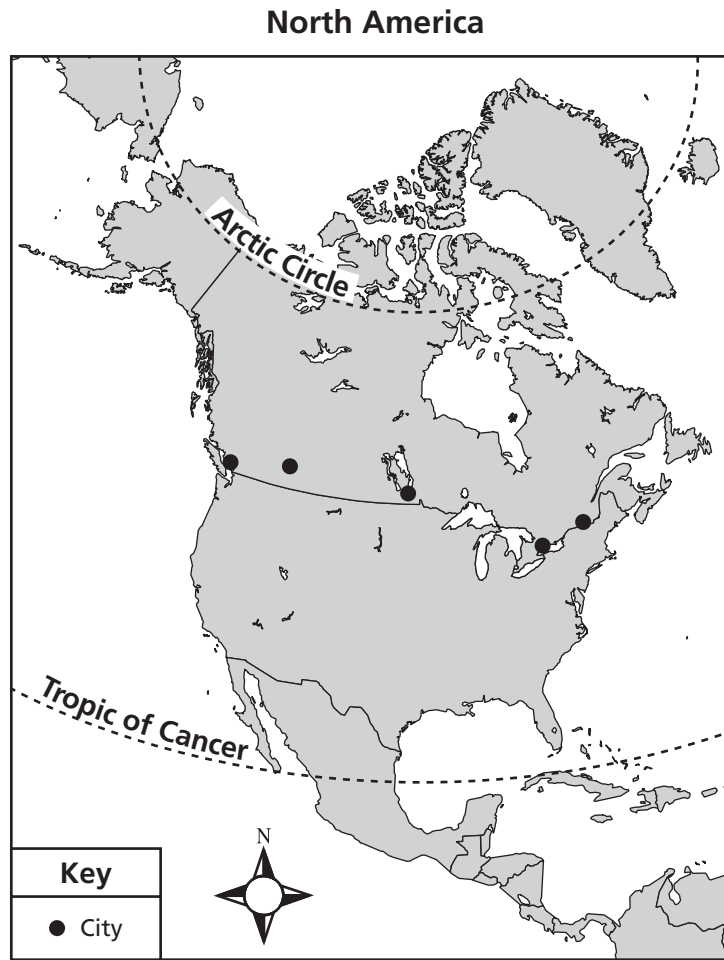


Source: Arizona Geographic Alliance

Which characteristics define the regions on the map?

- A** population densities
- B** religious beliefs
- C** geographic features
- D** economic issues

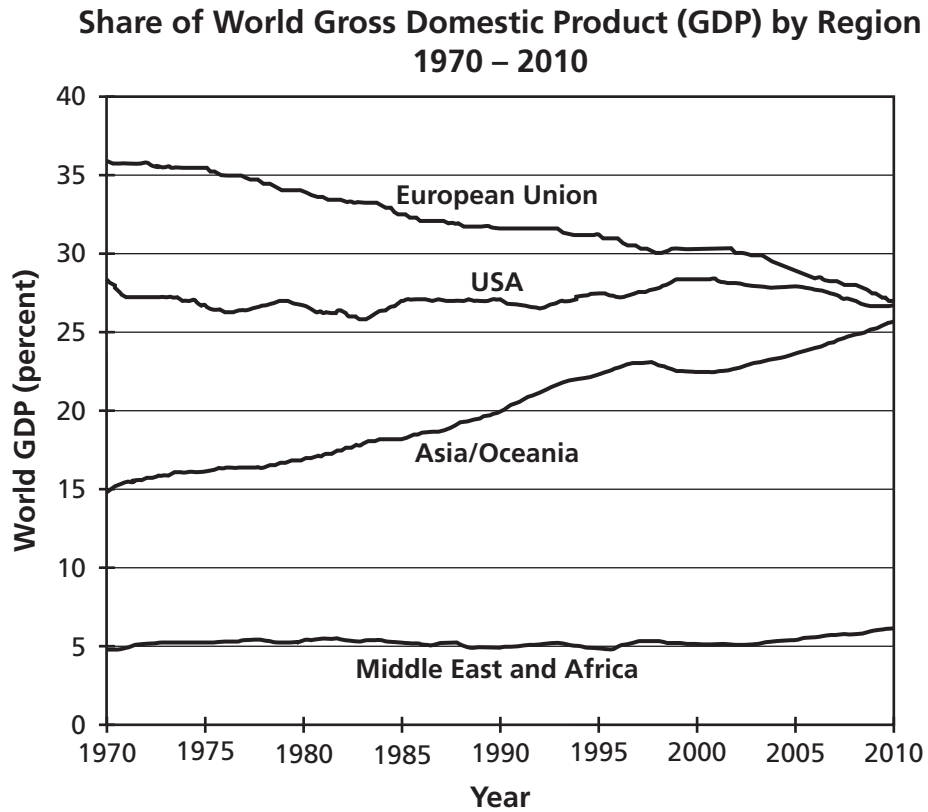
26 Study the map below.



Based on the map, which reason might best explain why a majority of Canadian cities are located near the United States border?

- F** desire to maintain foreign culture
- G** probable success of commercial fishing
- H** ability to acquire a college education
- J** comparative mildness of weather conditions

27 Study the graph below.



Source: World Bank

Which conclusion is most accurate based on the graph?

- A** The GDP of the Middle East and Africa began to increase after 1990.
- B** Many European nations increased trade after 1990.
- C** The GDP in the United States varied greatly after 1970.
- D** Many countries in Asia/Oceania experienced economic expansion after 1970.

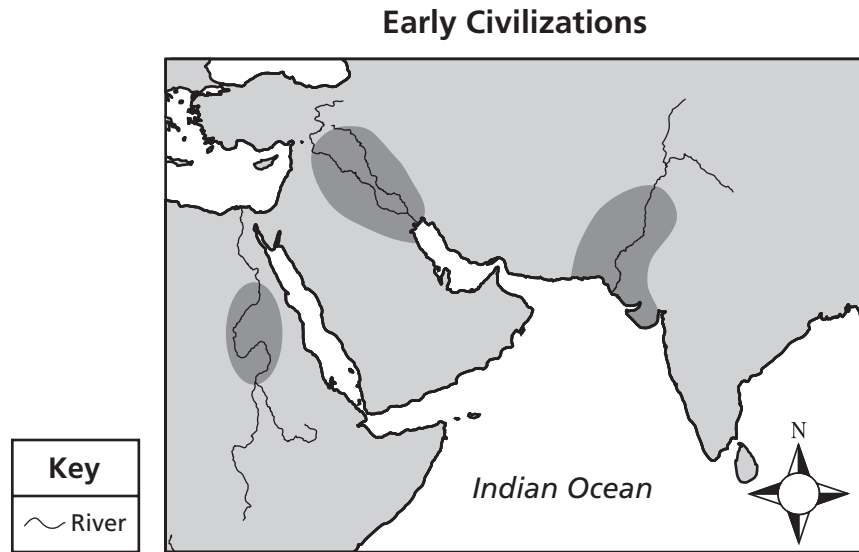
28 Study the information below.

The World Bank provides \$22 million to revitalize Afghanistan's private sector development. These markets are run by private individuals or groups.

Based on the information, one goal of the World Bank is most likely to

- F** oppose international trade monopolies.
- G** limit government interference.
- H** promote economic growth.
- J** guarantee fair labor practices.

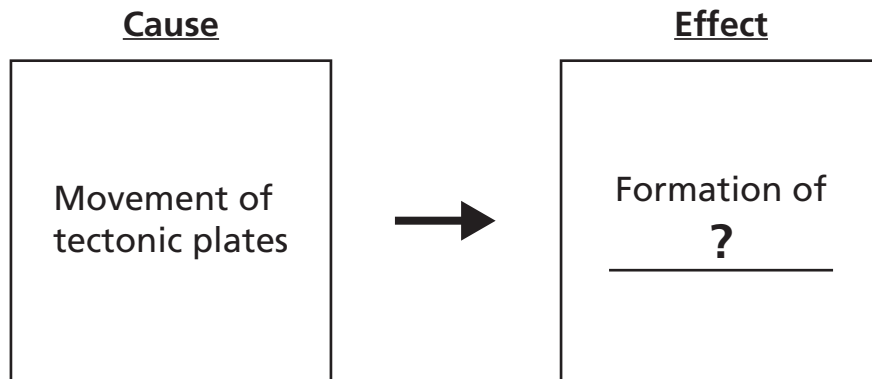
29 Study the map below.



Why did early civilizations settle in the darker-shaded area on this map?

- A** to have access to better hunting grounds
- B** to reduce the effects of natural disasters
- C** to have access to fertile farming lands
- D** to limit the number of foreign invasions

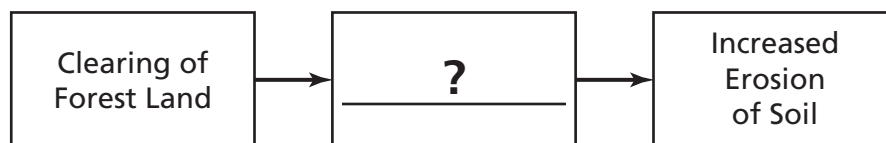
30 Study the diagram below.



Which geographic feature best completes the diagram?

- F** glaciers
- G** river deltas
- H** mountain ranges
- J** peninsulas

31 Study the flow chart below.



Which phrase best replaces the question mark in the flow chart?

- A** Heightened Tectonic Activity
- B** Increased Levels of Humidity
- C** Reduced Exposure to Intense Sunlight
- D** Increased Exposure to the Wind

32 Study the information below.

Actions of Benito Mussolini from 1925–1943

- Outlawed opposition political parties
- Replaced the royal guard with personal army and secret police
- Gained absolute control over Italy

Which term best summarizes the government described?

- F** dictatorship
- G** socialist
- H** oligarchy
- J** monarchy

33 Study the passage below.

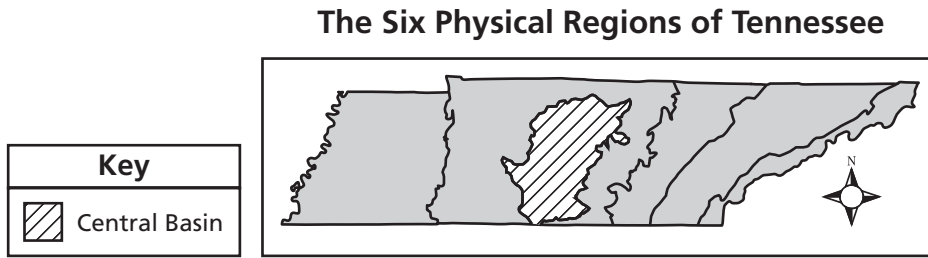
Gentrification is often defined as the transformation of neighborhoods from low value to high value. This change has the potential to cause displacement of long-time residents and businesses. Displacement happens when long-time or original neighborhood residents move from a gentrified area because of higher rents, mortgages, and property taxes.

— Centers for Disease Control and Prevention

What is one effect of the process described in the passage?

- A** Community neighborhoods remain stable.
- B** Residents native to the area are forced to relocate.
- C** Economic growth decreases property value.
- D** Local rental rates remain constant.

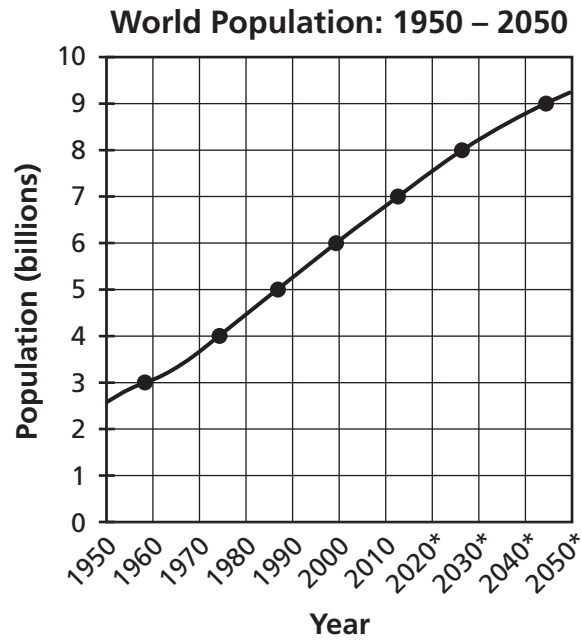
34 Study the map below.



Which region surrounds the Central Basin on the map?

- F** Gulf Coastal Plain
- G** Unaka Mountains
- H** Highland Rim
- J** Cumberland Plateau

35 Study the graph below.



* estimated

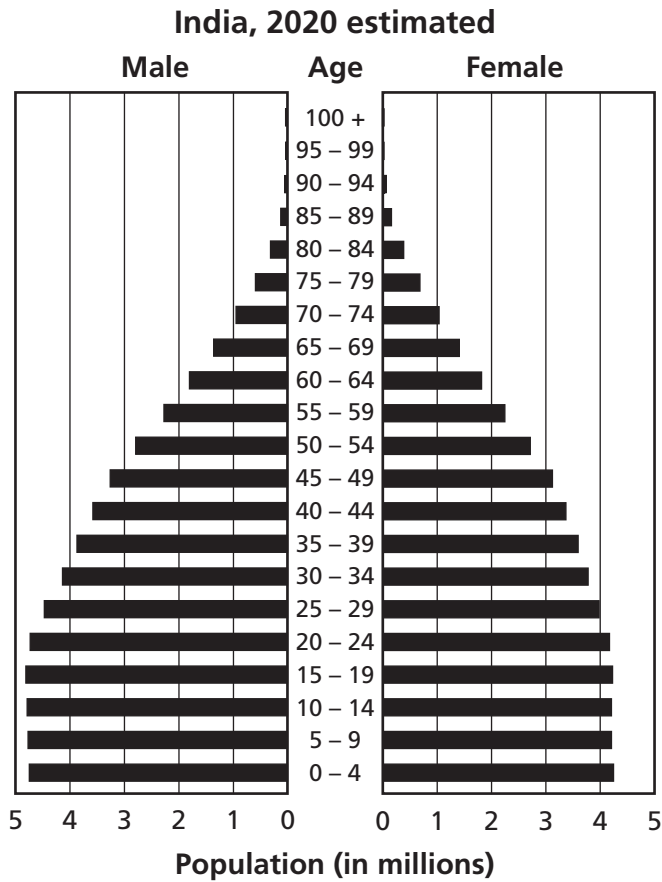
Source: U.S. Census Bureau

What is one possible effect of the trend shown on the graph?

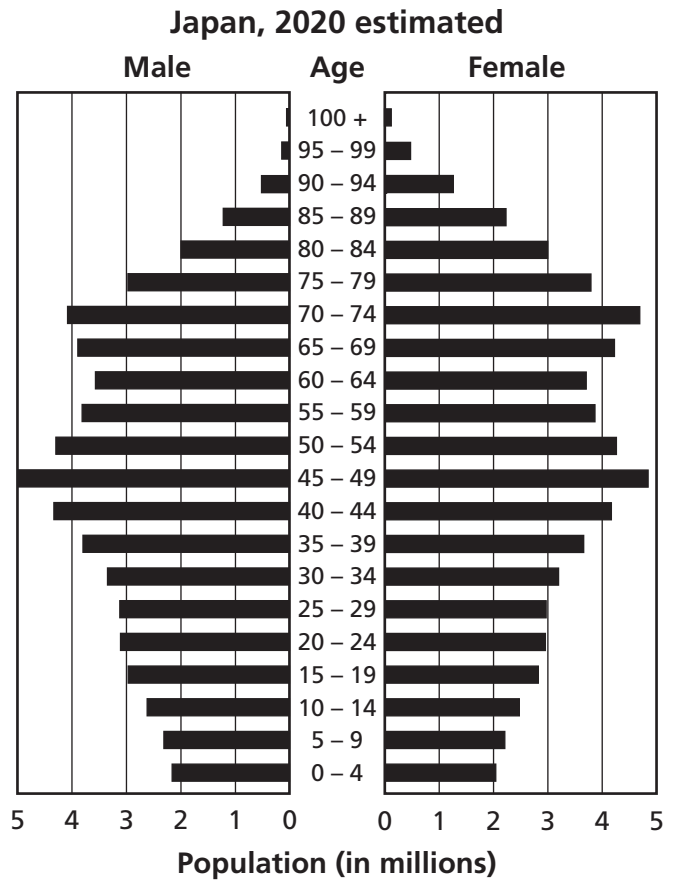
- A** Food prices will decline.
- B** Service industries will be reduced.
- C** Land prices will decrease.
- D** Agricultural land will be lost.

Part 2

36 Study the population pyramids below.



Source: U.S. Census Bureau

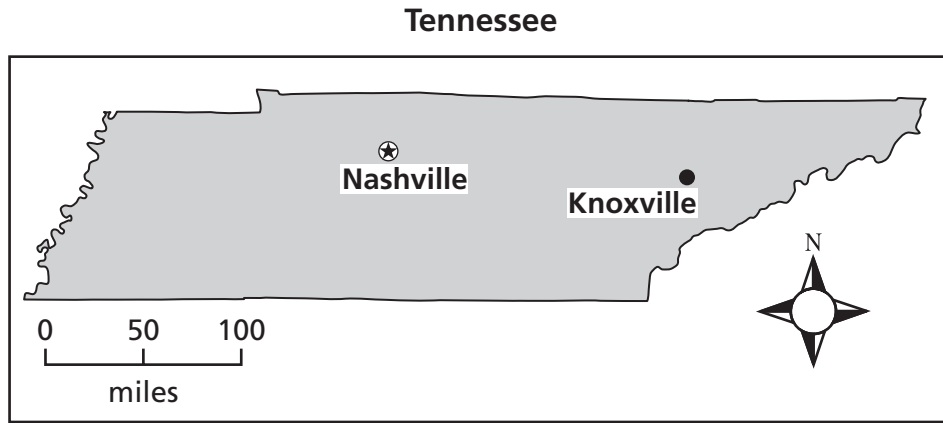


Source: U.S. Census Bureau

Based on the population pyramids, in which area will Japan most likely spend more money than India?

- F** school construction
- G** childcare
- H** elderly health care
- J** office construction

37 Study the map below.

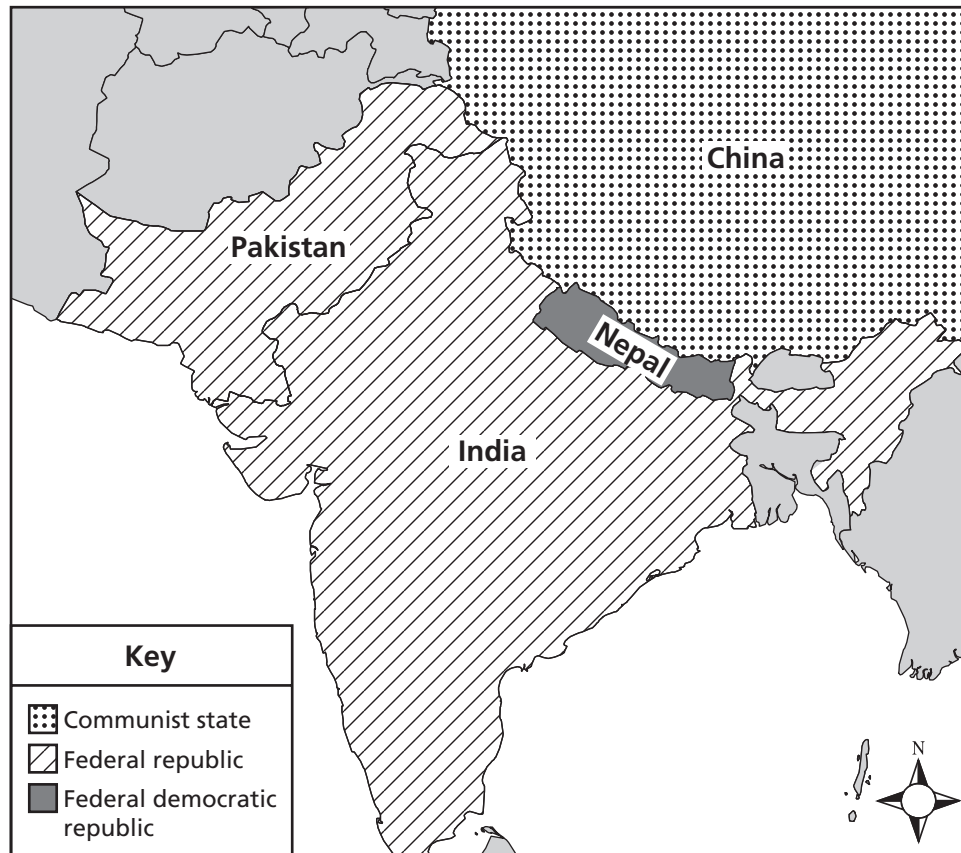


Based on the map, what is the approximate distance between Nashville and Knoxville?

- A** 100 miles
- B** 150 miles
- C** 200 miles
- D** 250 miles

38 Study the map below.

Southern Asia, 2011



Source: CIA World Factbook

Based on the map, in which country would a citizen have the fewest personal freedoms?

- F** Pakistan
- G** India
- H** Nepal
- J** China

39 Study the information below.

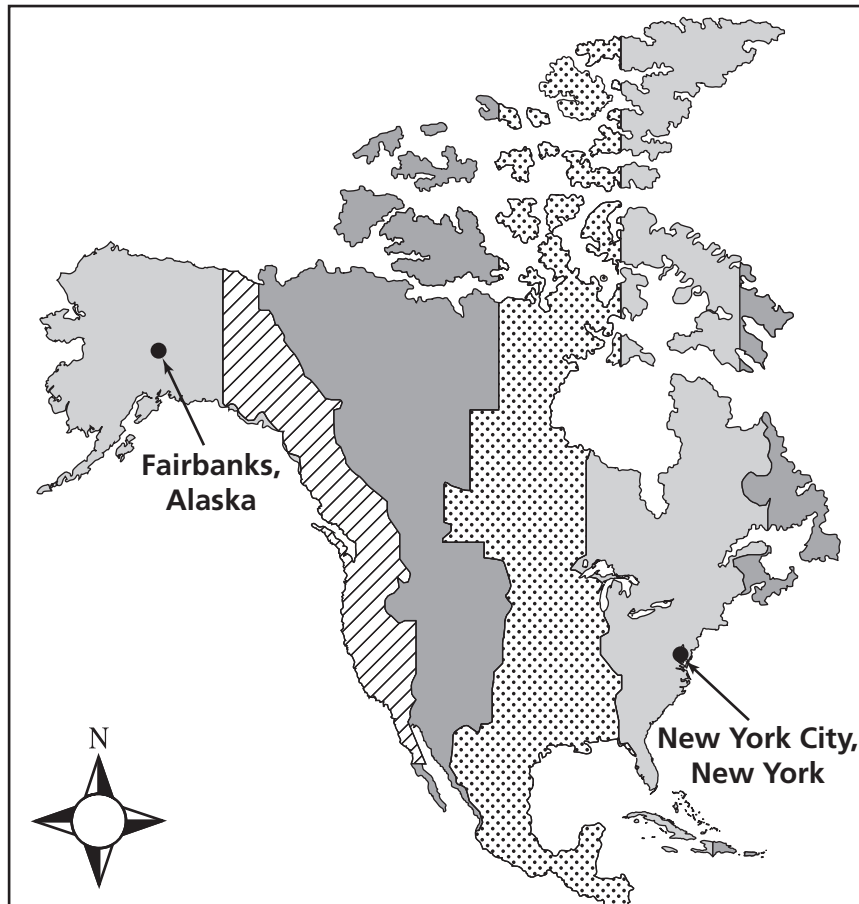
- What goods should be produced?
- How will goods be distributed?
- Who will purchase the goods and services?

Which term outlines the answers to the questions above?

- A** economic system
- B** federal budget
- C** state laws
- D** political system

40 Study the map below.

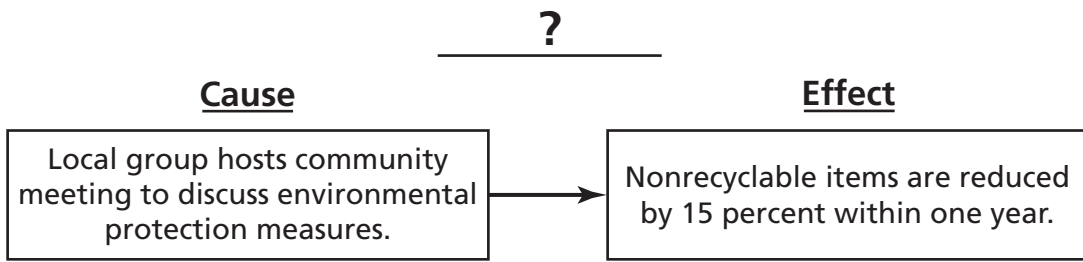
Time Zones of North America



What is the time in Fairbanks, Alaska, if it is 1:00 P.M. in New York, New York?

- F** 9:00 A.M.
- G** 10:00 A.M.
- H** 4:00 P.M.
- J** 5:00 P.M.

41 Study the diagram below.



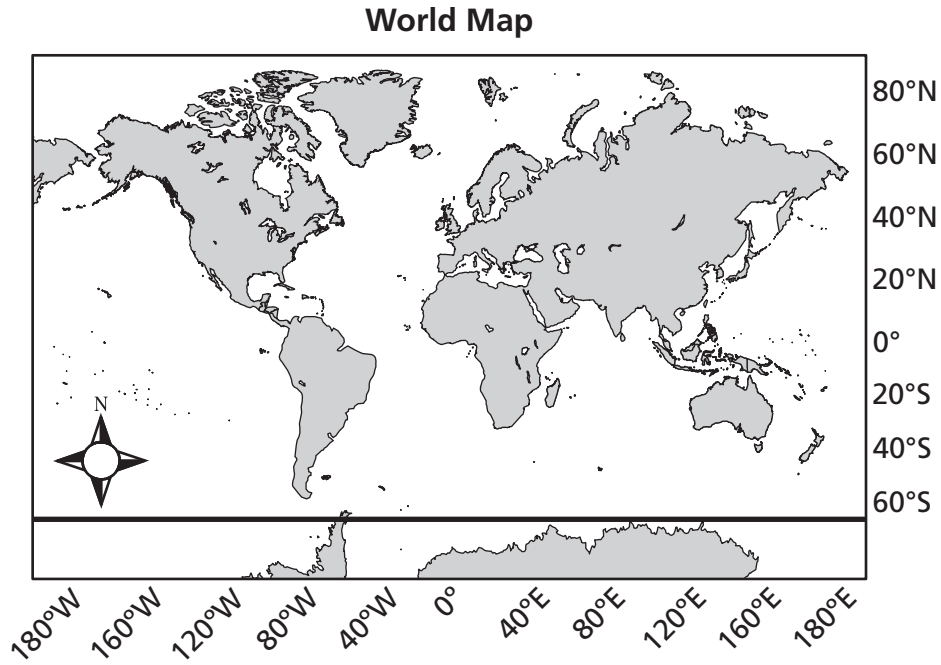
Which title best completes this diagram?

- A** City Abolishes Recycling Program
- B** State Passes New Environmental Laws
- C** Group Influences Daily Choices
- D** Local Consumers Purchase Brand Name Products

42 Which phrase best defines the demographic concept of growth rate?

- F** increase in cost of life's basic necessities
- G** number of people living in a specific given area
- H** pace at which a population increases
- J** average number of years a human can expect to live

43 Study the map below.

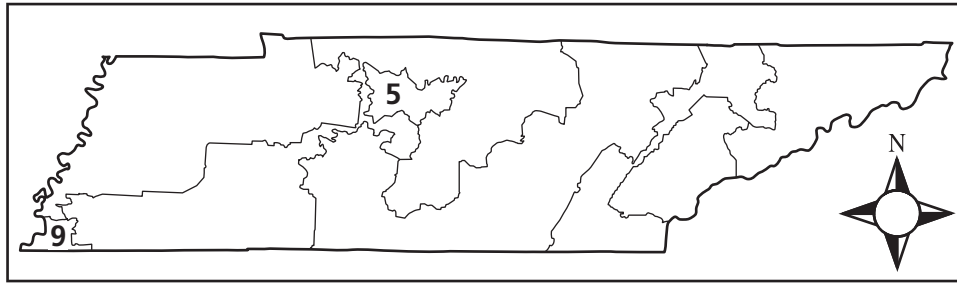


Which line is shown on the map?

- A** International Dateline
- B** Prime Meridian
- C** Tropic of Capricorn
- D** Antarctic Circle

44 Study the map below.

Tennessee Congressional Districts



Source: nationalatlas.gov

Based on the map, the size of Tennessee's 5th and 9th districts most likely resulted from

- F** boundaries of the original election districts.
- G** increased restrictions on federal land use.
- H** population concentrations in urban centers.
- J** balanced statewide population growth.

45 Which headline would most likely be published in a rural area newspaper?

A

Mega Malls Extend Shopping Hours

C

Local Farmers Support Environmental Cleanup of River

B

Residents Complain About Traffic Delays

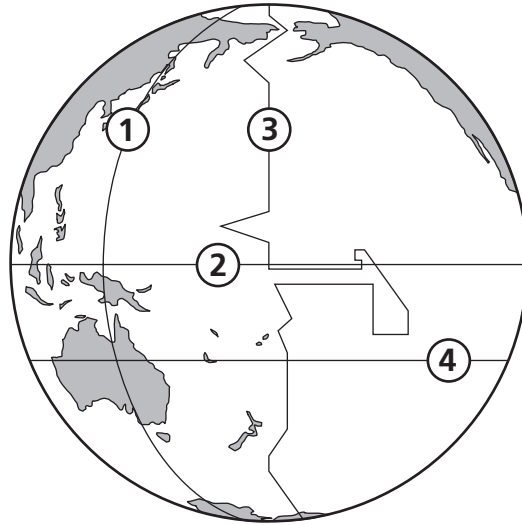
D

Construction Begins on Urban Transit Hub

Go On ►

46 Study the map below.

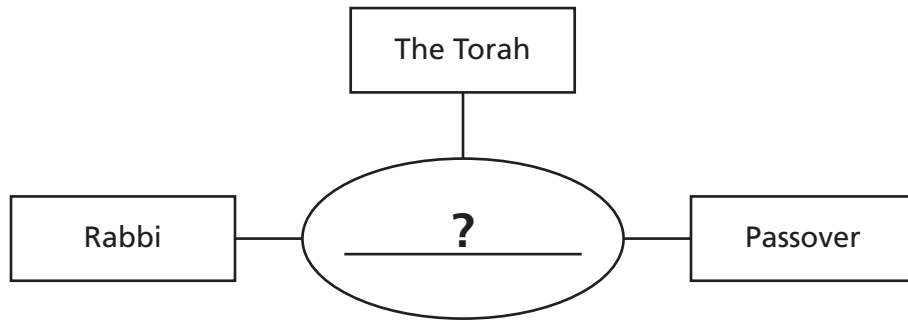
The World



Which number on the map shows the location of the Tropic of Capricorn?

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

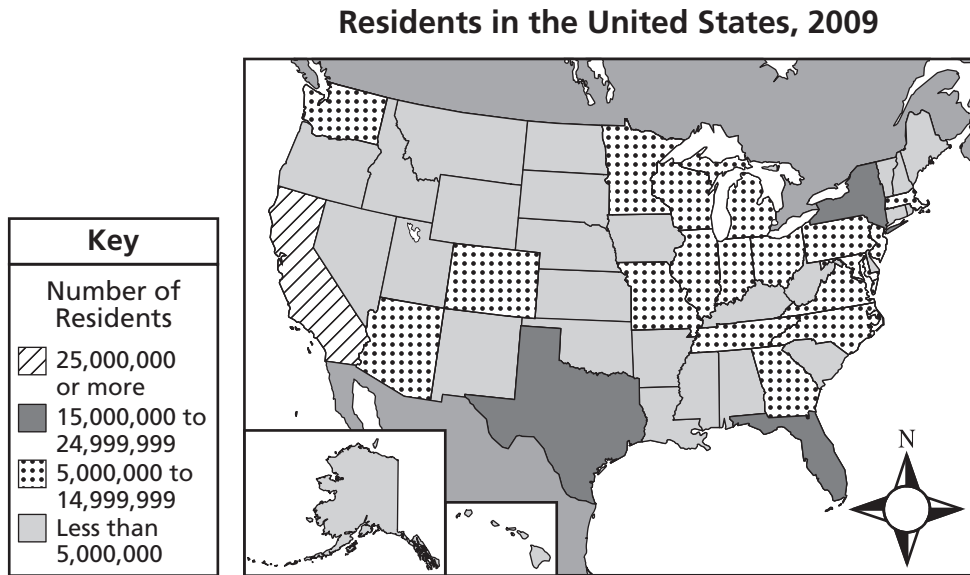
47 Study the diagram below.



Which religion is best described by the diagram?

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

48 Study the map below.



Source: census.gov

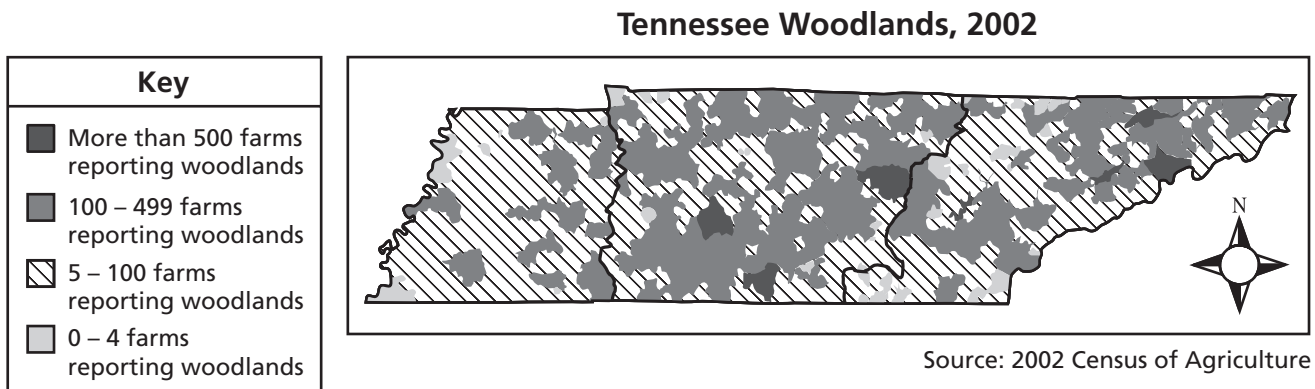
This map would be useful for identifying the state with the

- F** highest birth rate.
- G** greatest population.
- H** fewest industrial areas.
- J** lowest elevation.

49 Which physical feature creates a natural boundary between Europe and Asia?

- A** Himalaya Mountains
- B** Tigris River
- C** Ural Mountains
- D** Ganges River

50 Study the map below.



Which statement is supported by the map?

- F** The most farms reporting woodlands are located in the Eastern Division.
- G** The Western Division has more woodland farms than the Eastern Division.
- H** The Middle Division has fewer acres of woodland farms.
- J** The Middle Division has more farms reporting woodlands than the Western Division.

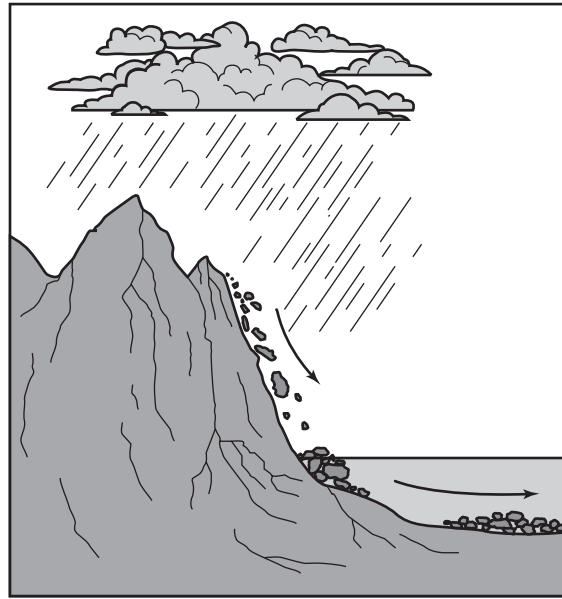
51 Study the list below.

- Loss of biodiversity
- Overcrowded streets
- Issue of waste disposal

Which modification of the physical environment results in these characteristics?

- A** desertification
- B** climate change
- C** urbanization
- D** crop irrigation

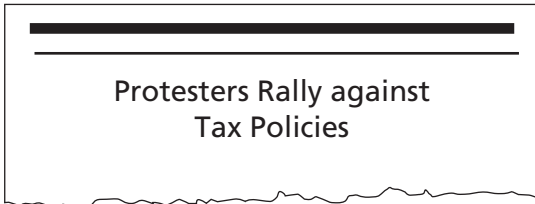
52 Study the image below.



Which physical process is shown in the image?

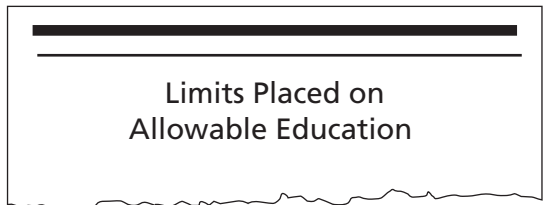
- F** plate subduction
- G** erosion
- H** desertification
- J** river currents

53 Which headline shows a practice of individual freedoms supported by most Western-European governments but limited in governments ruled by dictators?

A A rectangular newspaper clipping with a thick black horizontal line at the top. Below the line, the headline reads "Protesters Rally against Tax Policies". The bottom edge of the clipping is irregular and wavy.

C A rectangular newspaper clipping with a thick black horizontal line at the top. Below the line, the headline reads "Religious Services Outlawed throughout City". The bottom edge of the clipping is irregular and wavy.

B A rectangular newspaper clipping with a thick black horizontal line at the top. Below the line, the headline reads "Police Silence Opposition Party Leaders". The bottom edge of the clipping is irregular and wavy.

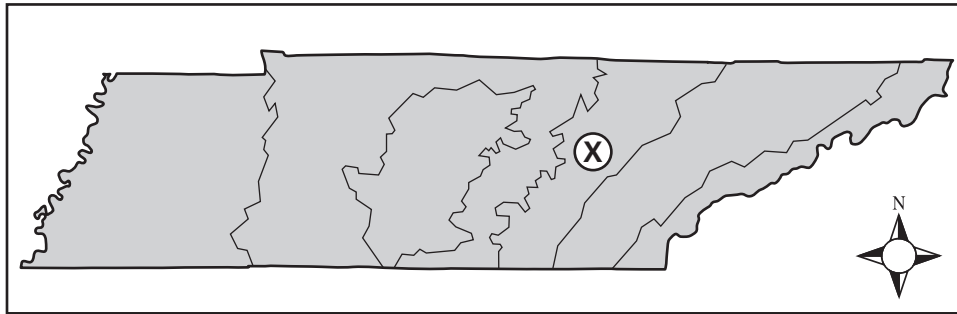
D A rectangular newspaper clipping with a thick black horizontal line at the top. Below the line, the headline reads "Limits Placed on Allowable Education". The bottom edge of the clipping is irregular and wavy.

54 Which type of map would indicate levels of elevation?

- F** resource
- G** climate
- H** topographic
- J** political

55 Study the map below.

Tennessee's Physical Regions



Which region on the map is marked by the X?

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

56 Study the table below.

Push Factors for Migration
Unemployment
Natural Disasters
Civil War
_____?

Which push factor can be added to the table?

- F** Agricultural Prosperity
- G** Health Services
- H** Technological Advancements
- J** Religious Oppression

57 Study the information below.

Company A is located in Taiwan and is the leading producer of video equipment. The equipment could change the entire video industry. Company B, which is located in the United States, agrees to purchase three million dollars worth of the equipment for sale in its stores. Selling these products can lead to increased profits.

The goods being shipped from Company A to Company B are known as

- A** tariffs.
- B** raw materials.
- C** exports.
- D** bartered resources.

Go On ►

58 Study the legislation below.

The objective of this Act is to restore and maintain the chemical, physical, and biological integrity of the Nation's waters.
— Federal Water Pollution Control Act, 2002

Which issue is addressed by this legislation?

- F** redistributing natural resources
- G** increasing economic development
- H** improving environmental quality
- J** reorganizing public programs

59 Study the chart below.

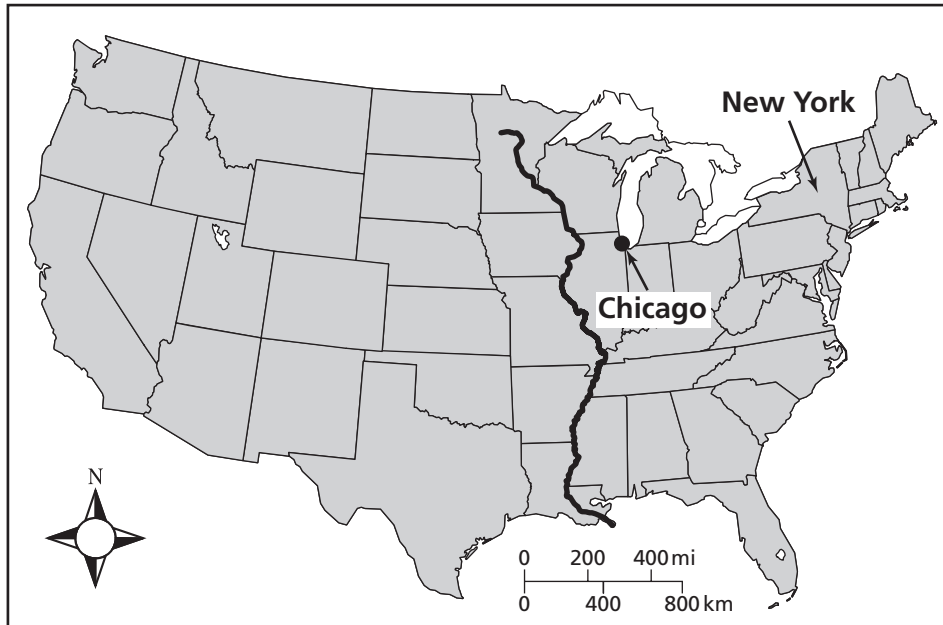
English Word	Language of Origin
Brigade	French
Canyon	Spanish
Replica	Italian
Bagel	Yiddish

Which factor most likely contributed to the development in this chart?

- A** cultural integration
- B** economic hardship
- C** religious tradition
- D** political isolationism

60 Study the map below.

Continental United States

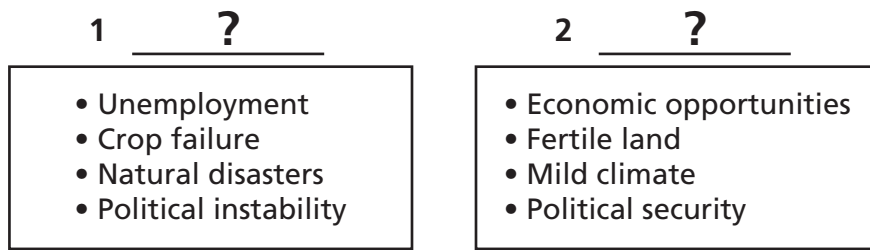


Key	
●	City
—	River

Which question could best be answered using the scale on the map?

- F** Which direction is Lake Erie from Lake Michigan?
- G** What is the distance from Chicago to New York?
- H** Which states border the western boundary of New Jersey?
- J** What is the largest city east of the Mississippi River?

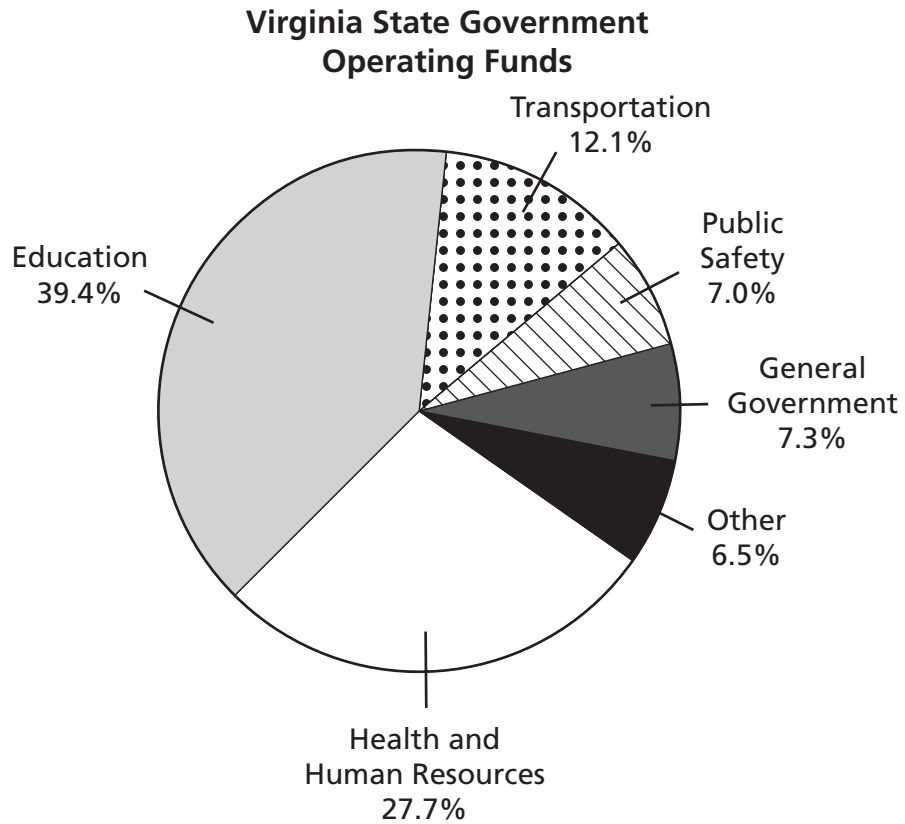
61 Study the diagram below.



Which pair best completes the diagram?

- A** 1 — Push Factors, 2 — Pull Factors
- B** 1 — Cultural Characteristics, 2 — Physical Characteristics
- C** 1 — Rural Factors, 2 — Urban Factors
- D** 1 — Population Distribution, 2 — Population Density

62 Study the circle graph below.



Source: virgina.gov

Based on the graph, the state government most likely provides the most funding for

- F** highways.
- G** police stations.
- H** hospitals.
- J** public schools.

63 Study the information below.

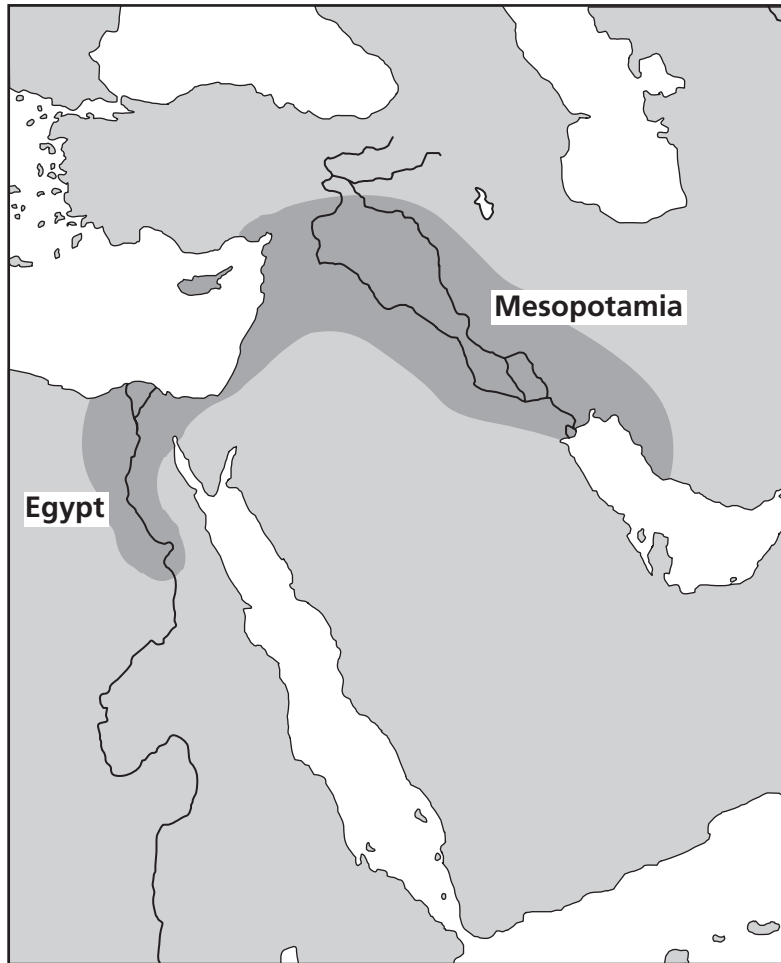
- Ruler controls most political power in government
- Ruler holds power until death or resignation
- Ruler passes power to an heir

Which form of government is best described by the list?

- A** theocracy
- B** monarchy
- C** democracy
- D** oligarchy

64 Study the map below.

Locations of Ancient Civilizations

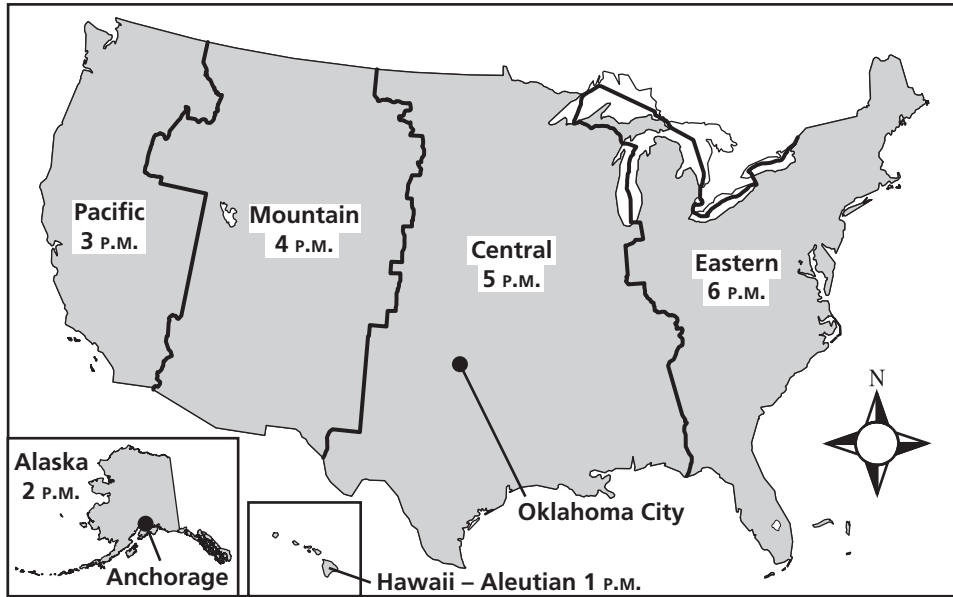


Which factor most contributed to the development of civilizations in the darker-shaded area?

- F** Seas provided protection from invasion.
- G** Fresh water was used to irrigate farmland.
- H** Mountains were mined for iron ore.
- J** Arid land provided building materials.

65 Study the map below.

United States Time Zones



If it is 4:00 P.M. in Oklahoma City, what time is it in Anchorage?

- A** 1:00 P.M.
- B** 2:00 P.M.
- C** 5:00 P.M.
- D** 9:00 P.M.

66 Study the excerpt below.

Agricultural runoff is the single biggest source of water pollution in the nation's rivers and streams, according to the federal Environmental Protection Agency.

— *New York Times*, Sept. 17, 2009

Based on the excerpt, which factor contributes to water pollution?

- F** farming practices
- G** large populations
- H** acid rain
- J** recycling waste

67 Which factor would directly contribute to changes in the boundaries of congressional districts?

- A** growth of religious groups
- B** declining economic growth
- C** availability of open land
- D** shifts in population

68 Study the passage below.

Deforestation is a major challenge. Between 1990 and 2010 Latin America and the Caribbean and Sub-Saharan Africa experienced the greatest forest losses, followed by the Arab States.

— United Nations, Human Development Report, 2011

Which effect does the environmental change described in this passage have on local areas?

- F** increase in rural populations
- G** decrease of available ranch lands
- H** increase in natural disasters
- J** decrease of animal habitats

69 Which map element conveys information about direction?

- A** projection
- B** legend
- C** bar scale
- D** compass rose

Reading and Language Arts Answer Key

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

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

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

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

Mathematics Answer Key

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

15	B
16	F
17	D
18	F
19	B
20	J
21	A
22	G
23	D
24	G
25	B
26	J
27	C
28	G

29	A
30	F
31	C
32	F
33	C
34	G
35	A
36	J
37	B
38	F
39	C
40	H
41	A
42	G

43	C
44	F
45	C
46	F
47	D
48	G
49	C
50	J
51	C
52	F
53	D
54	J
55	B

Science Answer Key

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

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

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

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

Social Studies Answer Key

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

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

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

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



Tennessee Comprehensive Assessment Program
Achievement Test ~ Grade 7
Practice Test
Version B



TN00005429