Tennessee Comprehensive Assessment Program
Achievement Test ~ Grade 5
Practice Test
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Introduction

What is the TCAP Achievement Test?

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

What are the questions testing?

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

Who will be tested?

Students in grades 3 through 8 will be tested.

How long will the tests take?

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

How will the tests be scored?

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

May calculators be used?

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

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

What is the purpose of the practice test?

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

Here are some tips for preparing students for the test.

Remind students to:

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

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

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

**Pause and Think:** If you are not sure how to answer a question, carefully read it again. Rule out answer choices that you know are incorrect and then choose from those that remain.
Directions
Read the story. Then answer Numbers 1 through 7.

Helping at the Petting Zoo

1. “I’m so glad that I had the opportunity to spend time with you over the summer,” Tonya said to her grandmother on the telephone. “I really enjoyed helping with the farm animals. I feel like I learned a lot over the past several weeks.”

2. “It was great having you here,” Grandma replied. Then Tonya’s grandmother spoke the most amazing words. “Grandpa and I were hoping that you would help us take care of the animals at the petting zoo during the county fair.” Tonya had been hoping to hear these words.

3. Tonya’s grandmother could not see her face, but Tonya was beaming. Year after year, she had been watching her older cousin Chris help their grandparents at the petting zoo. Tonya had always wanted to help, but until now, she had been too young.

4. “I would love to help!” Tonya exclaimed. “You name it, and I’ll do it!”

5. When Tonya hung up the telephone, she made a list of the animals that Grandma and Grandpa usually brought to the county fair. Then she thought about what her jobs might be. She made a big note on her calendar. The words “Work at the Petting Zoo!” appeared in the box marked “Saturday.” The important day was three weeks away.

6. That night, Tonya stayed awake in bed thinking about the petting zoo disaster that had occurred two years ago. She was still embarrassed about the whole event. On the last day of the county fair, Tonya had tried to help do some of the jobs at the petting zoo without telling anyone. She had followed Chris into the animal pen to help give water to some of the animals. Unfortunately, Tonya accidentally spilled the entire bucket of water, creating a huge, muddy mess. Then, when Chris left the pen to get some animal food from the trailer, Tonya had followed him, forgetting to latch the gate. Soon pigs, ducks, and goats were wandering around the fairground.
There was a moment of chaos as farm animals darted about. Tonya’s heart had beaten so fast that she thought it might burst through her chest. Many of the adults and children at the fair had helped herd the animals back into the pen. Of course, everyone thought the event was funny. After the animals were returned to the pen, Tonya walked away more embarrassed than she had ever been. She knew she was not ready to be a helper.

Now two years had passed and Tonya had spent a lot of time on her grandparents’ farm. Her grandparents noticed that Tonya’s ability to handle the animals had improved. Tonya could not wait for the fair. Each day she crossed off a box on the calendar.

Finally, the big day arrived. That morning, Tonya’s grandparents picked her up and drove to the fairground to set up the petting zoo. Tonya worked hard spreading hay around the pens while Grandpa led animals from the trailer to their pens. The fair began soon after everything was set up. Children gathered around the petting zoo, each eagerly awaiting a turn.

Tonya’s friends arrived in time to see her feed a baby lamb with a bottle. Then she walked a cow around the pen. When some of the hens got excited, she helped calm them. Tonya felt great until she saw her cousin Chris enter the pen.

“What is he doing here?” Tonya thought.

“Hey, do you need a hand?” Chris asked.

“No, thanks,” Tonya answered sternly.

“That’s great!” Chris said with a look of relief. “I am glad you can take over. Grandma and Grandpa need help with these animals, and I really want to walk around and play some games.”

Tonya felt good knowing that Chris also trusted her. Now Tonya knew she could be the official helper. “Go have fun,” she said to Chris. “I’ve got everything under control.”

Grandpa and Grandma smiled as they watched Tonya from the other side of the pen. Tonya helped a little girl pet a large, pink pig, and she brought animal food to the kids so that they could feed the goats. Her love for the animals and her sense of responsibility showed. Helping at the petting zoo was even more fun than she had imagined it would be.
1. Complete the following analogy.

Assist is to help as latch is to ________.

A release  
B fasten  
C shield  
D guard

2. Read the diagram.

Grandpa leads the animals to their pens from the trailer.  
Tonya’s friends arrive at the fair.  
Tonya helps a little girl pet a pig.

What belongs in the empty box?

F Chris asks Tonya if she needs help.
G Tonya brings food to the kids to feed the goats.
H Children help herd the animals.
J Children gather around the petting zoo.

Go On
3. Look at the diagram.

<table>
<thead>
<tr>
<th>Cause</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tonya feels that she is ready to help at the petting zoo.</td>
</tr>
</tbody>
</table>

What belongs in the empty box?

A. Tonya watched Chris at the petting zoo year after year.
B. Tonya is able to help calm the hens when they are excited.
C. Tonya helped at the petting zoo two years ago.
D. Tonya improves her ability to handle the animals over the summer.

4. What is one way the reader can tell that “Helping at the Petting Zoo” is fiction?

F. There is a plot.
G. The author tells about herself.
H. There are rhyming words.
J. The characters are real people.
5. How does the petting zoo disaster influence Tonya’s actions in the two years that follow?
   A. She believes that she has learned all she can about the animals.
   B. She decides that she should not work with the animals again.
   C. She realizes that she is not ready for a job at the fair.
   D. She asks to be given a different job at the county fair.

6. How do Grandma and Grandpa most likely feel at the end of the story?
   F. excited that children at the fair enjoy the petting zoo
   G. proud that Tonya does a good job at the petting zoo
   H. relieved that the animals are under control
   J. pleased that Chris is able to enjoy the fair this year

7. What is the author’s purpose for writing this story?
   A. to entertain readers by telling about a girl who works at a petting zoo
   B. to describe how exciting it is for a girl to feed farm animals
   C. to give information about farm animals at a county fair
   D. to persuade the reader to visit a petting zoo
Directions  Read the poem. Then answer Numbers 8 through 12.

Rainy Days

Let the summer slip away
Let dark days start to fall
Let the blue give way to gray
   I long to hear the call.

   It sounds just like a tune to me
   It waters me with song
   It always is good company
      At night or all day long.

Rain-wearing shoes go pitter-pat
Rain dips and dives and dances
Rain drips and drives, this way and that
   Upon the roof it prances.

On metal roofs it rat-a-tats
On wooden roofs it drums
On windows it just splitter-splats
   When at last it comes.

Down on leaves it splashes
Down wooden trunks it pours
Down to the earth it dashes
   Calling me outdoors.
8 Which line from the poem contains an example of onomatopoeia?
- F Let dark days start to fall
- G It waters me with song
- H At night or all day long.
- J On windows it just splitter-splats

9 Read Lines 17 through 20.

Down on leaves it splashes
Down wooden trunks it pours
Down to the earth it dashes
Calling me outdoors.

These lines show an example of
- A simile.
- B alliteration.
- C hyperbole.
- D repetition.

10 Which line lets readers know that this poem is written in first person?
- F Let the blue give way to gray
- G It sounds just like a tune to me
- H It always is good company
- J On wooden roofs it drums
11. Choose the line that best describes the time of year when the poem takes place.
   A. Let the summer slip away
   B. Let the blue give way to gray
   C. At night or all day long.
   D. Down on leaves it splashes

12. Read Line 10 from the poem.

   Rain dips and dives and dances

Which literary device does the line use?
   F. hyperbole
   G. metaphor
   H. personification
   J. simile
The Secrets of the Humpback Whale

1. You stare across the ocean waters. Suddenly a dark figure emerges from the deep water. You realize that a humpback whale seems to be looking right at you!

2. The curious animal wants to get a better look at the world above the ocean. Scientists call this action “spy hopping.” People are just as curious about the humpback whale as it is curious about us. Scientists have spent years trying to unravel the secrets of its life.

The Humpback Whale

3. The large body of a humpback whale is black across the top and back, but it has a mix of black and white on its underside. It also has bumps on its head in which at least one stiff hair grows. Scientists, however, are not certain of the purpose of these hairs. Some scientists think that these hairs might help the whales detect movement in the waters around them.

4. Adult humpback whales can grow to be 40–50 feet long. That’s longer than a school bus! They can weigh up to 40 tons, which means they could weigh more than two school buses.

Go On
A Close Bond

Young whales are born in warm, tropical waters. The newborn calves are almost as long as a small car and weigh between one and two tons. Like many other baby animals, they like to play. For instance, when a mother whale is floating on the surface of the water, the calf will wriggle up her back and then slide down the other side!

A mother whale will often touch the fins of her calf. She also likes to give her calf a ride on the top part of her head. The close bond between the mother and calf offers the young whale protection. When a calf gets into trouble, it can send out an alarm call, knowing its mother will quickly answer.

Time to Eat

The humpback whale can eat 2,000 pounds of food in one day! How does it manage to devour such large amounts? The whale has a special mouth and throat, which expand to form a large pouch. Inside, there are no teeth. Instead, hundreds of overlapping plates, called baleen, hang from the whale's upper jaw. Each piece of baleen has a hairy fringe. When the whale shuts its mouth, water rushes out. However, baleen trap the fish inside, and the whale swallows the fish.

The humpback often feasts on small fish like herring. It also eats small organisms called plankton and tiny shrimplike animals called krill. Its enormous appetite helps the humpback grow a thick layer of blubber beneath its skin. This fatty layer can be four inches thick, and it helps the whale survive its long migration.

The Long Migration

Like some types of birds, humpback whales migrate to warmer climates during the winter months. Humpback whales live in groups all over the world. During the summer months, they prefer to live in the cooler waters closer to the North and the South Poles. But as winter approaches and the water becomes too cold for them, the whales migrate to warmer waters closer to the equator.

Humpback whales are the champions of migration, traveling longer distances than any other mammal. Some groups of whales travel about 3,000 miles from the Arctic waters to the Hawaiian Islands. Another group of humpback whales spends its winters in the warm waters near Costa Rica. As summer approaches, they travel to cooler waters near Antarctica. Their journey is over 5,000 miles!
Songster of the Sea

Humpback whales are great singers too. They produce some of the longest and most varied sounds of any animal. Some songs can be 20 minutes long! Their songs include grunts, clicks, moans, and buzzes. However, the whale doesn’t have vocal cords like humans. They most likely make their noises by moving air through the tubes and chambers of their respiratory system, or breathing system.

Researchers guess that there may be different reasons for the whales’ music. Usually, male whales sing most often during mating season. They could be telling others, “Stay away from my territory.” Whales also sing when they are traveling. The melodies may be a way for them to stay in touch with each other. It is easy to hear the noisy songs, which can be as loud as the roar of a jet. In addition, all the whales in a certain area learn the same song. For instance, the whales near Hawaii sing a different song than the group by Costa Rica.

Keeping up the Studies

Today, scientists continue to study the humpback whale. These scientists take photographs of their tail flukes. Each fluke has unique markings, which are like fingerprints. The pictures allow scientists to track where the whales travel. Perhaps scientists will eventually learn all the secrets of the humpback whale.
13 Look at the diagram.

Which title belongs in the empty oval?

A Parts of a Whale  
B Diet of a Whale  
C Whale Migration Routes  
D Whale Songs

14 The headings in this passage help a reader to

F understand unknown words.  
G memorize important facts.  
H recognize answers to questions.  
J locate information quickly.
15 What is the main idea of the section titled “The Long Migration”?
A Humpback whales sing by moving air through their breathing systems.
B Humpback whales travel many miles to reach better waters.
C Humpback whales have large appetites that help them grow blubber.
D Humpback whales live in many oceans around the world.

16 Which is the best summary of the passage?
F Humpback whales are very curious animals. They eat thousands of pounds of food each day, migrate long distances, and sing songs. Scientists have spent years trying to understand humpback whales.
G Humpback whales have large bodies and eat thousands of pounds of food every day. They migrate longer distances than any other mammal. Singing songs may be one way that humpback whales communicate with one another.
H Humpback whales use baleen to trap fish and eat large amounts of food. Mothers and babies have a close bond that makes the babies feel safe. Humpback whales migrate long distances.
J Humpback whales are large animals that eat an enormous amount of food each day. Baby humpback whales are born in warm waters and are close to their mothers. Scientists are interested in these curious animals.

17 Which question can be answered after reading the passage?
A When do calves stop playing with their mothers?
B What is spy hopping?
C What animals prey on humpback whales?
D How long does it take a humpback whale to migrate?
18 What is the author’s purpose for writing this passage?
F to describe to readers a humpback whale’s journey through tropical waters
G to give readers information about the characteristics of humpback whales
H to entertain readers with a story about a humpback whale’s habits
J to tell readers why humpback whales migrate for such long distances

19 Which option would most help the reader understand where whales migrate?
A a video of humpback whales migrating near Antarctica in the summer
B a list of common humpback whale migration sites
C a map highlighting the migration paths of humpback whales
D a picture of humpback whales migrating near Costa Rica

20 The second picture in the passage helps the reader to
F see how whales play together.
G understand why whales travel in groups.
H see the distance that humpback whales have to travel.
J recognize the different parts of a humpback whale.
Directions  Martin is writing an essay about how his family and their neighbor help each other. Read the paragraph and answer Numbers 21 through 24.

My family helps my neighbor, and she helps us. Mrs. Nelson watches my sister and me until it is time for us to get on the bus. Every afternoon, I take Mrs. Nelson’s dog for a walk, and my sister plays with him. ________, Dad mows her lawn.

21 Read the sentence from the paragraph.

________, Dad mows her lawn.

Which transition would best begin this sentence?

A  Then  
B  Instead  
C  However  
D  Sometimes

22 Martin wants to add a sentence to the beginning of the paragraph. Which sentence best supports the topic sentence and fits with the rest of the paragraph?

F  Mrs. Nelson is nice.  
G  Mrs. Nelson has become a good friend to our family.  
H  Every morning, Mom drops us off at Mrs. Nelson’s house.  
J  Mom and Mrs. Nelson both like gardening.
23 Which sentence **best** fits the context and flow of ideas in this paragraph?
   A  Mrs. Nelson often bakes some cookies for us.
   B  Mrs. Nelson has a big backyard.
   C  Mrs. Nelson has lived here for many years.
   D  Mrs. Nelson also has a little, gray cat.

24 Which is the **best** concluding sentence for this paragraph?
   F  I am glad Mrs. Nelson is my neighbor.
   G  My sister and I enjoy playing with Mrs. Nelson’s dog.
   H  Mom wants to get Mrs. Nelson a gift for being so helpful.
   J  I like it when Mrs. Nelson tells us stories.
Shanell gave this speech. Read the speech and answer Numbers 25 through 31.

Let Our Talents Show

1. Have you heard that someone in our school can juggle cans of beans? Did you know that a girl in my math class can sing and play the piano with a blindfold covering her eyes? Did you hear about the boy who can balance a basketball on his head? These are amazing talents! Unfortunately, few students realize they could be sitting next to someone in class who can do these things.

2. On behalf of all the fifth grade students, I am speaking to you today to convince you that we should have a fifth grade talent show. We believe that putting together this show would prove to you, our teachers, that we are responsible and hard working. It is also a good way for us to learn about each other and have fun!

3. I think kids sometimes feel that they don’t have many things in common with other kids at school. A talent show will give us a chance to get to know each other even better. Last week, I talked to a group of students at lunch and asked the group its opinions about having a talent show. Two of the students discovered they both love to sing. They talked about singing together for the talent show. It will be so great to see new friendships form as students learn they have common interests.

4. We know putting together a talent show is a tremendous amount of work. However, this is something that is important to all fifth graders. We can work together on the show. Some students are willing to make decorations for the stage, while others want to make posters to advertise the talent show. So you see, we are ready to take responsibility for this project.

5. I hope that you, the fifth grade teachers, recognize how important this talent show is to us. We spend many hours working hard at school and doing homework. This talent show would be a great reward and provide a way for the fifth graders to work together. We appreciate your dedication to the students and hope that you will consider our idea.

Go On ▶
25 Read the sentence from Paragraph 4.

Some students are willing to make decorations for the stage, while others want to make posters to advertise the talent show.

What does the underlined word mean?
A show respect for
B make an announcement about
C give thanks for
D ask a question about

26 Which of these would best help convince the fifth grade teachers to allow the students to have a talent show?
F props that the students would use during the talent show
G a picture of a student singing and playing the piano while blindfolded
H a list of students who wish to participate and share their talents
J drawings of stage decorations that students wish to make
27 Which sentence from the speech is a fact?

A These are amazing talents!
B It is also a good way for us to learn about each other and have fun!
C They talked about singing together for the talent show.
D It will be so great to see new friendships form as students learn they have common interests.

28 Which list best represents the information in the speech?

F 1. talented kids in school
   2. talent show is a good idea
   3. will be a lot of work
   4. we are responsible enough to do it

G 1. kid can balance ball on head
   2. responsible students in school
   3. talent show is a good idea
   4. convince teachers we can do it

H 1. talented kids in school
   2. students love to sing
   3. responsible students in school
   4. talent show is a good idea

J 1. responsible students in school
   2. students do not know one another well
   3. students love to sing
   4. students are hard-working
29 Look at the diagram.

```
<table>
<thead>
<tr>
<th>Cause</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Shanell gives a speech about having a fifth grade talent show.</td>
</tr>
</tbody>
</table>
```

Which sentence belongs in the empty box?

A. One student can balance a basketball on his head.
B. Two students enjoy singing and would like to sing together.
C. Some students feel that they have too much work to do.
D. The students want to do something fun to learn about each other.

30 Which question is answered in the speech?

F. Will parents help with preparations for the show?
G. What are the benefits of a talent show?
H. How many students will take part in the show?
J. When will the talent show take place?
The audience for this speech is the

A entire school population.
B school principal.
C fifth grade students.
D fifth grade teachers.
Directions  Read and answer Numbers 32 through 38.

32  Which skill would a good group leader use?
    F  listening to what others have to say
    G  choosing to do most of the work
    H  denying making a mistake
    J  refusing to give compliments

33  Read the sentence.

    We told the bus driver that the backpacks left on the bus were mine.

Which word best replaces the underlined word in the sentence above?
    A  those
    B  ours
    C  they
    D  us
34 Which sentence is written correctly?
F The tiny children be very sleepy.
G The tiny children are very sleepy.
H The tiny children was very sleepy.
J The tiny children been very sleepy.

35 Which sentence is written correctly?
A My team is so excited that theirs no soccer practice this afternoon.
B I don’t never have any time to play or watch television during the week.
C Now my older brother can teach me how to play that new game.
D Mom will be happy that I can finally help her sit the table for dinner.

36 Which sentence is written correctly?
F Miguel, Jenny asked, “will you help me with my homework?”
G Miguel Jenny asked, “will you help me with my homework?”
H “Miguel,” Jenny asked “will you help me with my homework?”
J “Miguel,” Jenny asked, “will you help me with my homework?”
37 Read the sentences below.

The rain poured down for hours. It left puddles everywhere. The scouts did not cancel their food drive.

Which of these is the best way to combine the three sentences?

A The rain poured down for hours, leaving puddles everywhere: the scouts did not cancel their food drive.

B Pouring down for hours, rain leaving puddles everywhere, yet the scouts did not cancel their food drive.

C The rain poured down for hours, it left puddles everywhere, and the scouts did not cancel their food drive.

D Pouring down for hours, the rain left puddles everywhere, but the scouts did not cancel their food drive.

38 Read the sentence fragment.

The old television.

How should the sentence fragment be changed to make a complete sentence?

F The old television needs to be repaired.

G The old television needing repair.

H The old television repair.

J correct as is
Part 2

Directions  Read the story. Then answer Numbers 39 through 46.

New Responsibilities

1  On the count of three, all of the men in our town groaned as they pulled the frame of the house upright to stand tall and proud against a blue sky. It is common for people of the Amish community to help our neighbors build their barns. Boys aren’t really needed, and I was still considered a boy. No matter how much I begged, the adults would let me hammer only a few wooden pegs into place. Even my youngest brother, Liam, could hammer in pegs. I wanted to be old enough to really help! I kicked at the dirt. I could only watch as the men proudly patted each other on the back.

![Image of men working on a barn]

2  My oldest brother, Caleb, wiped the sweat from his brow with his bandana and tucked it into his worn overall pocket. He draped a friendly arm over my shoulder, which I shrugged off with a grunt.

3  “Abraham, you’ll be old enough soon. Next spring there will be plenty of barns to raise. You’ll have so much work expected of you that you’ll wish you could sneak out to the swimming hole instead!” Caleb chuckled.
I did not find this funny. “Tell me these arms aren’t strong enough to work!” I pulled my hand into a fist and raised it so that my brother could inspect my muscles. “I chop more wood with these arms than anyone else around. I can do the work, Caleb!”

Caleb studied me, and I saw his face soften as he dipped his head. “I’ll talk to Papa. The Yoders’ family barn goes up in a couple of weeks. Maybe you can help build it.”

My heart thumped in my chest like a heavy drumbeat. Caleb smiled and motioned toward the table that was set with a feast of food. “After weeks of working on this barn, I’m thinking of nothing but sausage and baked beans. I promise to talk to Papa, but only if you let me have your share of apple pie.”

We sat down at the long wooden tables. Glasses of cold lemonade clinked around the table. Everyone piled their tin plates high with meat, cheese, and biscuits with wild strawberry jam. My plate remained empty, and even when Caleb nudged me, I could only smile and shake my head. The only thing I could think about was raising the Yoders’ barn.

When the food was gone and the lemonade pitchers were dry, Papa and the other men began playing fiddles and banjos. Caleb clapped his hands as people began to dance. Tomorrow the men would finish the barn. They would make its wooden frame into a complete building. Tonight, though, there was a celebration.

I did not feel like participating in the festivities. I had bigger things on my mind. I walked to the barn, running my hands carefully down the rough beams. There was nothing as pleasing to me as the smell of fresh wood. I walked around the structure, looking at the way the walls were fixed together. Not a crack nor space could be seen because they were so carefully constructed. I wished that I could have helped. I heard footsteps behind me and turned to see Caleb approaching. For the second time that day, my heart jumped.

“What did Papa say?” I whispered hopefully.

Caleb paused, chewing on a blade of grass. Even in the dimming evening light, I could see a big smile on his face. “Papa says . . .”

Anxious, I spoke quickly, “Tell me, Caleb.”

“What plans do you have two weeks from tomorrow, say, about sunrise?” Caleb asked.

I whooped and threw my hat in the air. I felt my appetite returning and wondered if there was any more apple pie left. After all, I was going to need all the strength I could get!
39 Read the sentence from Paragraph 6.

My heart thumped in my chest like a heavy drumbeat.

Which literary device is used in this sentence?
A simile  
B onomatopoeia  
C hyperbole  
D personification

40 Readers can tell this story is written in the first-person point of view because it

F has dialogue between the characters.  
G is told by a character who reveals his thoughts.  
H has a plot with a conflict and a resolution.  
J is a true story about real people and true events.

41 What is Abraham’s problem in the story?
A He has not learned to properly hammer in pegs.  
B His older brother still considers him a boy.  
C His younger brother is allowed to hammer in pegs.  
D He is not old enough to do more work.
Based on the story, what will most likely happen when Abraham begins his new responsibilities?

F  He will grow stronger than his older brother.
G  He will show his youngest brother how to do the work.
H  He will do more than just hammer in pegs.
J  He will watch the older men build barns in the neighborhood.

Which statement from the story best supports the conclusion that it takes a long time to build a barn?

A  “Next spring there will be plenty of barns to raise.”
B  “You’ll have so much work expected of you that you’ll wish you could sneak out to the swimming hole instead!”
C  “After weeks of working on this barn, I’m thinking of nothing but sausage and baked beans.”
D  After all, I was going to need all the strength I could get!

How can readers tell that Abraham is proud of what is built in his community?

F  He throws his hat in the air.
G  He loses his appetite at the party.
H  He asks his brother to talk to his father.
J  He admires the new barn during the party.
45 Read the sentence from Paragraph 6.

“. . . I promise to talk to Papa, but only if you let me have your share of apple pie.”

Which definition has the same meaning as the underlined word?

A  a full portion belonging to an individual
B  a part of a plow
C  to take part in
D  to divide equally

46 Read the sentence from Paragraph 4.

I pulled my hand into a fist and raised it so that my brother could inspect my muscles.

What is the meaning of the underlined word?

F  find
G  recognize
H  examine
J  watch
Directions

Sara wrote this book report. It contains mistakes. Read the report and answer Numbers 47 through 53.

(1) A Trip of Hope, written by Ann York, is an excellent book and has become one of my favorites. (2) It is a historical fiction story about the Pilgrims who traveled to America on the Mayflower. (3) The voyage events are similar to those that the real Pilgrims experienced.

(4) The main character is an 11-year-old boy named James who traveling on the ship with his parents. (5) Unfortunately some of the other children on the ship tease James. (6) One day a terrible storm tosses the ship around the Atlantic Ocean, causing a large pole to break. (7) James has an idea about how to fix the pole, and his idea works, the captain is very grateful. (8) James’s actions don’t stop the children from teasing his. (9) James also watches a man fall overboard and tells the crew. (10) The crew members are able to save the man because of James’s fast action. (11) It’s not long after that the other children on the ship realize that they should not tease James.

(12) Ann York makes the characters in her book come to life. (13) She has written about an adventure that is so exciting that I couldn’t put the book down until I finished it. (14) I would definite tell all fifth graders to read this book.

47 Read Sentences 2 and 3.

It is a historical fiction story about the Pilgrims who traveled to America on the Mayflower. The voyage events are similar to those that the real Pilgrims experienced.

Choose the correct way to write the underlined word.

A voyager’s
B voyagers
C voyagers’
D correct as is
48 Read Sentence 4.

The main character is an 11-year-old boy named James who traveling on the ship with his parents.

Choose the correct way to revise the underlined words in the sentence.

F who travel
G who is traveling
H who have traveled
J who has traveling

49 Read Sentence 5.

Unfortunately some of the other children on the ship tease James.

Which sentence correctly uses a comma?

A Unfortunately some of the other children on the ship tease, James.
B Unfortunately some of the other children, on the ship tease James.
C Unfortunately some of the other children on the ship, tease James.
D Unfortunately, some of the other children on the ship tease James.
50 Read Sentence 7.

James has an idea about how to fix the pole, and his idea works, the captain is very grateful.

Choose the best revision of the run-on sentence above.

F James has an idea about how to fix the pole. When his idea works, the captain is very grateful.
G James has an idea about how to fix the pole, his idea works and the captain is very grateful.
H James has an idea about how to fix the pole; his idea works when the captain is very grateful.
J James has an idea about how to fix the pole and his idea works and the captain is very grateful.

51 Read Sentence 8.

James’s actions don’t stop the children from teasing his.

Which word best replaces the underlined word?

A it
B her
C him
D them
52  Read Sentence 13.

She has written about an adventure that is so exciting that I couldn’t put the book down until I finished it.

Choose the correct way to write the underlined word.

F  coul’dnt
G  couldn’t
H  could’nt
J  correct as is

53  Read Sentence 14.

I would definite tell all fifth graders to read this book.

Which word correctly replaces the underlined word in the sentence?

A  define
B  definitely
C  definiteness
D  correct as is
Directions  
Read the passage. Then answer Numbers 54 through 57.

Riding the Wind

What’s it like to fly in a hot-air balloon?

1. Imagine sailing through the sky, high above buildings and trees, in perfect peace and quiet. No noisy engines. No smudgy window in your way. No blustery wind blowing in your face. You can’t feel or hear the wind because you’re traveling in the exact same direction and at the exact same speed it is.

2. A hot-air balloon has three main parts: the balloon, called an envelope; a basket, where passengers ride; and a burner system, which supplies the hot air.

3. Most balloon envelopes are made of strong, lightweight nylon. They vary in size and shape, but they have to be really, really big to lift even a single person. Most weigh more than an adult man and use more fabric than you’d need to cover a baseball diamond.

4. The basket is usually made of wicker, which is sturdy but not too stiff. It needs to bend a bit for a soft landing, just like a good jumper bends her legs instead of keeping them stiff and straight when she lands.

5. When the burner system blasts flames, it makes a noisy whooshing sound, but once the balloon is flying, the burner can be turned off. The air in the envelope will then slowly cool, and the balloon will gradually sink unless the pilot starts the burner again.

6. To steer, a pilot adds hot air to the balloon to go up or deflates it to go down, until he finds a breeze blowing in the direction he wants to fly. But no matter which way the wind blows them, balloonists have an amazing bird’s-eye view of the world.

54 Read this sentence from the passage.

To steer, a pilot adds hot air to the balloon to go up or **deflates** it to go down, until he finds a breeze blowing in the direction he wants to **fly**.

What is a synonym for the underlined word above?

- F  loosens
- G  charges
- H  flattens
- J  separates

55 Which sentence **best** describes the main idea of the passage?

- A  A burner system heats the air in the balloon.
- B  Balloon envelopes have to be really big in size.
- C  A hot-air balloon has several parts that work together to make it float.
- D  Hot-air balloons have an envelope, a basket, and a burner system.
56 Read the following steps involved in flying a hot-air balloon.

1. Hot air enters the balloon.
2. The balloon sinks.
3. The burner is turned on.
4. The burner is turned off.
5. The balloon rises.

In what order should these steps happen?

F 3, 1, 5, 4, 2
G 1, 3, 5, 2, 4
H 3, 5, 4, 1, 2
J correct as is

57 Jeremy is writing a report on hot-air balloons. Which source would have the best information for his report?

A a story about adventures in a hot-air balloon
B a newspaper article about hot-air balloon facts
C a brochure advertising hot-air balloon rides
D an airplane magazine that mentions hot-air balloons

Go On ➤
Directions  Nancy wrote this report. It contains mistakes. Read the report and answer Numbers 58 through 66.

1  My friends and I have made a promise to do all that we can to preserve the earth. I want to do more than just recycle, though. I’d like to get involved in something really big. I think people sometimes forget that we can do more than just save trees, water, and energy.

2  Although there are many animals that need help, I’d like to work to save mountain gorillas. Mountain gorillas are neat animals that live in Africa. Gorillas have a vegetarian diet. Unfortunately, there aren’t very many mountain gorillas left. Forests, where these gorillas live, are often cut down to build farms. This leaves a smaller area in which gorillas can live. _________, the farmers and gorillas are living closer together. Consequently, gorillas can catch human diseases, just like people can catch colds from one another.

3  What happens when an illness that a gorilla catches is more serious than just a cold? Gorillas must rely on humans to help them. Luckily, there are scientists, veterinarians, and other people who work together to help the gorillas. These caring people provide medical care for injuries as well as try to prevent the gorillas from catching human diseases.

4  Someday I’d like to travel to Africa and join these volunteers. They work with the native people to make things better for everyone—gorillas and humans alike. This is called conservation medicine. The volunteers believe that keeping animals, people, and the environment healthy go hand in hand. I’d love to be part of a group that works hard to improve everyone’s habitat.

58  If Nancy wanted to give her report a title, what would be the best title to use?
   F  Africa: Ever Changing
   G  Preserving Africa
   H  Joining the Gorilla Doctors
   J  Gorillas: The Adorable Animal
59 Choose the person who would be most interested in this report.

A  a scientist studying mountain gorillas in Africa
B  a person who wants to volunteer to help mountain gorillas
C  a veterinarian who treats mountain gorillas at the local zoo
D  a person who lives near mountain gorillas in Africa

60 Which sentence should be removed from Paragraph 2?

F  Although there are many animals that need help, I’d like to work to save mountain gorillas.
G  Gorillas have a vegetarian diet.
H  Unfortunately, there aren’t very many mountain gorillas left.
J  Consequently, gorillas can catch human diseases, just like people can catch colds from one another.

61 How should Paragraphs 2, 3, and 4 be arranged to present a logical order?

A  2, 4, 3
B  4, 3, 2
C  3, 2, 4
D  correct as is

Go On
62 Read Paragraph 1.

My friends and I have made a promise to do all that we can to preserve the earth. I want to do more than just recycle, though. I’d like to get involved in something really big. I think people sometimes forget that we can do more than just save trees, water, and energy.

Which is the best concluding sentence for the paragraph?
F We can do more to save energy.
G More studies should be done on gorillas.
H There are many volunteers around the world.
J Humans should be more caring about wildlife.

63 Read the diagram.

Which phrase belongs in the blank box?
A Problems gorillas may face
B Steps conservationists take to help gorillas
C Results from scientific studies of gorillas
D Gorilla observations from volunteers
64  Read the sentences from Paragraph 2.

This leaves a smaller area in which gorillas can live. ________, the farmers and gorillas are living closer together.

Which phrase belongs in the blank space?

F  As a result
G  At any rate
H  By the way
J  To begin with

65  The author most likely wrote this report to

A  encourage readers to visit a farm in Africa.
B  inspire readers to participate in a recycling program.
C  persuade readers to practice conservation medicine to help mountain gorillas.
D  inform readers about problems mountain gorillas may experience in Africa.

66  Read the sentences from Paragraph 4.

1) Someday I’d like to travel to Africa and join these volunteers.
2) They work with the native people to make things better for everyone—gorillas and humans alike.
3) This is called conservation medicine.
4) The volunteers believe that keeping animals, people, and the environment healthy go hand in hand.

Choose the correct order of the sentences.

F  1, 3, 2, 4
G  1, 2, 4, 3
H  1, 4, 3, 2
J  correct as is

Go On ➤
Directions  Read and answer Numbers 67 through 75.

67  Read the sentence below.

All of the fifth grade students were required to participate in the science fair the teachers thought it would be a great experience.

Which of these is the best way to correct the run-on sentence?

A  All of the fifth grade students were required to participate in the science fair although the teachers thought it would be a great experience.

B  All of the fifth grade students were required to participate in the science fair, but the teachers thought it would be a great experience.

C  All of the fifth grade students were required to participate in the science fair because the teachers thought it would be a great experience.

D  All of the fifth grade students were required to participate in the science fair, then the teachers thought it would be a great experience.

68  Read the sentences.

Dana was excited about the fishing tournament. She had hardly slept all night.

Choose the best way to combine the two sentences above.

F  Dana was excited about the fishing tournament; but she had hardly slept all night.

G  Dana was excited about the fishing tournament, and she had hardly slept all night.

H  Dana was excited about the fishing tournament, for she had hardly slept all night.

J  Dana was excited about the fishing tournament; however, she had hardly slept all night.
69  Read the paragraph.

(1) He showed us how to build a shelter with pine branches and even made a pillow with leaves and fluff from milkweed pods. (2) I could not imagine sleeping outdoors. (3) The man seemed to know everything about camping. (4) However, after the shelter was complete, it looked as comfortable as the softest feather bed.

Choose the best order for the sentences.

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

70  A group of students is writing a report about some of the historical sites in Tennessee. Which source would provide the most reliable information for the report?

F  a professor who teaches Tennessee history at a local college  
G  a Tennessee native who collects historical artifacts  
H  a student who often watches history programs  
J  a tour guide who works at a local museum
71 Complete the analogy.

Chapter is to book as brick is to ________.

A stone
B cement
C wall
D water

72 In a report about Mark Twain, under which heading could a reader find information about Mark Twain’s book *The Adventures of Tom Sawyer*?

F Tours Around the World
G Growing Up on the Mississippi
H A Newspaper Reporter in the West
J Success as a Writer
Look at the picture.

What is the main idea of this picture?

A  Two girls are talking about a game.
B  Two girls are playing basketball.
C  Two girls are laughing during a game.
D  Two girls are winning a basketball game.
Look at the picture.

What is the mood of the picture?

F  bewildered
G  doubtful
H  happy
J  respectful
Look at the picture.

What is the purpose of the sign?

A  to persuade people to take swimming lessons
B  to entertain people with a funny design of a swimmer
C  to inform people that there are many swimmers in the water
D  to communicate to people to avoid swimming in the area
The population of Tennessee is about 5,501,000 people. How is 5,501,000 written in words?

A. five million, five hundred one
B. five million, five hundred ten thousand
C. five million, five hundred one thousand
D. five million, five hundred thousand, one
The table shows the lengths of string used by 5 different students during an experiment.

<table>
<thead>
<tr>
<th>Student</th>
<th>String Length (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ana</td>
<td>2.5</td>
</tr>
<tr>
<td>Claudia</td>
<td>1.5</td>
</tr>
<tr>
<td>Ethan</td>
<td>2.0</td>
</tr>
<tr>
<td>Mario</td>
<td>3.0</td>
</tr>
<tr>
<td>Ricky</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Which graph best represents the data in this table?
3. The front of a clay design is shown below.

What is the area of the front of the clay design?

A. 72 square inches
B. 36 square inches
C. 27 square inches
D. 17 square inches
4. A student has one sheet of stickers that contains 78 stickers. There are 6 rows of stickers with an equal number of stickers in each row. How many stickers are in each row?
   - F 11
   - G 13
   - H 72
   - J 84

5. Which shows the prime factorization of 48?
   - A $2 \times 2 \times 2 \times 2$
   - B $2 \times 2 \times 3 \times 4$
   - C $2 \times 2 \times 2 \times 2 \times 2$
   - D $2 \times 2 \times 2 \times 2 \times 3$
Natasha is saving money to buy new boots. For each 5 dollars she saves, her mother gives her 2 more dollars to add to the savings. The graph below shows the total amount Natasha has saved and the total amount her mother has given her at the end of each month for 4 months.

Based on the information in the graph, which is the best prediction of the total amount Natasha will have saved and the total amount her mother will have given her by the end of December?

F  Natasha - $20; Her mother - $8
G  Natasha - $25; Her mother - $10
H  Natasha - $30; Her mother - $12
J  Natasha - $35; Her mother - $14
7 Heavy rains caused the water level of a lake to rise eight hundred sixty-four thousandths of a meter. Which number is equivalent to eight hundred sixty-four thousandths?
A 0.0864
B 0.864
C 86,400
D 864,000

8 Solve:

\[
92 \frac{7}{8} - 49.326 =
\]
F 40.152
G 43.454
H 43.549
J 57.551

9 A figure has 6 faces, 12 edges, and 8 vertices. What is the name of this figure?
A square pyramid
B pentagonal prism
C rectangular prism
D triangular pyramid
10. What is the value of the expression, when \( w = 10 \)?

\[ w \times \left(7 \frac{3}{5} + 1 \frac{2}{5}\right) - \frac{2}{5} \]

- **F** 77
- **G** 79\( \frac{3}{5} \)
- **H** 86
- **J** 89\( \frac{3}{5} \)

11. One windshield wiper blade on Kevin’s new car is 2.25 feet long. What is 2.25 written as a mixed number?

- **A** 2\( \frac{1}{25} \)
- **B** 2\( \frac{1}{4} \)
- **C** 2\( \frac{2}{5} \)
- **D** 2\( \frac{5}{2} \)
Look at the inequality below.

$$4x > 20$$

Which set contains only values of $x$ that make this inequality true?

- **F** $\{4, 5, 6\}$
- **G** $\{3, 4, 5\}$
- **H** $\{5, 6, 7\}$
- **J** $\{6, 8, 10\}$

Sammy is converting the number of acres of land his grandfather’s farm covers to the number of square miles it covers. He will multiply the number of acres by one thousand, five hundred sixty-two millionths. How is this number written in standard form?

- **A** $0.001562$
- **B** $0.01562$
- **C** $1,000.000562$
- **D** $1,562$
14 A painter used 3 gallons of red paint and 2 gallons of white paint to make a road sign. There are 16 cups in a gallon. She also used 3 cups of clear paint to protect the sign. What information is not needed to determine the difference between the numbers of cups of red and white paint she used?

F the number of cups in a gallon
G the number of cups of clear paint she used
H the number of gallons of red paint she used
J the number of gallons of white paint she used
Look at the three-dimensional figure below.

Which of these shows the two different types of face shapes in this figure?

A

B

C

D
16 Which inequality is true?

F \( \frac{2}{6} > \frac{3}{12} \)

G \( \frac{3}{12} < \frac{1}{6} \)

H \( \frac{12}{3} > \frac{10}{2} \)

J \( \frac{6}{3} < \frac{10}{5} \)

17 Juan needs \( 2 \frac{3}{4} \) teaspoons of salt and \( 1 \frac{3}{8} \) teaspoons of pepper for a recipe. Which is the best estimate of the total amount of salt and pepper Juan needs for this recipe?

A \( 1 \frac{1}{2} \) teaspoons

B 3 teaspoons

C \( 4 \frac{1}{2} \) teaspoons

D 6 teaspoons
A restaurant owner sells lemonade in 20-ounce cups. He makes 1,024 ounces of lemonade. What is the greatest number of 20-ounce cups the restaurant owner can fill completely with 1,024 ounces of lemonade?

F  4
G  5
H  51
J  52
Jeff unfolded a candy box into the shape shown below. The fold lines are represented by the dashed line segments.

Which figure could represent the candy box Jeff unfolded?

A

B

C

D
The drawing below represents the dimensions of Sandy’s backyard.

What is the perimeter of Sandy’s backyard?

F  24 feet
G  32 feet
H  36 feet
J  80 feet
21 What value of $x$ makes this equation true?

$$x + \frac{9}{6} = 5$$

A $\frac{1}{2}$
B $\frac{3}{2}$
C $\frac{6}{2}$
D $\frac{7}{2}$
The graph below shows the number of newspapers sold at a store on the first 5 days in December.

Based on the information in this graph, which is the best prediction of the number of newspapers sold on December 6th of the same year?

- **F** 5
- **G** 10
- **H** 30
- **J** 45

Juwan said \( \frac{12}{20} \) of his classmates are girls. Which decimal is equivalent to \( \frac{12}{20} \)?

- **A** 0.06
- **B** 0.12
- **C** 0.35
- **D** 0.60
24 Celia has a tent with two rectangular walls and a rectangular floor. The tent also has two triangular walls. Which three-dimensional figure best describes Celia’s tent?

F rectangular prism
G triangular pyramid
H triangular prism
J pentagonal prism

25 Which inequality is true when $x$ is replaced by each of the numbers in the set below?

\{10, 20, 30\}

A $\frac{x}{2} \geq 5$
B $x + 15 > 30$
C $\frac{60}{x} > 2$
D $x - 5 \geq 15$
What is the value of the expression below?

$$\frac{5}{6} - \left( \frac{1}{4} + \frac{1}{12} \right)$$

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>$\frac{1}{3}$</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>$\frac{5}{12}$</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>$\frac{1}{2}$</td>
<td></td>
</tr>
<tr>
<td>J</td>
<td>$\frac{2}{3}$</td>
<td></td>
</tr>
</tbody>
</table>
27. The diagram below shows the dimensions of the patio in Mr. Hampshire’s backyard.

Area of Rectangle = length × width

Area of Triangle = \( \frac{1}{2} \) base × height

What is the area, in square feet, of the patio?

A. 20 square feet  
B. 35 square feet  
C. 40 square feet  
D. 55 square feet
Rudy keeps his crayons in a box shaped like a rectangular prism. The dimensions of the box are shown below.

What is the volume of this box in cubic inches?

F 232 cubic inches
G 160 cubic inches
H 26 cubic inches
J 20 cubic inches

Mr. Smith bought a package of 80 erasers for his students. He put an equal number of erasers in each of 22 bags. Which statement best describes the greatest number of erasers Mr. Smith could have put in each bag?

A Each bag had 3 erasers, and 4 erasers were left over.
B Each bag had 3 erasers, and 6 erasers were left over.
C Each bag had 3 erasers, and 14 erasers were left over.
D Each bag had 3 erasers, and 16 erasers were left over.
30 Which is a true statement?

F \( \frac{2}{8} > 0.25 \)

G \( \frac{3}{8} < 0.25 \)

H \( \frac{6}{8} < 0.75 \)

J \( \frac{7}{8} > 0.75 \)

31 A coordinate grid is shown below.

A vertical line segment that is 8 units long is drawn on the grid. Which list of coordinate pairs could represent the locations of the endpoints of this line segment?

A (2, 1), (2, 8)

B (8, 0), (8, 7)

C (8, 4), (1, 4)

D (4, 9), (4, 1)

Go On →
For a bake sale, 3 pies were each cut into 8 equal slices. During the sale, \( \frac{12}{8} \) of the pies were sold. Which best explains the amount of these 3 pies that was not sold during the bake sale?

F 1 whole pie and 6 slices  
G 1 whole pie and 2 slices  
H 2 whole pies and 6 slices  
J 2 whole pies and 8 slices

A three-dimensional figure is shown below.

Each triangular face has an area of 10 square centimeters (sq cm). Each rectangular face has an area of 12 square centimeters (sq cm). What is the surface area of this figure?

A 22 sq cm  
B 36 sq cm  
C 54 sq cm  
D 56 sq cm
34 Use the centimeter side of your ruler to help you solve this problem.

A picture of a stapler is shown below.

What is the length of this stapler to the nearest 0.5 centimeter?

F 12.0 centimeters
G 12.5 centimeters
H 13.0 centimeters
J 13.5 centimeters

35 The distances Kyle jumped in 7 standing broad jumps are listed below. All the distances are in inches.

53, 58, 67, 59, 63, 62, 58

What is the mode of the data?

A 58
B 59
C 60
D 67
Part 2

The table below shows the speed, in miles per hour, of some of the fastest animals in the air.

<table>
<thead>
<tr>
<th>Animal</th>
<th>Speed (miles per hour)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Golden Eagle</td>
<td>150</td>
</tr>
<tr>
<td>Peregrine Falcon</td>
<td>185</td>
</tr>
<tr>
<td>Spine-Tailed Swift</td>
<td>106</td>
</tr>
<tr>
<td>Spur-Winged Goose</td>
<td>88</td>
</tr>
</tbody>
</table>

Which graph best represents the data in the table?
37 Conner had 49 carrot sticks to put in lunches for his family. He made 6 lunches and put the same number of carrot sticks in each lunch. What is the greatest number of carrot sticks that Conner could put in each lunch?

A 9  
B 8  
C 7  
D 6

38 Richard made a poster in the shape of a parallelogram, with the dimensions shown below.

Area = base × height

What is the area of this poster?

F 24 square feet  
G 20 square feet  
H 12 square feet  
J 10 square feet

Go On
Charles made 1 cup of trail mix. The amount of each ingredient he used for the trail mix is shown in the table below.

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Amount in Cups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raisins</td>
<td>$\frac{1}{8}$</td>
</tr>
<tr>
<td>Chocolate Chips</td>
<td>$\frac{1}{4}$</td>
</tr>
<tr>
<td>Toasted Oat Cereal</td>
<td>$\frac{3}{8}$</td>
</tr>
<tr>
<td>Pretzels</td>
<td>$\frac{1}{4}$</td>
</tr>
</tbody>
</table>

Which graph best represents the information in the table?
Mrs. Delgado wrote these clues about a three-dimensional figure.

- Six of my faces are rectangular faces.
- I have 18 edges.
- I have 12 vertices.

Which figure could be the one described in Mrs. Delgado’s clues?

F hexagonal prism
G rectangular prism
H hexagonal pyramid
J rectangular pyramid

Solve:

\[ \frac{4}{5} + 0.625 = \]

A 1.425
B 1.075
C 0.825
D 0.705
A baby weighed $8 \frac{1}{2}$ pounds when he was born. When he was three months old, he weighed $12 \frac{1}{4}$ pounds. What is the difference between the baby’s weight when he was three months old and when he was born?

- **F** $3 \frac{1}{4}$ pounds
- **G** $3 \frac{3}{4}$ pounds
- **H** $4 \frac{1}{4}$ pounds
- **J** $4 \frac{3}{4}$ pounds

What is the prime factorization of 50?

- **A** $2 \times 5^2$
- **B** $2^5 \times 5$
- **C** $2^2 \times 5^2$
- **D** $2^2 \times 25$
44 What is the value of this expression?

\[ 4 - \left(\frac{2}{3} + \frac{1}{6}\right) \]

F \( \frac{3}{6} \)

G \( \frac{1}{3} \)

H \( \frac{1}{2} \)

J \( \frac{2}{3} \)

45 Which number is equivalent to forty-nine thousandths?

A 0.0049

B 0.049

C 0.49

D 4.9
One of the largest pumpkin pies ever baked had a mass of 916.25 kilograms. What is 916.25 written as a mixed number?

F $916 \frac{2}{5}$

G $916 \frac{1}{4}$

H $916 \frac{1}{5}$

J $916 \frac{1}{25}$
Heidi made the letter H shown below, using 5 congruent rectangles.

What is the perimeter, in centimeters, of the letter H Heidi made?

A  14 centimeters  
B  15 centimeters  
C  30 centimeters  
D  32 centimeters
48 The graph below shows the number of CDs and DVDs sold at a store during each of 4 months.

Based on the graph, which is the best prediction of the number of CDs and DVDs that will be sold in July?

F Fewer DVDs will be sold than CDs.
G More DVDs will be sold than CDs.
H More than 250 DVDs will be sold.
J Fewer than 100 CDs will be sold.

49 The scores Amie earned in her last 5 bowling games are shown below.

84, 80, 76, 88, 87

What is the mean of Amie’s scores?

A 76
B 80
C 83
D 84
The table below shows the weights of two boys.

<table>
<thead>
<tr>
<th>Boy</th>
<th>Weight (pounds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Franklin</td>
<td>158.7</td>
</tr>
<tr>
<td>Paul</td>
<td>128.9</td>
</tr>
</tbody>
</table>

Which is the best estimate of the difference between the weights of the two boys?

F  20 pounds
G  30 pounds
H  280 pounds
J  290 pounds

A baker made 900 cookies. He put the cookies into packages of 36 cookies each. How many packages of cookies did the baker make?

A  27
B  26
C  25
D  22
52 Which statement is true?

F $4.25 < 4 \frac{2}{5}$

G $4.25 = 4 \frac{2}{5}$

H $\frac{4}{5} < 0.45$

J $\frac{4}{5} = 0.45$

53 A triangle has a base of 8 inches and a height of 8 inches. What is the area of this triangle?

Area $= \frac{1}{2} \text{base} \times \text{height}$

A 16 square inches
B 32 square inches
C 64 square inches
D 128 square inches
54 Amanda bought $\frac{3}{6}$ yard of blue ribbon and 0.25 yard of green ribbon. What is the total amount of ribbon that Amanda bought?

- F 0.4 yard
- G $\frac{5}{7}$ yard
- H 0.75 yard
- J $\frac{27}{30}$ yard

55 Liam has 104 cards to pass out to 7 players in a card game. Each player will receive an equal number of cards. Which statement best describes the greatest number of cards that could be passed out to the players?

- A Each player will receive 6 cards, and 14 cards will be left over.
- B Each player will receive 14 cards, and 6 cards will be left over.
- C Each player will receive 14 cards, and 16 cards will be left over.
- D Each player will receive 16 cards, and 14 cards will be left over.

56 What is the value of the expression below, when $z = 1$?

$$8.75 - (3.625 - z)$$

- F 2.625
- G 4.125
- H 6.125
- J 6.135

Go On
57 Look at the inequality below.

\[ x - 3 \leq 7 \]

Which set contains only values of \( x \) that make this inequality true?

**A** \{8, 9, 10\}

**B** \{8, 10, 12\}

**C** \{10, 12, 14\}

**D** \{11, 13, 15\}

58 Jana cut two pieces of ribbon for a project. She cut one piece of ribbon \(2 \frac{1}{6}\) yards long and the other piece \(3 \frac{4}{6}\) yards long. Which is the best estimate of the total length, in yards, of the two pieces of ribbon?

**F** \(\frac{1}{2}\) yard

**G** \(1\frac{1}{2}\) yards

**H** 5 yards

**J** 6 yards
59 Use the inch side of your ruler to help you solve this problem.

A picture of a bookmark is shown below.

What is the length of this bookmark to the nearest $\frac{1}{4}$ inch?

- A $4\frac{1}{4}$ inches
- B $4\frac{1}{2}$ inches
- C $4\frac{3}{4}$ inches
- D $5\frac{1}{4}$ inches

60 What is the prime factorization of 42?

- F $2^3 \times 7$
- G $3^2 \times 7$
- H $2 \times 3 \times 7$
- J $2 \times 2 \times 13$
61. What is the value of the expression below, when \( s = \frac{3}{4} \)?

\[ 4(s + 8) \]

A. 11
B. 12 \( \frac{3}{4} \)
C. 32 \( \frac{3}{4} \)
D. 35

62. Which three-dimensional figure can be created using only the faces shown below?

F. pyramid
G. rectangular prism
H. cube
J. triangular prism
63 Mr. Alexander needs to buy $5 \frac{7}{8}$ yards of fabric for curtains and $3 \frac{1}{2}$ yards of fabric for a tablecloth. How many total yards of fabric does Mr. Alexander need to buy?

A $\frac{8}{2}$ yards
B $\frac{1}{2}$ yards
C $\frac{4}{5}$ yards
D $\frac{3}{8}$ yards

64 What is the value of $s$ in the equation below?

\[8 = s - 5 \frac{5}{6}\]

F $s = 2 \frac{1}{6}$
G $s = 3 \frac{5}{6}$
H $s = 12 \frac{1}{6}$
J $s = 13 \frac{5}{6}$
The grid below shows the locations in which LaShonda planted flowers and a tree in her backyard.

Which is closest to the distance between the flowers and the tree?

A  \(7 \frac{1}{2}\) units

B  7 units

C  \(6 \frac{1}{2}\) units

D  6 units
Mrs. Wilson spent 2 hours working in her backyard on Saturday. She spent some of the time pulling weeds, some of the time trimming trees, and the rest of the time mowing grass. What information is not needed to determine the number of minutes Mrs. Wilson spent mowing grass?

F  the total number of seconds in 2 hours
G  the total number of minutes in 2 hours
H  the fraction of the 2 hours Mrs. Wilson spent pulling weeds
J  the fraction of the 2 hours Mrs. Wilson spent trimming trees

Terry sewed a zipper that was 25.4 centimeters long into a jacket. Which mixed number shows another way to write 25.4?

A  $25 \frac{1}{25}$
B  $25 \frac{4}{25}$
C  $25 \frac{1}{4}$
D  $25 \frac{2}{5}$
The length of each edge of a cube is 8 centimeters (cm).

Surface Area = \(2(l \times h) + 2(w \times h) + 2(l \times w)\)

\(l = \text{length} \quad w = \text{width} \quad h = \text{height}\)

What is the surface area of this cube?

- F 192 square centimeters
- G 256 square centimeters
- H 384 square centimeters
- J 512 square centimeters
Mrs. Salinas made a rose garden with the dimensions pictured below.

What is the area, in square feet (sq ft), of Mrs. Salinas's rose garden?

A 23 sq ft
B 26 sq ft
C 27 sq ft
D 32 sq ft
Part 1

1. Which bird has a beak that is best adapted for cracking seeds?

A

B

C

D
The diagram shows a cell.

Which structure should be labeled the nucleus?

F 1
G 2
H 3
J 4
A dog has 6 puppies, 4 females and 2 males. Which statement best describes the characteristics of the puppies?

A  All of the puppies will look exactly like the mother.

B  All of the puppies will look exactly like the father.

C  The male and female puppies will look like both the mother and the father.

D  The male puppies will look like the father, and the female puppies will look like the mother.
Students are testing how the shape of a container affects the rate of evaporation. They place four containers of water outside on a windy day. From which open container will the water most likely evaporate the fastest?

- **F**: 150 mL of Water
- **G**: 150 mL of Water
- **H**: 150 mL of Water
- **J**: 150 mL of Water
Four objects were dropped from a height of 10 meters. The order in which they reached the ground is shown in the table.

<table>
<thead>
<tr>
<th>Falling Objects</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Object</strong></td>
</tr>
<tr>
<td>Feather</td>
</tr>
<tr>
<td>Golf Ball</td>
</tr>
<tr>
<td>Sheet of Notebook Paper</td>
</tr>
<tr>
<td>Foam Ball</td>
</tr>
</tbody>
</table>

The sheet of paper took the longest time to reach the ground most likely because

- **A** it has the most mass.
- **B** it has the most surface area.
- **C** it has the least weight.
- **D** it is the smallest object.
6 Which force holds the atmosphere of Earth in place?
   F  electric
   G  magnetic
   H  gravity
   J  friction

7 Which would most likely cause a substance to melt?
   A  addition of heat
   B  removal of heat
   C  increase in mass
   D  decrease in mass

8 As a city’s population grows, wooded areas are replaced by housing developments. What effect will this most likely have on the species in the wooded areas?
   F  More natural predators will move to the wooded areas.
   G  New species will migrate to the wooded areas.
   H  A few species will adapt to become predators.
   J  The population of some species will become zero.
A diagram of land and ocean temperatures is shown.

This diagram illustrates the

A cause of sea breezes.
B effect of erosion on the shoreline.
C movement of crustal plates.
D formation of a hurricane.
An airplane is slowing down and flying lower as it prepares to land at an airport. Which statement best describes the energy of the airplane?

- F. The kinetic energy decreases, and the potential energy decreases.
- G. The kinetic energy decreases, and the potential energy increases.
- H. The kinetic energy increases, and the potential energy decreases.
- J. The kinetic energy increases, and the potential energy increases.

A certain type of mite is a parasite of honeybees. Which statement best describes the relationship between the mites and the bees?

- A. The mites harm the bees by feeding on their blood.
- B. The mites get honey in return for helping the bees stay healthy.
- C. The mites help the bees find food but get nothing in return.
- D. The mites live in the hive of the bees but do not interact with the bees.
12. A diagram illustrating the movement of an air mass over a mountain is shown.

**Diagram:**
- Air Movement: X
- Ocean: Y
- Mountain

How is the air at Y most likely different from the air at X?

- F The air at Y is colder than at X.
- G The air at Y is drier than at X.
- H The air at Y is moving faster than at X.
- J The air at Y is more polluted than at X.

13. Four objects were dropped at the same time from the same height. Which object will most likely have the longest drop time?

- A an iron ball
- B a large book
- C an open umbrella
- D a horseshoe magnet

14. Newton’s understanding of gravity was important for the development of which technology?

- F a satellite that orbits Earth
- G a car powered with corn oil
- H robots that help with daily tasks
- J instruments that detect radio waves coming from space
15. The drawing shows forces causing a fault in the Earth's surface.

Which may result as movement occurs along this fault?

A. fossil formation  
B. hot spring  
C. volcano  
D. earthquake

16. Which structures are found in both plant and animal cells?

F. chloroplast and cytoplasm  
G. mitochondrion and chloroplast  
H. vacuole and cell wall  
J. nucleus and vacuole
A teacher placed a metal spoon in a container of water with a temperature of 37°C. Then the teacher measured the temperature of the spoon in the water for 5 minutes.

<table>
<thead>
<tr>
<th>Time (min)</th>
<th>Temperature (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>23</td>
</tr>
<tr>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>2</td>
<td>26</td>
</tr>
<tr>
<td>3</td>
<td>28</td>
</tr>
<tr>
<td>4</td>
<td>29</td>
</tr>
<tr>
<td>5</td>
<td>31</td>
</tr>
</tbody>
</table>

Based on the data, which best explains how energy was transferred between the metal spoon and the water?

A. Heat from the water transferred to the spoon by radiation.
B. Heat from the water transferred to the spoon by conduction.
C. Heat from the spoon transferred to the water by radiation.
D. Heat from the spoon transferred to the water by conduction.
Some organisms are shown in the drawing below.

Which statement best compares how these organisms obtain energy?

- **F** The tree, grass, and flower make food, and the deer and bird must eat food.
- **G** The deer and bird make food, and the tree, grass, and flower must eat food.
- **H** The deer, flower, bird, grass, and tree must make food.
- **J** The deer, flower, bird, grass, and tree must eat food.
The picture shows the fossilized skull of an extinct animal.

What did this animal most likely eat?

A  grasses
B  insects
C  other animals
D  dead material
20 Which of these is most responsible for objects being pulled toward the ground?

F air pressure
G magnetic field
H gravity
J friction

21 A student often sees birds near his school, like the one shown below.

The student wants to find out how these birds get the energy they need to live. Which investigation would best help the student answer this question?

A using the Internet to learn where these birds live
B counting the number of these birds near his school
C asking the teacher if other animals eat these birds
D observing what these birds eat every day for a week
22 The picture shows air flow over a mountain.

![Diagram of air flow over a mountain]

Which numbered region most likely has the highest summer temperatures?

F 1  
G 2  
H 3  
J 4

23 Which statement best describes photosynthesis?

A process of using sunlight to make food from carbon dioxide and water  
B process of breaking down materials by wind, water, or temperature change  
C process of changing from an immature form to an adult form  
D process of forming clouds through evaporation and condensation
A diagram of the water cycle is shown.

Water Cycle

Which arrow on the diagram represents evaporation?

F  1
G  2
H  3
J  4
25 Which of these keeps a satellite in orbit around Earth?
   A  the shape of the satellite
   B  the mass of the satellite
   C  the magnetic force of Earth
   D  the gravitational pull of Earth

26 An investigation using a fan and a wooden car is shown.

Which of these will most likely increase the distance the car will travel?
   F  change the direction the car is pointed
   G  make the size of the cardboard larger
   H  decrease the speed of the fan
   J  add mass to the car
27 A flea is a parasite that gets its energy from the blood of animals like dogs. How are the flea and dog affected in this relationship?
   A Both organisms are helped.
   B Both organisms are unaffected.
   C The flea is helped, and the dog is harmed.
   D The dog is helped, and the flea is not affected.

28 An animal called a sea anemone uses stinging cells to capture prey.

Although this animal looks like a flower, it must get energy from which source?
   F soil
   G sunlight
   H ocean water
   J other organisms
29 Which of these has the greatest effect on how tall a student will grow?
   A genetic material from both parents
   B genetic material from the shortest parent
   C the height of the oldest sibling
   D the average height of the other siblings

30 Which of these most likely results from plate movement?
   F sandy beaches
   G mountain ranges
   H ocean currents
   J global winds
31. In which location will the water in the glass evaporate most quickly?

A. 2°C

B. 24°C

C. 20°C

D. 30°C
32. Which of these is a physical property?
   - F  ability to rust in water
   - G  ability to react with acid
   - H  ability to melt when heated
   - J  ability to burn in oxygen

33. Which planet is farthest from the sun?
   - A  Earth
   - B  Mars
   - C  Neptune
   - D  Saturn
34 A cell is shown.

Which numbered structure is the vacuole?
F 1
G 2
H 3
J 4

35 Plants use energy from the sun to produce sugar through
A germination.
B photosynthesis.
C pollination.
D respiration.
DO NOT
MARK
ON THIS
PAGE
A student rides a bicycle down a hill.

At which point do the student and the bicycle have the most potential energy?

F  1
G  2
H  3
J  4
The diagram shows two mountains near an ocean.

Warm, moist air rises as it moves over a mountain. Which of the numbered areas will have the most precipitation?

A 1  
B 2  
C 3  
D 4  

Go On
38 A camper cooks a pot of stew over a fire as shown.

At which location is heat from the fire **mainly** transferred by radiation?

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

39 Which of these does a puppy inherit from its parents?

- A dark fur
- B cut paw
- C barking to go out
- D sitting upon request
40 Which tool is best for astronomers to use when identifying constellation patterns?
F digital camera
G star chart
H microscope
J binoculars

41 The pictures below show a tooth from a shark that lived long ago and a tooth from a shark that lives today.

Based on the teeth, which is the best conclusion?
A Sharks that live today are longer than sharks that lived long ago.
B Sharks that live today are smaller than sharks that lived long ago.
C Modern sharks eat more food than sharks that lived long ago.
D Modern sharks live in different habitats than sharks that lived long ago.
42 Which human activity would most threaten the survival of a species that lives in a river?
   F planting native trees near the river
   G collecting water samples from the river
   H using pesticides on farmland near the river
   J measuring the water temperature of the river

43 Space telescopes helped improve our understanding of outer space by advancing our ability to
   A take samples from objects in space.
   B travel farther into space.
   C communicate into space.
   D observe objects farther in space.
The table below contains information about the planets in the solar system.

**Planet Information**

<table>
<thead>
<tr>
<th>Planet</th>
<th>Type</th>
<th>Approximate distance from the sun (million km)</th>
<th>Equatorial Diameter (compared to Earth)</th>
<th>Mass ( \times 10^{21} \text{ kg} )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mercury</td>
<td>Rocky</td>
<td>57.9</td>
<td>0.382</td>
<td>330.2</td>
</tr>
<tr>
<td>Mars</td>
<td>Rocky</td>
<td>227.9</td>
<td>0.532</td>
<td>641.9</td>
</tr>
<tr>
<td>Venus</td>
<td>Rocky</td>
<td>108.2</td>
<td>0.949</td>
<td>4,868.5</td>
</tr>
<tr>
<td>Earth</td>
<td>Rocky</td>
<td>149.6</td>
<td>1.00</td>
<td>5,974.2</td>
</tr>
<tr>
<td>Neptune</td>
<td>Gaseous</td>
<td>4,497.1</td>
<td>3.883</td>
<td>102,430</td>
</tr>
<tr>
<td>Uranus</td>
<td>Gaseous</td>
<td>2,871.0</td>
<td>4.007</td>
<td>86,832</td>
</tr>
<tr>
<td>Saturn</td>
<td>Gaseous</td>
<td>1,427.0</td>
<td>9.449</td>
<td>568,460</td>
</tr>
<tr>
<td>Jupiter</td>
<td>Gaseous</td>
<td>778.3</td>
<td>11.209</td>
<td>1,899,000</td>
</tr>
</tbody>
</table>

Which conclusion can best be made from this information?

F. The gaseous planets have smaller diameters than the rocky planets.
G. The closer planets are to the sun, the larger they are.
H. The gaseous planets have more mass than the rocky planets.
J. The rocky planets are farther from the sun than the gaseous planets.

Small pieces of ice are broken off a large block of ice. Compared to the block of ice, the pieces of ice will completely melt

A. faster than the block of ice.
B. slower than the block of ice.
C. at a higher temperature than the block of ice.
D. at the same rate as the block of ice.

Go On ▶
A girl is jumping rope.

No matter how high the girl jumps, she always lands back on the ground because

F air resistance pushes her down.

G the force of gravity pulls her down.

H inertia pushes her down.

J a magnetic force pulls her down.
The locations of Nashville, TN, and Wilmington, NC, are shown on the map.

How does the climate of Wilmington most likely compare to the climate of Nashville?

A  Wilmington has hotter summers because it is farther east.

B  Nashville has more rain because it is farther west.

C  Wilmington has milder winters because it is closer to the ocean.

D  Nashville has the same climate because it is the same distance from the equator.
The table gives some characteristics of some of the planets in our solar system.

### Planet Characteristics

<table>
<thead>
<tr>
<th>Planet</th>
<th>Approximate distance from the sun (kilometers)</th>
<th>Diameter (kilometers)</th>
<th>Average Temperature (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mercury</td>
<td>57 million</td>
<td>4,876</td>
<td>141</td>
</tr>
<tr>
<td>Venus</td>
<td>107 million</td>
<td>12,107</td>
<td>449</td>
</tr>
<tr>
<td>Earth</td>
<td>150 million</td>
<td>12,755</td>
<td>7.2</td>
</tr>
<tr>
<td>Mars</td>
<td>229 million</td>
<td>6,794</td>
<td>–44</td>
</tr>
<tr>
<td>Jupiter</td>
<td>777 million</td>
<td>142,983</td>
<td>–153</td>
</tr>
</tbody>
</table>

Which planet is closest in size to Earth?

- **F** Mercury
- **G** Venus
- **H** Mars
- **J** Jupiter

A student is trying to determine if the composition of ice cubes affects the melting point. Which will be the best investigation to use?

- **A** Freeze pure water in 3 identical ice cube trays, and then place each tray on a table in different rooms.
- **B** Freeze pure water, sugar water, and salt water in 3 identical ice cube trays, and then place the trays side by side on the same table.
- **C** Freeze pure water in 3 different-sized ice cube trays, and then place each tray on a different table in the same room.
- **D** Freeze pure water, sugar water, and salt water in 3 different-sized ice cube trays, and then place the trays side by side on the same table.
50 One difference between an animal cell and a plant cell is that
   
   F  only plant cells have a nucleus.
   G  only animal cells have a cell membrane.
   H  only animal cells have a chloroplast.
   J  only plant cells have a cell wall.

51 Three objects will be dropped from a height of 10 meters. The time it takes for each object to reach the ground will be recorded in the table below.

<table>
<thead>
<tr>
<th>Object</th>
<th>Drop Time (sec)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ball</td>
<td></td>
</tr>
<tr>
<td>Pencil</td>
<td></td>
</tr>
<tr>
<td>Handkerchief</td>
<td></td>
</tr>
</tbody>
</table>

The handkerchief will most likely have the longest drop time because of its

A  length.
B  mass.
C  shape.
D  texture.
As a hippopotamus feeds on grass, a small bird feeds on parasites, such as ticks, living on the hippopotamus. Which of these organisms have a mutualistic relationship?

- **F** the hippopotamus and the bird
- **G** the bird and the tick
- **H** the tick and the hippopotamus
- **J** the grass and the hippopotamus
Some information about the planets is given.

### Planetary Information

<table>
<thead>
<tr>
<th></th>
<th>Mercury</th>
<th>Earth</th>
<th>Mars</th>
<th>Jupiter</th>
<th>Saturn</th>
<th>Neptune</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Approximate distance from the Sun (in millions of kilometers)</strong></td>
<td>58</td>
<td>150</td>
<td>228</td>
<td>778</td>
<td>1,427</td>
<td>4,497</td>
</tr>
<tr>
<td><strong>Mass of Planet (Earth = 1)</strong></td>
<td>0.1</td>
<td>1</td>
<td>0.1</td>
<td>317.9</td>
<td>95.2</td>
<td>17.1</td>
</tr>
<tr>
<td><strong>Number of Observed Moons</strong></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>62</td>
<td>60</td>
<td>13</td>
</tr>
</tbody>
</table>

Which conclusion is **best** supported by the data in the table?

A. The farther the planets are from the sun, the more moons they have.
B. The mass of the three farthest planets increases with their distance from the sun.
C. The greater the mass of the planets, the more moons they have.
D. The three planets with the smallest mass have the fewest number of moons.

A student has four identical footballs. A different force is applied to each football as it is thrown. Which force will most likely cause the football to travel the **least** distance before hitting the ground?

F. 10 newtons
G. 12 newtons
H. 15 newtons
J. 18 newtons
The drawing shows two different types of earlobes in humans.

Which factor most affects whether a student has free or attached earlobes?

A  the diet of the student  
B  the environment in which the student lives  
C  the genes inherited from the parents of the student  
D  the hearing ability of the student

A student is looking for a constellation in the night sky. Which tool should the student use to find the correct direction?

F  binoculars  
G  compass  
H  star chart  
J  meter stick
57. Which invention slows the growth of bacteria in food?
   A. refrigerator  
   B. microwave oven  
   C. dishwasher  
   D. can opener

58. The picture shows a land feature.

Which event most likely formed this feature?
   F. two crustal plates sliding past each other  
   G. rivers depositing large amounts of sand  
   H. hot liquid rock moving to the surface  
   J. sediments being dropped by the wind

Go On
A fossil is shown.

Which of these can best be concluded about the animal that this fossil came from?

A It had the ability to fly.
B It was a plant eater.
C It hunted at night.
D It traveled in a pack.
60 Which best describes how a hawk obtains energy differently than an oak tree?
   F  The hawk absorbs energy from the sun.
   G  The hawk absorbs energy from the soil.
   H  The hawk breathes in carbon dioxide.
   J  The hawk consumes other organisms.

61 After a student throws a ball up in the air, the ball falls down to the ground. Which type of force always acts upon the ball to pull the ball to the ground?
   A  electrical
   B  frictional
   C  magnetic
   D  gravitational
Many desert lizards spend daylight hours under rocks, as shown.

This behavior is **mainly** a response to which part of the environment?

- **F** lack of rain
- **G** high temperatures
- **H** shifting sand
- **J** high winds
A water bottle is knocked off a desk as shown.

63. At what position in its fall does the water bottle have the highest amount of kinetic energy?
   A 1  
   B 2  
   C 3  
   D 4  

64. Which phase change takes place when heat energy is removed from water?
   F liquid to gas
   G liquid to solid
   H solid to liquid
   J solid to gas

Go On
A food web is shown.

In this food web, which organism is a predator?

A. Mouse
B. Grass
C. Rabbit
D. Fox
66. Which trait does a child inherit from her parents?
   F. learning to swim
   G. favorite music
   H. style of clothing
   J. color of eyes

67. A certain species of shrimp can travel from one place to another by riding on a sea cucumber, as shown in the diagram below.

The sea cucumber is not harmed by the presence of the shrimp. Which term best describes this relationship?
   A. competitive
   B. mutualistic
   C. commensal
   D. parasitic

Go On
68. Which best describes why cities near oceans are often warmer in the winter than cities far from the ocean at the same latitude?

- F Oceans cool more slowly than land.
- G Ocean tides are highest in the winter.
- H The moon heats the air over the ocean.
- J Ocean waves move more quickly in the winter.

69. A diagram of our solar system is shown.

The arrow points to which planet?

- A Saturn
- B Venus
- C Uranus
- D Neptune
1. America’s culture can best be represented by its
   A. art.
   B. climate.
   C. wildlife.
   D. landforms.

2. Which consumer goods were most often purchased by Americans using credit in the 1920s?
   F. movie tickets
   G. household appliances
   H. school supplies
   J. sports equipment
3 Which of these geographical features is found in West Tennessee?
   A the Highland Rim
   B the Cumberland River
   C the Gulf Coastal Plain
   D the Great Smoky Mountains

4 Which of these was a goal of the American Indian Movement (AIM) during the 1960s and 1970s?
   F to create laws protecting child safety
   G to gain rights promised by the government
   H to organize labor unions for farm workers
   J to improve job opportunities for women
5 Which city is located nearest 35°N and 80°W on the map above?

A Los Angeles  
B Dallas  
C Atlanta  
D Miami

6 Women are guaranteed the right to vote by which amendment to the United States Constitution?

F 13th Amendment  
G 15th Amendment  
H 17th Amendment  
J 19th Amendment
Directions
Use this map and your own knowledge to do Numbers 7 and 8.

The North and South Divided, 1863

7 Which statement is true about the states of Missouri, Kentucky, Maryland, and Delaware?

A They decided to stay in the Union.
B They were the first to ban slavery.
C They refused to fight in the Civil War.
D They were conquered by the Confederacy.
8. According to the map, which of these states fought against slavery?
   - F  Florida
   - G  Michigan
   - H  South Carolina
   - J  Texas

9. The result of the U.S. Supreme Court decision in *Brown v. Board of Education* was the
   - A  desegregation of public schools.
   - B  elimination of import taxes.
   - C  ban on literacy tests for voting.
   - D  removal of voting restrictions.
**Directions**

Use the timeline below and your own knowledge to do Number 10.

**Some Inventions**

- Telephone
- Radio
- Light bulb
- Phonograph
- Skyscraper
- Gasoline-powered automobile
- Subway

10. According to the timeline, which of these could people do first?
   - F listen to a radio
   - G ride on a subway
   - H talk on a telephone
   - J work in a skyscraper

11. Which of these rights did workers most demand in the late 1800s?
   - A higher wages
   - B education for their children
   - C longer vacation time
   - D better medical care
12. Which number on the map above marks a state that borders California and Idaho?

F  1
G  2
H  3
J  4
Directions  Use the chart below and your own knowledge to do Numbers 13 and 14.

<table>
<thead>
<tr>
<th>Year</th>
<th>Automobiles Registered in the United States (in millions)</th>
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<tr>
<td>1940</td>
<td>27</td>
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<td>1960</td>
<td>62</td>
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<td>1980</td>
<td>122</td>
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<tr>
<td>2000</td>
<td>134</td>
</tr>
</tbody>
</table>

Note: Numbers are approximate.
Source: Vehicle Facts and Figures, Motor Vehicle Manufacturers Association of the United States

13 Approximately how many automobiles were registered in the United States in 1980?
   A  27 million
   B  62 million
   C  122 million
   D  134 million

14 In which of these years was the highest number of automobiles registered in the United States?
   F  1940
   G  1960
   H  1980
   J  2000
The School Board wants students to wear uniforms to school. Representatives from the Student Council ask to talk to the School Board at their next meeting. Three students give an oral presentation stating their reasons for not wanting school uniforms.

15 Which First Amendment right were the students using most when they made their presentation?
   A  freedom of speech
   B  freedom of the press
   C  freedom of religion
   D  freedom of movement

Some Events in the United States, 1865–1869

1865 — Civil War ended
1866 — Civil Rights Act passed
1867 — Alaska purchased from Russia
1868 — 14th Amendment passed
1869 — Transcontinental Railroad completed

16 Which of these statements is supported by the timeline above?
   F  Transportation improvements led to the Civil War.
   G  The United States continued to expand after the Civil War.
   H  Civil Rights were denied to the people of Alaska.
   J  The 14th Amendment led to the purchase of Alaska.
Directions  
Use the chart below and your own knowledge to do Numbers 17 and 18.

Data for Some Counties in Tennessee

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<tr>
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<td>Anderson</td>
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<td>67,346</td>
<td>68,250</td>
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<tr>
<td>Bedford</td>
<td>474</td>
<td>27,916</td>
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<td>Davidson</td>
<td>502</td>
<td>477,811</td>
<td>510,784</td>
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<td>Haywood</td>
<td>533</td>
<td>20,318</td>
<td>19,437</td>
<td>19,797</td>
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<td>Williamson</td>
<td>582</td>
<td>58,108</td>
<td>81,021</td>
<td>126,638</td>
</tr>
</tbody>
</table>

Source: United States Bureau of the Census

17 Which of these is a true statement about the counties listed?
   A The largest city is most likely found in Davidson County.
   B The population of all the counties increased between 1980 and 2000.
   C The population of Williamson County will most likely go down in 2010.
   D The county with the smallest land area has the fewest number of people.

18 Based on the information in the chart, which of these counties had the **lowest** rate of growth from 1990 to 2000?
   F Anderson
   G Bedford
   H Davidson
   J Haywood
19 Which person is responsible for leading a local city government?
   A governor
   B judge
   C mayor
   D senator

20 Which geographical feature forms most of the eastern border of Tennessee?
   F Great Valley of Tennessee
   G Appalachian Mountains
   H Highland Rim
   J Cumberland Plateau

We moved into our house last Wednesday. I suppose you would like to see us in our sod house. It is not quite so convenient as a nice frame [wood house] but I would as soon live in it as the cabins I have lived in . . . The only objection I have [is that] we have no floor yet . . .

— Letter from Mattie V. Oblinger, 1873

21 What can the reader tell about Mattie Oblinger’s house from the passage above?
   A It was stronger than a log cabin.
   B It needed to be finished.
   C It could be moved on a wagon.
   D It was like other places she had lived.
Accomplishments of _______?

- Reorganized state government
- Improved education in public schools
- Supported the building of roads and bridges

22. Which person best completes the title of the list above?
   F. Buford Ellington
   G. William Blount
   H. James Polk
   J. Austin Peay

23. Which of these statements best describes life on the Great Plains in the late 1800s?
   A. People lived far away from each other.
   B. Most people worked in large factories.
   C. There was a high level of air pollution.
   D. There was no land available for farming.
24 Which of these cities is located nearest 36°S, 174°E?
   F Auckland
   G Wellington
   H Blenheim
   J Invercargill

25 Clara Barton is famous for helping injured soldiers during the
   A French and Indian War.
   B Revolutionary War.
   C War of 1812.
   D Civil War.
26 Which statement is supported by the map above?

F Pennsylvania had the largest population in the United States in 2000.
H Laborers moved from Pennsylvania to California to work in factories in 1900.
J Large numbers of people moved to Pennsylvania to work on farms in 1900.

27 What important position did Jefferson Davis hold during the 1860s?

A He was the president of the Confederacy.
B He was a general in the Union army.
C He was the governor of New York.
D He was a justice in the U.S. Supreme Court.
Directions

Use the graph below and your own knowledge to do Numbers 28 and 29.

United States Unemployment Rate, 1960–2000

Source: U.S. Bureau of Labor Statistics

28 According to the graph, when did the United States come closest to reaching its goal of full employment?

F 1970
G 1980
H 1990
J 2000

29 According to the graph, when did the greatest percent of the population have difficulty finding jobs?

A 1970
B 1980
C 1990
D 2000

Go On ▶
30 Congress is preparing to pass a spending bill. Which item is a national need?
   F funds to pay for holiday fireworks
   G a grant to build a shopping center
   H funds to pay soldiers’ salaries
   J a grant to build a visitor center at a city park

31 What do Americans celebrate on Columbus Day?
   A the sacrifices of people who served in the United States military
   B the exploration of the Americas by European sailors
   C the efforts of leaders in the Civil Rights movement
   D the United States declaration of independence from Great Britain

32 Which event listed below would need conflict resolution?
   F A young child reads a book on the steps.
   G Students put posters in the hall during a class election.
   H A child leaves an unlocked bicycle on the grass.
   J Students shout angrily at each other on the playground.
33 Which of these was the **main** purpose of the Bill of Rights?

A to break ties with Great Britain  
B to guarantee personal freedoms  
C to create a new form of government  
D to encourage immigration from Europe

34 Which product **most** helped rock ’n’ roll music become popular during the 1950s?

F the radio  
G the airplane  
H the telephone  
J the railroad

35 Which event happened on Black Tuesday in 1929?

A Pearl Harbor was attacked.  
B War broke out in Europe.  
C Prices of stocks fell.  
D Franklin Roosevelt was elected president.
Part 2

36. What geographic feature forms the western border of Tennessee?
   F. Great Smoky Mountains
   G. Mississippi River
   H. Rocky Mountains
   J. Tennessee River

37. Which of these is the best example of a person using credit?
   A. A farmer trades his eggs for another farmer’s milk.
   B. A girl pays cash at the store for a new basketball.
   C. A woman puts money into her savings account.
   D. A man borrows money from a bank to start a business.
38 Which of these best completes the diagram above?

F  Black bears
G  Bluegrass music
H  Hudson River
J  Great Smoky Mountains
Some Rivers of the United States

Which number on the map above shows the Rio Grande?

A 1  
B 2  
C 3  
D 4
1860 Population of Some Confederate States

<table>
<thead>
<tr>
<th>State</th>
<th>White</th>
<th>Slave</th>
<th>Free African Americans</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Carolina</td>
<td>291,300</td>
<td>402,406</td>
<td>9,914</td>
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<tr>
<td>Tennessee</td>
<td>826,722</td>
<td>275,719</td>
<td>7,300</td>
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<tr>
<td>Texas</td>
<td>420,891</td>
<td>182,566</td>
<td>355</td>
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<tr>
<td>Virginia</td>
<td>1,047,299</td>
<td>490,865</td>
<td>58,042</td>
</tr>
</tbody>
</table>

Source: U.S. Census, 1860

40. Which statement is supported by the table above?
   - F All African Americans in Tennessee were free.
   - G Texas had more free African Americans than the other southern states.
   - H All white people in Virginia were slaveholders.
   - J South Carolina had more slaves than white residents.

41. Unlike the Declaration of Independence, the United States Constitution outlines the
   - A national holidays.
   - B state boundaries.
   - C laws of the country.
   - D rules for foreign trade.

Go On
42 Ulysses S. Grant and Robert E. Lee are best known for

- **F** capturing the man who assassinated President Abraham Lincoln.
- **G** serving as presidents of the United States after the Civil War.
- **H** writing the Emancipation Proclamation.
- **J** leading opposing armies during the Civil War.

43 What was one important result of the invention of the phonograph?

- **A** Concerts became less popular across the country.
- **B** Children spent more time in school learning about dance.
- **C** Different kinds of music spread to many parts of the country.
- **D** Fewer people took lessons to learn how to play instruments.
Directions: Use the timeline below and your own knowledge to do Numbers 44 and 45.

Some Events of the Late 1800s

- United States gains Alaskan territory
- Apache Native Americans move onto reservations
- First transcontinental railroad is completed

44. The events listed on the timeline most contributed to
   F. westward expansion.
   G. the Civil Rights movement.
   H. improvements in farming methods.
   J. the creation of laws protecting workers.

45. Which of these was a result of the event listed for 1867?
   A. Fewer people immigrated to the United States.
   B. The United States became less involved in foreign affairs.
   C. People were more easily able to travel throughout the United States.
   D. The United States gained access to natural resources.
“The election shall be free and equal . . .”
— Tennessee State Constitution

The excerpt above is most similar to the United States Constitution’s promise that all citizens will have

F  the right to vote.
G  freedom of assembly.
H  the right to free speech.
J  freedom of religion.
Based on this graph, the month with the most precipitation in Oak Ridge is

A  March.
B  July.
C  December.
D  August.

Which right did the 13th Amendment grant?

F  fair trial
G  religious liberty
H  freedom from slavery
J  ownership of property

Go On
Mr. Miller: Well, there is not enough money for the workmen. We work 13 hours at night and 11 hours at day, and we get 42 cents an hour . . .

Senator: Why did you strike?

Mr. Miller: Why did we strike? We did not have enough money so that we could have a standard [regular] American living.

— George Miller to Senate Committee, 1919

49 Based on the excerpt above, what did the striking workers want?

A cleaner factories
B shorter hours
C better pay
D safer machines
Directions
Use the map below and your own knowledge to do Numbers 50 and 51.

Percent Change in Population for the 50 States: 1990–2000

What was the population change for the state of Georgia?

F 0–13%
G 14–25%
H 26–39%
J 40% or more
51 Which of the following states had the largest population change from 1990 to 2000?
A  New York
B  Tennessee
C  Texas
D  Arizona

52 Which leader best completes the chart?
F  Senator
G  President
H  Chief Justice
J  Speaker of the House
Directions
Use the map below and your own knowledge to do Number 53.

53 According to the map, which of these is the approximate location of Cleveland?

A 37°N and 82°W
B 37°N and 97°W
C 42°N and 82°W
D 42°N and 75°W
Some Inventions of the 1800s

| Telegraph | Telephone | Radio |

54 The inventions listed above most helped to improve
   F transportation.
   G health services.
   H communication.
   J farming methods.

55 Which material was commonly used by Great Plains settlers in the late 1880s to build their homes?
   A concrete
   B ice
   C brick
   D sod
Directions  Use the graph below and your own knowledge to do Numbers 56 and 57.

Compact Disc Singles Sold

Number of Compact Disc Singles Sold (in millions)

Years

Source: Recording Industry Association of America

56  Approximately how many compact disc singles were sold in 1994?

F  9 million
G  15 million
H  21 million
J  33 million

57  The graph indicates that in 1997

A  stores charged high prices for compact discs.
B  customers bought large numbers of compact discs.
C  record companies produced very few compact discs.
D  record companies signed many new artists.
58 Which First Amendment right protects people who want to meet about water restrictions?

F freedom of religion  
G freedom of assembly  
H freedom of press  
J freedom to petition the government

59 Which two states border Tennessee on the map above?

A Kentucky and Indiana  
B Georgia and Florida  
C Mississippi and Maryland  
D Arkansas and Missouri
60 Which of these is a true statement about Jane Addams?

F  She served as a nurse in both world wars.
G  She was the first woman governor of her state.
H  She was a leader in the antislavery movement.
J  She established community services for the poor.

61 Which describes an economic boom?

A  high unemployment
B  rising stock prices
C  low tax rates
D  decreasing corporate profits
62 Which of these events would be resolved in a court?

F two property owners arguing over a land boundary
G two policemen discussing what a law means
H neighbors petitioning for a stop sign on their street
J office workers supporting different political parties

63 Which of these people worked to end slavery before and during the Civil War?

A Andrew Jackson
B Frederick Douglass
C General Ulysses S. Grant
D Chief Justice Roger Taney
Directions
Use the photograph below and your own knowledge to do Number 64.

64 Which change most contributed to the growth of suburbs such as Levittown?

F the growing use of automobiles
G improvements in labor laws
H the invention of television
J increases in women’s rights
Directions Use the flow chart below and your own knowledge to do Numbers 65 and 66.

Buying on Credit

April
Mr. Clark buys a DVD player for $100.00 on credit.

May
He receives a bill from the credit card company for his purchase. He pays the company $50.00.

June
He pays another $50.00 to the credit card company.

July
He still owes the company money on his purchase of the DVD player.

65 The money that Mr. Clark still owes the credit card company is called

A deposit.
B income.
C savings.
D interest.
By using a credit card, Mr. Clark was able to

F buy a good and pay for it later.
G use cash to make the purchase.
H obtain a free service from the bank.
J keep a record of how much money was left in the bank.
Based on the graph above, which industry is predicted to grow the most between 1996 and 2016?

A. Mining  
B. Manufacturing  
C. Construction  
D. Agriculture

Source: United States Department of Labor
The purpose of Veterans Day is to honor people in the United States who

F came from other countries.
G fought for women’s suffrage.
H served in the military.
J served as president.

March in Birmingham
Montgomery Bus Boycott
March on Washington

The people involved in the events above tried to achieve their goals mainly

A by using force.
B by electing their leaders.
C through nonviolent protests.
D through the support of their state government.
### Reading/Language Arts Answer Key

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