Student Name _____

Teacher Name _____

School _____

System _____

Tennessee Comprehensive Assessment Program

Achievement Test ~ Grade 4

Item Sampler

Version B

Table of Contents

Introduction 3

What is the TCAP Achievement Test? 3

What are the questions testing? 3

Who will be tested? 3

How long will the tests take? 3

How do I use the sample questions? 3

How will the tests be scored? 4

May calculators be used? 4

Which test accommodations may be used? 4

Here are some tips for preparing students for the test 4

Reading/Language Arts 5

Mathematics 57

Science 75

Social Studies 100

Answer Key 132

Developed and published under contract with Tennessee State Department of Education by the Educational Measurement group of Pearson, a business of NCS Pearson Inc., 2510 North Dodge Street, Iowa City, Iowa 52245. Copyright © 2012 by Tennessee State Department of Education. All rights reserved. No part of this publication may be reproduced or distributed in any form or by any means, or stored in a database or retrieval system, without the prior written permission of Tennessee State Department of Education.

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

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 sample questions in this on-line Item Sampler are representative of the item types and item formats that will be used in the actual test, including those questions with and without art.

What are the questions testing?

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

Who will be tested?

All students in grades 3 through 8 will be tested.

How long will the tests take?

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

How do I use the sample questions?

These questions provide information about the TCAP Achievement Test. The questions in the on-line Item Sampler are representative of questions that will be on the TCAP Achievement Test.

In a classroom learning session, these questions can be used to prepare students for the actual test. Item types with and without art are presented to better familiarize students with the actual test format.

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

An answer key for the sample questions is provided at the end of this on-line Item Sampler.

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 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.

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.

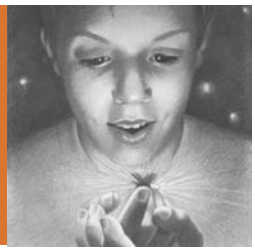
Listen: Listen to and read the test directions carefully.

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.

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reading and Language Arts



Directions **Nancy wrote this book report. It may contain mistakes. Read the report and answer Numbers 1 through 7.**

1 *Hillary and the Hedgehog* is a great book by Beth Chen. It is about a girl who finds a surprise in her grandmother Rubys garden.

2 The main character in this book is Hillary. She is nine years old. Every summer, Hillary visits her grandmother in England. The country of England is part of the islands of Great Britain. She likes visiting her grandmother, but Hillary feels lonely in England.

3 Grandmother asks Hillary to pick some blueberries for dessert. While gathering the berries, Hillary notices that many of them have been nibbled. She bends down and finds a little round hedgehog hiding under the blueberry bushes. Hillary is surprised by this animal. It has a long nose, small ears, and dark eyes.

4 Hillary remembers that hedgehogs make grunting sounds when they are happy and sniffling sounds when they are upset. This hedgehog sound like it has a cold. It seems scared. Hillary decides to care for it.

5 She brings it mushrooms and fresh berries to eat. Her new friend makes more and more grunting sounds when Hillary visits. She also brings it water to drink. Hillary names the hedgehog "Blueberry." It does not seem as frightened, and Hillary does not feel as lonely anymore.

6 At the end of the summer, Hillary does not want to leave her new friend. She is happy when she sees two more hedgehogs under the blueberry bushes. Hillary thinks that these must be Blueberry's parents. She knows that Blueberry will be just fine in the garden.

7 I like this book because it tells about an interesting friendship. When I finished reading the book, I wanted to learn more about hedgehogs.

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **1 Language**

Performance Indicator: **0401.1.9 Choose the correct formation of plurals, contractions, and possessives within context.**

1 **Read this sentence from Paragraph 1.**

It is about a girl who finds a surprise in her grandmother Rubys garden.

What is the correct way to write the underlined words in the sentence?

A grandmother's Ruby

B grandmother Ruby's

C grandmothers' Ruby

D grandmother Rubys'

Reporting Category: **1 Language**

Performance Indicator: **0401.1.15 Identify grade level compound words, contractions, and common abbreviations within context.**

2 **Which word from the book report is a compound word?**

F surprise

G frightened

H lonely

J anymore

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: 3 Writing and Research

Performance Indicator: 0401.3.2 Identify the audience for which a text is written

3 **This report would be most interesting to someone who**

A wants to find out if the author is a good writer.

B has read a book about summer vacations.

C likes stories about animals that talk.

D enjoys growing blueberries in a garden.

Reporting Category: 3 Writing and Research

Performance Indicator: 0401.3.3 Choose a topic sentence for a paragraph.

4 **Which sentence would be best to add as a topic sentence for Paragraph 4?**

F Hillary learned a lot about hedgehogs from her grandmother last summer.

G Hillary picks blueberries for the hedgehog.

H Hillary noticed many pictures of hedgehogs in a library book.

J Hillary tells Grandmother about the hedgehog later that day.

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **3 Writing and Research**

Performance Indicator: **0401.3.4 Select details that support a topic sentence.**

5 **Which detail would be best to add to the end of Paragraph 3?**

A There are many hedgehogs at the London Zoo.

B The hedgehog also has several pointy spikes all over its back.

C She wonders if the hedgehog has a large family.

D The second chapter tells more about how Hillary finds the hedgehog.

Reporting Category: **3 Writing and Research**

Performance Indicator: **0401.3.5 Rearrange sentences to form a sequential, coherent paragraph.**

6 **Read these sentences from Paragraph 5.**

(1) She brings it mushrooms and fresh berries to eat. (2) Her new friend makes more and more grunting sounds when Hillary visits. (3) She also brings it water to drink. (4) Hillary names the hedgehog "Blueberry."

Which order is best for the sentences?

F 4, 1, 2, 3

G 4, 2, 3, 1

H 4, 3, 2, 1

J 4, 1, 3, 2

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**3 Writing and Research**
Performance Indicator:	**0401.3.6 Choose the supporting sentence that best fits the context and flow of ideas in a paragraph.**

7 **Read these sentences from Paragraph 6.**

She is happy when she sees two more hedgehogs under the blueberry bushes. Hillary thinks that these must be Blueberry's parents.

Which supporting sentence best fits between these two sentences?

A Hedgehogs do not look like any other animal.

B She looks all around the beautiful garden.

C There are still lots of berries on the bushes.

D They are a little bigger than Blueberry.

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Directions **Students wrote this letter to the city council. It contains mistakes. Read the letter and answer Numbers 8 through 13.**

March 14, 2011

Dear City Council Members:

1 We are students from Elmwood Elementary. Our teacher, Mr. López, has asked us to plan a project that will improve our town. Our idea is to have a special day of celebration for planting trees. Adding trees to our community can help our citizens in several ways.

2 Trees bring happiness to people. This is an important reason to plant them. Trees help people feel calm and peaceful. Our class gave a survey to one hundred people. We asked them questions about trees. The results showed people feel happier when they are around a lot of trees. There are more than seventy kinds of trees in our area. We even read a report in our science class about how trees help sick people. The report showed hospital patient recover faster when they can see trees from their windows.

3 Trees also helps citizen have a cleaner environment. Trees make the air cleaner. They clean chemicals from the air while giving more oxygen to Earth's atmosphere. Trees provide shade that keeps houses cool in warm weather. The shade saves energy, and we think that have been always a good idea.

4 Finally, a tree-planting celebration will bring people in our community together. People may make new friends. Also get to know an old friend better. Working together also makes people feel like part of a team.

5 We hope you will agree to sponsor this celebration. If so, Mr. López has agreed to help our class organize the details. We have already spoken with owners of a local garden center. The garden center is willing to sell the trees to us at a lower price and to show people how to plant them properly. We hope you will consider this meaningful project. Thank you for your time.

Sincerely,

Mr. López's Fourth-Grade Class

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**1 Language**
Performance Indicator:	**0401.1.2 Identify the correct use of verbs (i.e., agreement, tenses, action and linking) within context.**

8 **Read this sentence from Paragraph 3.**

The shade saves energy, and we think that have been always a good idea.

Choose the correct replacement for the underlined words.

F were

G is

H are

J correct as is

Reporting Category:	**1 Language**
Performance Indicator:	**0401.1.5 Select the best way to correct incomplete sentences within context.**

9 **Read these sentences from Paragraph 4.**

People may make new friends. Also get to know an old friend better.

What is the correct way to rewrite the underlined incomplete sentence?

A They may also get to know an old friend better.

B Might also get to know an old friend better.

C Also to know an old friend better.

D Get to know an old friend better.

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **1 Language**

Performance Indicator: **0401.1.11 Identify sentences with correct subject-verb agreement (person and number).**

10 **Read this sentence from Paragraph 3.**

Trees also helps citizen have a cleaner environment.

What is the correct way to write the underlined part of the sentence?

F Trees also help citizens has

G Trees also helps citizen has

H Trees also help citizens have

J correct as is

Reporting Category: **3 Writing and Research**

Performance Indicator: **0401.3.1 Identify the purpose for writing (i.e., to entertain, to inform, to share experiences).**

11 **What is the main purpose for writing this letter?**

A to share experiences with city council members about a tree celebration

B to inform city council members about how trees can help people

C to entertain city council members with fun facts about trees

D to persuade city council members to sponsor a tree celebration

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**3 Writing and Research**
Performance Indicator:	**0401.3.7 Identify sentences irrelevant to a paragraph's theme or flow.**

12 **Which sentence from Paragraph 2 is irrelevant and should be deleted?**

F Trees help people feel calm and peaceful.

G Our class gave a survey to one hundred people.

H We asked them questions about trees.

J There are more than seventy kinds of trees in our area.

Reporting Category:	**3 Writing and Research**
Performance Indicator:	**0401.3.8 Select appropriate time-order or transitional words to enhance the flow of a writing sample**

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

Trees make the air cleaner. They clean chemicals from the air while giving more oxygen to Earth's atmosphere. _____, trees provide shade that keeps houses cool in warm weather.

Which transitional word or phrase best fills in the blank line?

A In addition

B Therefore

C For example

D In other words

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Directions Read and answer Number 14.

Reporting Category:	**1 Language**
Performance Indicator:	**0401.1.7 Recognize usage errors occurring within context (i.e., double negatives, troublesome words: to/too/two, their/there/they're, its/it's).**

14 **Which sentence uses the underlined word correctly?**

F My grandma is taking me <u>too</u> the beach.

G I have <u>to</u> older brothers.

H That shirt is <u>two</u> big for me.

J I like <u>to</u> play softball and basketball.

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Directions **Keiko gave this speech to her class. Read the speech and answer Numbers 15 through 21.**

Dog Days

1 When my aunt went on vacation last year, she asked me to take care of her puppy, Baxter. Aunt Jen told me that Baxter is really playful and needs to be walked every day. Aunt Jen said she would even pay me. I was happy and excited to help her.

2 One afternoon, my neighbor Mr. Salazar noticed how careful I was with Baxter. Mr. Salazar suggested I start a dog-walking service. It seemed like a good idea, so I wrote down some ideas about how to start this service. It was not long before I had a plan.

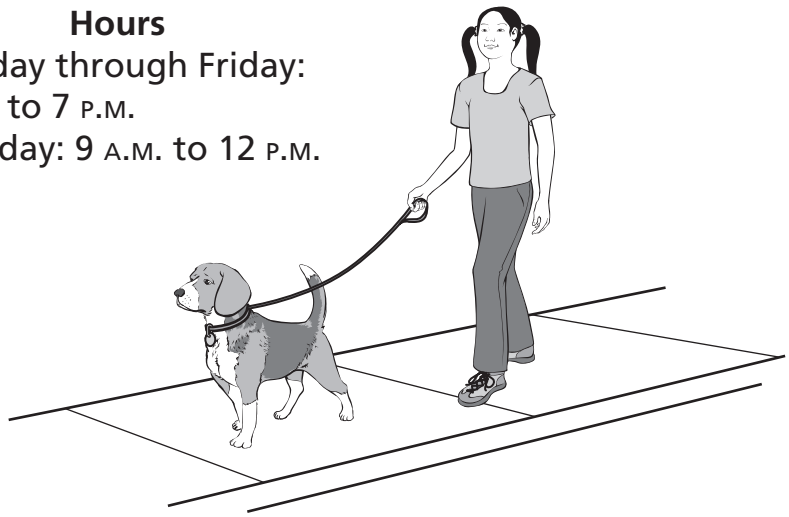
3 First, I asked my mom for permission. Then I spoke to several of my neighbors. I asked if they would like someone to walk their dogs in the afternoons or on Saturday mornings. This helped me build a list of possible customers.

4 Next, I made fliers about my service. On each flier, I wrote my name, telephone number, the hours I could work, and the amount it would cost to walk each dog. I even drew a cartoon of myself walking Baxter. Then I passed out the fliers to each person on my list.

Dog Days Walking Service

- $3.00 for 30 minutes
- $5.00 for 1 hour

Hours
Monday through Friday:
5 P.M. to 7 P.M.
Saturday: 9 A.M. to 12 P.M.



Keiko Kimura
290-5992

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

5 Soon, I had five customers. The first day was really difficult. I had decided to walk all of the dogs at the same time. This sure was a mistake! I tried to give each dog the attention it needed, but all of the dogs wanted to be petted at the same time. Handling more than one leash wasn't very easy either. The dogs were sniffing and jumping around so much that the leashes became tangled. I couldn't walk more than a few feet without almost falling down. I told myself that I would schedule only one dog at a time in the future.

6 After being paid for my first week of work, I used some of the money I earned to buy toys and dog treats for my pups. I also bought a calendar to keep track of my schedule.

7 Having this business has taught me to be responsible. I always make sure to walk the dogs after my homework and chores are finished. I also remember to arrive on time or call the owner before I have to cancel a walk. This is very important. I want my customers to know that they can trust me with their pets and that I am a responsible businessperson.

8 Starting a dog-walking business was a great idea. I am exercising more, and I don't have to ask my parents for spending money. I'm so glad that my aunt gave me the chance to watch Baxter. I have learned that hard work can pay off.

Reporting Category: **4 Communication and Media**

Performance Indicator: **0401.2.1 Identify the main idea and supporting points of a speech.**

15 **Keiko's speech is <u>mainly</u> about how she**

A took care of a new dog.

B started a new business.

C learned how to be honest.

D created her own work fliers.

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **4 Communication and Media**

Performance Indicator: **0401.2.2 Given a list of interactive behaviors (i.e., taking turns, behaving courteously, not interrupting, listening, remaining on task), identify those that are appropriate (or inappropriate) for group activities.**

16 **Which audience behavior would be most appropriate while Keiko is giving her speech?**

F listening carefully and making eye contact with Keiko

G showing interest by asking Keiko a lot of questions during her speech

H complimenting Keiko by calling out encouraging words and phrases

J drawing pictures during the speech without looking at Keiko

Reporting Category: **4 Communication and Media**

Performance Indicator: **0401.2.3 Select the best summary of a speech**

17 **Which sentences best summarize this speech?**

A Keiko walked five dogs at the same time. She decided that was hard work. Now she has an easier job.

B Keiko worked for one week and bought dog toys and treats. She also bought a calendar to stay organized. She liked hard work and did it well.

C Keiko asked her mom to start a dog-walking service. Her mother agreed. Then she passed out fliers to her neighbors and worked hard.

D Keiko started a dog-walking service for her neighborhood. She started with five customers. This job taught her responsibility.

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **3 Writing and Research**

Performance Indicator: **0401.4.3 Complete a graphic organizer (e.g., chart, web) organizing material collected from text or technological sources.**

18 **After hearing Keiko's speech, a classmate made this chart.**

Dog Days Walking Service
Keiko Kimura
290-5992

Prices	Hours
$3.00 for 30 minutes $5.00 for 1 hour	Saturday: 9 A.M. to 12 P.M. _____

According to the speech, what should the classmate write in the blank space?

F Monday through Friday: 4 P.M. to 7 A.M.

G Monday through Friday: 5 P.M. to 7 P.M.

H Monday through Friday: 5 A.M. to 7 P.M.

J Monday through Friday: 7 P.M. to 4 A.M.

Reporting Category: **6 Informational Text**

Performance Indicator: **0401.6.1 Select questions used to focus and clarify thinking before, during, and after reading text.**

19 **Choose the question that is answered in the speech.**

A Where did Aunt Jen go on vacation last year?

B How much money did Keiko make for watching Baxter?

C Which neighbor suggested that Keiko should walk dogs?

D What kinds of dogs did Keiko walk her first day?

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **4 Communication and Media**

Performance Indicator: **0401.7.2 Identify the main idea in a visual image.**

20 **What is the main idea of the flier?**

F Keiko's dog-walking service is the best in town.

G Keiko is a young girl who loves dogs.

H Keiko's services are available every day by appointment.

J Keiko has a service for walking dogs six days a week.

Reporting Category: **4 Communication and Media**

Performance Indicator: **0401.7.3 Choose the most effective medium to enhance a short oral presentation (e.g., still pictures, model, diorama, PowerPoint, recording).**

21 **Which medium would be best for Keiko to share with the audience after giving her speech?**

A a diagram naming the parts of a dog

B a map showing her neighborhood

C a short video of her walking a dog

D a picture of her and her aunt

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Directions **Read this story from the country of Liberia. Then answer Numbers 22 through 28.**

Sia and the Spider

1 Once upon a time, there was a young girl named Sia who lived in a small village. Sia was the best at finding delicious food in the forest. The food she found always tasted better than anyone else's. The bananas and plums were sweet and big. The oranges were always juicy.

2 Spider was different than Sia. He was greedy. He always wanted the best things for himself. One day, Spider tried to trick Sia into telling him where she found the best food. However, Spider did not know that Sia was also quite clever.

3 "Will you please show me where you get your food?" Spider asked Sia in a polite voice.

4 "Well . . ." began Sia, wrinkling her forehead.

5 "Pretty please?" begged Spider.

6 "I guess just this once," said Sia. "If you can keep a secret, I'll take you to the juiciest oranges."

7 "I can keep a secret!" cried Spider as he quickly followed her down a long path. Spider was so excited about getting good food without having to search for it.

8 When they reached the tree, Spider's eyes popped open, and his mouth drooled. The oranges were so ripe that the branches were hanging down to the ground! He pushed Sia aside and ate all the oranges on the tree. There was nothing left for Sia, and there wasn't even a thank you from Spider.

9 Then Sia said, "If you can keep a secret, I'll show you the biggest bananas you have ever seen!"

10 Spider rubbed his full belly. *Sia is foolish*! he thought to himself. "I can keep a secret!" he promised as he followed her deeper into the forest.

11 When they reached the banana tree, Spider's eyes popped open, and his mouth drooled again. The bananas looked amazing! He pushed Sia aside and ate all the bananas on the tree. There was nothing left for Sia, and there wasn't even a thank you from Spider.

12 Then Sia said, "If you can keep a secret, I'll lead you to the sweetest honey in the world!"

13 Spider rubbed his bulging belly and said to himself, *Sia is even more of a fool than I thought*. Although his stomach was full, he said, "I can keep a secret!" as he walked behind her down a hidden trail.

14 Sia pointed and said, "Inside that giant tree over there is the best honey you will ever taste!"

15 As Sia expected, Spider shoved her aside, crawled inside the tree, and gobbled up all the honey. There was nothing left for Sia, and there wasn't even a thank you from Spider.

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

16 "Ahh! That was delicious!" said Spider, patting his bursting belly. Then Spider tried to crawl out of the tree. He had eaten so much that he was trapped.

17 "Help me! I'm stuck in the tree!" cried Spider to Sia.

18 Sia grinned at Spider. She knew this would happen after everything that Spider ate.

19 "Please help me," pleaded Spider. "I know I was wrong! I used you to get good food."

20 "Yes, you did," said Sia. "And now you must stay in the tree until your greedy belly becomes thin enough for you to squeeze out of the hole."

21 Spider sobbed and rested his head on one of his front legs. Sia did not seem so foolish anymore.

22 Sia spent the rest of the day collecting fresh fruits from the other trees. She had a tasty lunch of oranges and plums. On her way back to the village, she stopped by the honey tree. Spider's belly was a bit thinner now, so Sia was able to use a branch to help him crawl out of the tree.

23 When they both returned to the village, Spider apologized again. "Thank you for showing me all the good fruits and the honey tree, Sia." Sia finally got her thank you, and Spider was never greedy again.

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **2 Vocabulary**

Performance Indicator: **0401.1.13 Recognize and use grade appropriate vocabulary within context.**

22 **Read Paragraph 13.**

Spider rubbed his bulging belly and said to himself, *Sia is even more of a fool than I thought.* Although his stomach was full, he said, "I can keep a secret!" as he walked behind her down a hidden trail.

Which word from the paragraph helps the reader understand the meaning of bulging?

F rubbed

G stomach

H full

J hidden

Reporting Category: **5 Logic**

Performance Indicator: **0401.5.4 Choose a logical word to complete an analogy using synonyms and antonyms.**

23 **Read the analogy.**

Pleaded is to begged as sobbed is to _____.

Which word best completes the analogy?

A cried

B yelled

C demanded

D whispered

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **7 Literature**

Performance Indicator: **0401.8.1 Recognize plot features of fairy tales, folk tales, fables, and myths.**

24 **Choose the lesson learned in this story.**

F Trying the hardest means winning every time.

G Taking more than a fair share can lead to trouble.

H Keeping secrets can lead to big rewards.

J Learning to do something well takes practice.

Reporting Category: **7 Literature**

Performance Indicator: **0401.8.2 Identify characters, setting, and plot in a passage.**

25 **Most of this story takes place in**

A the forest.

B a honey tree.

C the village.

D a banana tree.

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **7 Literature**

Performance Indicator: **0401.8.3 Determine the problem in a story and recognize its solution.**

26 **What is the main problem in the story?**

F Sia finds all the best fruit.

G Spider is greedy.

H Sia tells Spider a secret.

J Spider calls Sia names.

Reporting Category: **7 Literature**

Performance Indicator: **0401.8.4 Make appropriate predictions about text.**

27 **When Spider looks for fruit in the future, he will most likely**

A learn to find fruit alone.

B keep the fruit he finds a secret.

C eat all the fruit.

D share fruit with the villagers.

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **7 Literature**

Performance Indicator: **0401.8.8 Recognize the sounds of language (i.e., alliteration, rhyme, and repetition).**

28 **Which element of language is used most in this story?**

F rhyme

G repetition

H alliteration

J rhythm

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Directions **Read and answer Number 29.**

Reporting Category: **1 Language**

Performance Indicator: **0401.1.10 Choose the correct use of quotation marks and commas in direct quotations.**

29 **Which sentence uses quotation marks correctly?**

A "Let's go to the park", Kim said.

B "Angela asked, How will we get there?"

C "We could walk," Kim replied, but it's pretty far."

D "Let's ask my mom if she will drive us," Angela said.

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Directions Read this flier written by a teacher. Then answer Numbers 30 through 32.

Accidental Inventions

Some of the greatest inventions were discovered purely by accident. Sometimes accidents help people think about problems in new ways. Many inventors have become famous after learning from unexpected results!

Read about some accidental inventions. After reading, you will be invited to become a real inventor too!

Toll House™ Cookies

© Shaun Lowe/ iStockphoto #2775214

In the 1930s, Ruth Wakefield owned and worked at the Toll House Inn in Whitman, Massachusetts, with her husband. Ruth enjoyed making meals and desserts for the guests who stayed there. One of her favorite recipes was her chocolate butter cookies.

One day Wakefield realized that she was out of the powdered chocolate she used to make her special cookies. She decided to break apart pieces of a chocolate bar to use in place of the other chocolate. She thought the chocolate would melt evenly into the dough. Instead the pieces kept their shape. Wakefield accidentally invented the chocolate chip cookie! This happy mistake thrilled the guests and became one of the most popular cookies in the world.

Play-Doh™

© Tamara Murray/ iStockphoto #781760

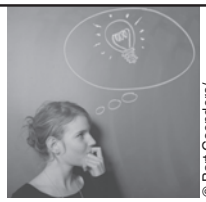
Joseph McVicker became an owner of his family's company in 1949. This business made wallpaper cleaner and other household products. McVicker also liked to look at different ways to use those products.

McVicker learned that modeling clay was often too hard for children to use. He thought of the perfect solution. The wallpaper cleaner that his company made could be shaped like clay but was even softer. McVicker sent a tub of this cleaner to area schools. Both the teachers and the students enjoyed molding it into different shapes. This certainly was an unexpected use for a cleaning product!

Soon all of the schools in Cincinnati, Ohio, were asking for McVicker's wallpaper cleaner. He decided to turn that accidental invention into a new company that produced and sold colored molding dough. He did not try to invent a toy. He just took a chance by looking at something in a new and different way. Play-Doh became far more successful than the wallpaper cleaner ever was!

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.



© Bart Coenders/ iStockphoto #5164183

The Assignment: Be an Inventor
Due Date: Next Friday

Do you have an idea for an invention? Do you know a new way to use an old product? Invention comes from exploration. If you are curious, you have the first ingredient for your creation! Follow these steps to complete the assignment.

STEP 1: The Idea — Think of a problem you could solve with an invention.

STEP 2: Brainstorm — Think of as many ideas as you can to solve the problem.

STEP 3: The Solution — Review all your ideas and choose the best one.

STEP 4: Diagram — Draw a picture of your idea.

STEP 5: Build It — Make a model of your invention using household items.

STEP 6: Test It — Ask your family and friends to try it. Does it work? Make any necessary adjustments.

Bring your invention to school. Be prepared to talk about it and the steps you used to create it.

Helpful Websites:

www.Inventor$_Kids.com
Kids tell about their inventions.

www.Accidental_Inventions#.com
Inventions that happened by mistake.

www.Help%_for_Inventions.com
Advice and tips for inventors of all ages.

www.Invention-Creations$.com
Contests for inventors aged 5 – 18.

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **6 Informational Text**

Performance Indicator: **0401.6.2 Identify the stated main idea and supporting details in text.**

30 **Which sentence best states the main idea of the section titled "Toll House Cookies"?**

F Ruth Wakefield was a successful baker and owner of the Toll House Inn.

G Broken chocolate pieces can be used instead of powdered chocolate in cookies.

H The famous recipe came from an inn located in Whitman, Massachusetts.

J A baker created a popular treat when she replaced a key ingredient in her old recipe.

Reporting Category: **6 Informational Text**

Performance Indicator: **0401.6.6 Use available text features (e.g., graphics and illustrations) to make meaning from text.**

31 **Look at the picture from the section titled "The Assignment: Be an Inventor."**

© Bart Coenders/ iStockphoto #5164183

Which step does this picture illustrate?

A Step 1

B Step 4

C Step 5

D Step 6

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **6 Informational Text**

Performance Indicator: **0401.6.7 Arrange instructions in sequential order**

32 **Read these instructions for completing the invention assignment.**

1. *Bring your invention to school.*
2. *Have family and friends test the invention.*
3. *Think of a problem that needs to be solved.*
4. *Talk about the invention and how you developed it.*

What is the correct order of these instructions?

F 4, 2, 1, 3

G 3, 1, 2, 4

H 2, 1, 4, 3

J 3, 2, 1, 4

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Directions **Read the passage. Then answer Numbers 33 through 38.**

Space Junk

by Jonathan McDowell

1 Picture yourself in the future. You are leaving Earth in a spaceship. You stare out the window. Sun reflects off the storm clouds that hover above the planet.

2 Inside your spaceship, the computers hum. Suddenly there is a loud crack. Now your ears pop.

3 You hear a loud hissing sound. That hissing sound is very bad news. You notice a small hole in the wall of your ship. Then you race for the emergency rescue capsule. Your spaceship is the victim of one of space's biggest threats: space junk.

4 This nightmare hasn't happened — yet.

Space Scraps

5 So what hit your spacecraft? It could have been part of an old rocket. It may have been a wrench that flew out of an astronaut's hand. It might have been a piece that broke off a satellite. Those are just a few of the things floating in space. Today, scientists count about 12,000 items. Each is at least ten centimeters (four inches) wide. Countless other bits of junk are smaller.

6 Out of those things, 900 are working satellites. They send TV and telephone signals around the world. They help scientists study space and weather. Everything else is space junk.

© NASA/Getty Images News/Getty Images #1764996

Tracking Trash

7 Space junk includes satellites that have stopped working, fuel tanks from rockets, and scrap metal from old spacecraft. All that strange, old stuff interests me. Ever since I was 12, I've been

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

learning about trash. I don't mean the trash that lies around your bedroom and makes your parents mad. I mean the trash that's littering space.

8 I didn't start out studying space trash. I began by learning about every rocket launch I could. I still do. That led me to notice something. People send a lot of stuff into space. Each year, we add to the things in orbit. Some of those things are still useful. A lot is just junk. I try to keep track of all of it.

Leftover Litter

9 People's littering of space began in 1957. That's when the Soviet Union launched Sputnik, the first human-made satellite. The Soviet Union and the United States raced to be the first to explore space.

10 Since Sputnik, people have launched 5,000 satellites. Four thousand have stopped working. Then what? Eventually, a satellite slows down. It falls out of orbit and burns up in Earth's atmosphere.

11 The problem is, that doesn't happen overnight. The satellite can continue in orbit for months or even years. All that time, it can slam into anything nearby.

12 Old satellites aren't the only problem. Rockets streak through space to put satellites in orbit. The last stage, or section, of the rocket ends up in orbit, too. Then it is just a useless metal tube with some fuel inside. Years later, it may blow up and shatter into hundreds of dangerous pieces.

Tossed in Space

13 It may be hard to believe, but sometimes people litter in space deliberately. Russian cosmonauts didn't know what to do with trash from their space station. So they threw it out into space.

14 When the United States and the Soviet Union tested weapons, they blew up old satellites. This created lots of space trash.

15 China did the same thing last year. It was the single worst case of space littering. That's because the weather satellite the Chinese blew up was relatively large. So it exploded into a huge number of pieces.

Trashing the Future?

16 Many scientists are worried about the layers of litter. They fear that space junk will tear apart satellites launched in the future. That would make even more trash!

17 Space junk could also end the Space Age. Someday, we may not be able to launch any new spaceships. Why not? They would be shredded by floating space junk.

18 Yet there is hope. People now know the importance of tidying up space. Scientists are working on solutions. They have found ways to design satellites and rockets that put less trash in space. We can hope that the brainpower that lets us explore space can help us clean it up, too.

Jonathan McDowell/National Geographic Stock

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **3 Writing and Research**

Performance Indicator: **0401.4.1 Select appropriate sources from which to gather information on a given topic**

33 **Which book would have the best information about the topic of space junk?**

A *The First Astronaut*

B *The Human-Made Satellite*

C *Stop Littering in Space!*

D *Who Wants to Go to Space?*

Reporting Category: **3 Writing and Research**

Performance Indicator: **0401.4.4 Differentiate among the kinds of information available in a variety of reference materials (i.e., dictionary, thesaurus, atlas, encyclopedia).**

34 **What information about satellites would someone find in a thesaurus?**

F the name of the largest satellite

G synonyms for the word satellite

H maps of countries where satellites have been designed

J photographs taken by satellites

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **5 Logic**

Performance Indicator: **0401.5.2 Recognize cause-effect relationships within context.**

35 **According to Paragraph 14, the United States and the Soviet Union blew up old satellites because they**

A were testing weapons that way.

B did not need them anymore.

C had purchased new ones.

D did not know what to do with them.

Reporting Category: **4 Communication and Media**

Performance Indicator: **0401.7.4 From a list of media, identify the medium that is available to you that was probably not available to previous generations.**

36 **Which medium was not in use when Sputnik was launched?**

F a radio

G an online dictionary

H a television

J an encyclopedia collection

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**7 Literature**
Performance Indicator:	**0401.8.5 Identify the forms of text (e.g., poems, drama, fiction, nonfiction).**

37 **Which characteristic is the best clue that "Space Junk" is an informational passage?**

A There are a lot of rhyming words.

B The characters are not real.

C The characters have speaking parts.

D There are many pieces of factual information.

Reporting Category:	**7 Literature**
Performance Indicator:	**0401.8.7 Identify the author's purpose (e.g., to entertain, to inform, to persuade, to share feelings).**

38 **The author most likely wrote this passage in order to**

F entertain readers with a story about space.

G persuade readers to learn more about space.

H share feelings about space junk with readers.

J inform readers about the dangers of space junk.

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Directions **Read the passage. Then answer Numbers 39 through 41.**

Going Ape

Eating, drinking, and being merry are all part of the day for these hairy "redheads."

by Deborah Churchman

Eat . . .

1 Think about this: Orangutans (oh-RANG-uh-tans) are the only great apes that live in trees all day. So nearly everything they do has to be done while balancing and hanging on. Good thing they've got four "hands" to help!

2 Orang babies have a great support system: Mom. Mom feeds her baby warm milk for its first four to seven years.

3 As her baby gets older, it gets very interested in what Mom is eating. Mom makes it baby food. But she doesn't have a blender. Instead, when her baby asks for food, she uses her teeth. She chews the food and spits it out into baby's mouth.

4 Fruit is the number one treat of orangs. They prefer durian fruit (which tastes like sweet, garlicky custard). But they'll go for any fruit they can find, including mango.

5 It takes a good memory to live on fruit in these forests. The fruit trees grow far apart, and different kinds get ripe at different times. So orangs have to remember where and when to visit each tree. That's one reason young orangs stay with their mothers for so long.

6 When they're young, orangs hang on to their mother's hair. Mom carries them through their forest home, teaching them what's good to eat and what's not. Orangs spend more than half their waking hours looking for food. That's more time than you spend at school!

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

© Twinkieartcat/Dreamstime #14658517

7 These lessons are just as important as yours are — and just as hard. It can take 12 years for an orangutan to learn where all the different kinds of food can be found in its forest. Along the way, it's also learning how to take care of itself (just like you).

Drink . . .

8 Fruit is juicy, so orangs get most of the water they need from their food. But if they're still thirsty, then what? There are no faucets or drinking fountains where they live.

9 Many orangs lick raindrops off leaves or look for other places where rainwater collects, such as in tree holes. Sometimes they chew leaves into a spongy wad and use that to soak up water.

10 When the rain comes down, Mom and Baby open their mouths and catch the drops. They also lick their hair after a rain to get water. But usually orangs don't like getting soaked. Sometimes they pick big leaves and wear them as rain hats!

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

© Enjoylife25/Dreamstime #2553171

Be Merry!

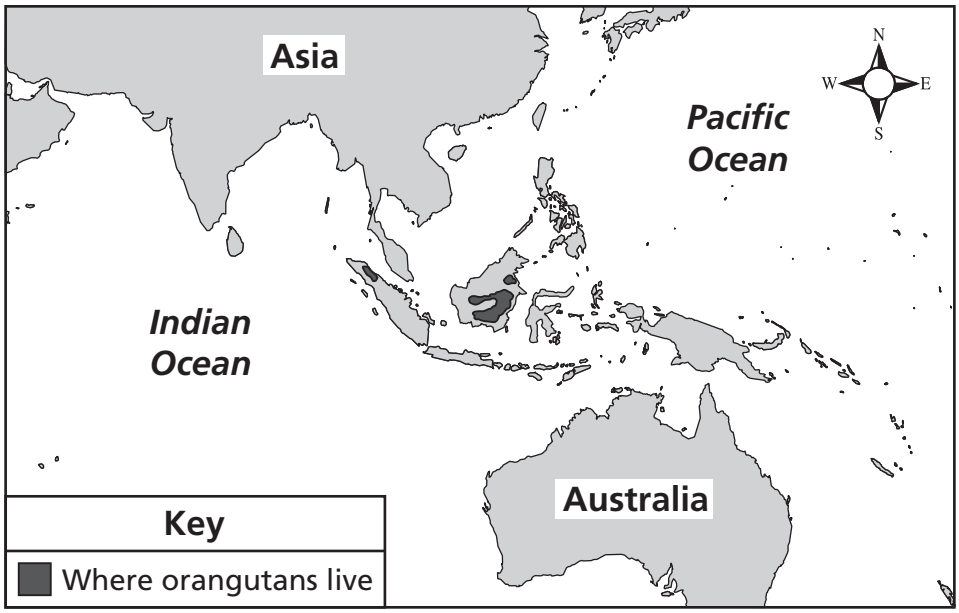
11 Sometimes orangutans just want to have fun. They swing and splash and play in lots of ways. At other times, what looks like play is just a great ape's way of surviving.

12 At the very hottest time of day, the big red ape hangs upside down from a vine and splashes water on its head. What a fun way to cool down!

Save the Great Apes

13 Orangutans live only on the Southeast Asian islands of Borneo and Sumatra. Much of their rain forest home has been cut down, and there are very few patches of forest left where these apes can still live. Many people are working hard to try to save the great apes and their forests. Let's hope orangs can keep hanging on!

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.



Reprinted from July 2002 issue of Ranger Rick® magazine, with permission of the publisher, the National Wildlife Federation®. Copyright 2002 by the National Wildlife Federation®.

Reporting Category: **3 Writing and Research**

Performance Indicator: **0401.4.2 Rank the reliability of sources on a given topic.**

39 **Tina is writing a report about the foods orangutans eat. The source that will provide Tina with the most reliable facts is a**

A story about an orangutan mother feeding her baby.

B website about orangutans feeding in their natural habitat.

C newspaper article about a new orangutan zoo exhibit.

D book of photographs showing orangutans and other apes.

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **5 Logic**

Performance Indicator: **0401.5.3 Distinguish between fact/opinion and reality/fantasy.**

40 **Which sentence from this passage is an opinion?**

F When they're young, orangs hang on to their mother's hair.

G These lessons are just as important as yours are — and just as hard.

H Sometimes they pick big leaves and wear them as rain hats!

J Many people are working hard to try to save the great apes and their forests.

Reporting Category: **6 Informational Text**

Performance Indicator: **0401.6.4 Use headings, graphics, and captions to make meaning from text.**

41 **The bold headings in the passage help the reader to understand**

A the kinds of places where orangutans live.

B the different topics covered in the passage.

C what the pictures in the passage are showing.

D how mother and baby orangutans survive.

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Directions Read and answer Numbers 42 and 43.

Reporting Category: 4 Communication and Media

Performance Indicator: 0401.7.1 Select the most appropriate and reliable media for accessing information, writing a report, or making a presentation.

42 **José is writing a report about leopards. Which source would provide the most useful information?**

F an encyclopedia entry about leopards

G an Internet site with pictures of leopards

H a television special about people who help leopards

J a short story about a boy who has several leopards

Reporting Category: 6 Informational Text

Performance Indicator: 0401.6.3 Use table of contents, title page, and glossary to locate information

43 **Kara found a library book about wolves. She is looking at the table of contents. Kara is most likely trying to learn**

A the title of the book.

B the name of the author.

C how many chapters are in the book.

D definitions of words she does not know.

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Directions **Read the story. Then answer Numbers 44 through 46.**

King Edmond's Contest

by Clare Mishica

1 Once upon a time, long ago, a wise, old king named Edmond wanted to retire. He had spent many years settling disagreements and ruling his land with a kind, fair hand. Now he wanted to spend some time fishing and reading all of the books in the royal library. But first King Edmond had to choose someone else to rule the land.

2 Of course, everyone thought that he or she would be the best king or queen.

3 "I can lift a cow," said one man named Rupert. "I'm the strongest man in the world. I should be the king."

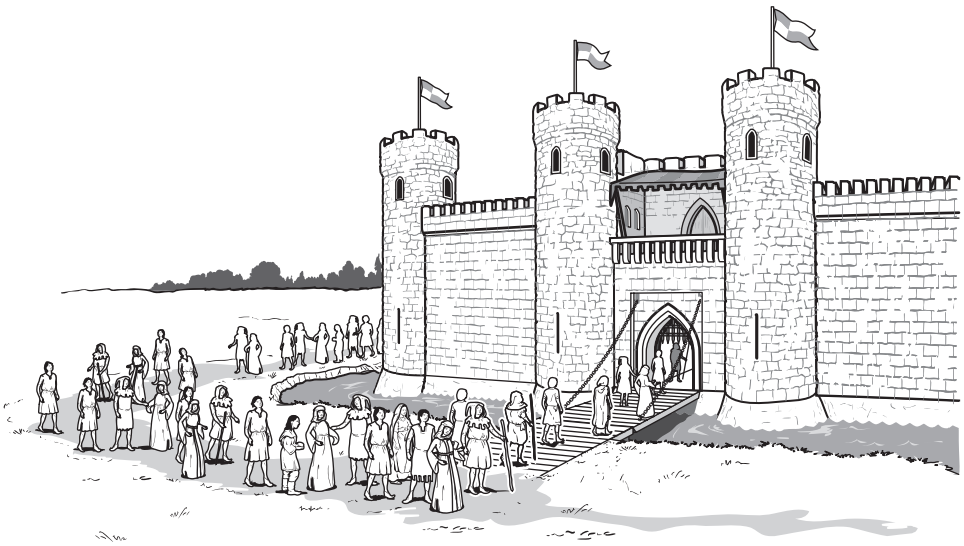
4 "But I can juggle," argued a woman named Elana. "I would be a great queen."

5 "I can fight dragons," hollered someone else. "No one would make a better king than I."

6 "I can climb mountains," bragged another.

7 Everyone wanted the king's job. Finally King Edmond decided to have a contest. He announced: "The new ruler will be the one who introduces me to the amazing Cordelia Lee."

8 "Who is this Cordelia Lee?" people asked and whispered and wondered. No one knew. To help them out, King Edmond told the people they could each ask him one question, and the very next morning there was a line of people that stretched out over the drawbridge and twisted around and around the castle like a giant snake curled up in the sun. Everyone wanted to win this contest and be chosen to rule the land.



Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

9 One by one, the doorkeeper brought the people to see the king. To be fair, no one could hear another person's question or its answer.

10 "Does Cordelia Lee live in our village?" asked Rupert.

11 "Yes." King Edmond nodded.

12 "Is Cordelia Lee a person?" asked Elana, "or is she a horse or cow or chicken?"

13 "She's a person." King Edmond smiled.

14 People wanted to know if Cordelia Lee was famous or rich. They asked if Cordelia Lee could sing or shoot a bow and arrow. King Edmond answered every question, but still no one had any idea who Cordelia Lee might be. How could they introduce the king to someone they didn't know? How could they hope to win King Edmond's contest?

15 At long last the doorkeeper brought in the only person left. This young man had a worn jacket and dusty boots, but his brown eyes twinkled as if he knew a big secret.

16 "Yes," sighed King Edmond. His crown had slid down over his forehead, and his chin was propped up in his hands. It had been a very long day.

17 "King Edmond," said the young man, "I'm Jonathan James. How are you today?"

18 "That's your question?" asked the king, batting away an annoying fly that was trying to buzz in his royal ear. "I'm very tired, and I have a terrible crick in my neck; and now you've wasted your question."

19 Jonathan James smiled. "My mother taught me to always be considerate of others, no matter who they are — a king or a servant. When your doorkeeper brought me in, I asked for her name so that I could wish her a good day. She was so patient with the crowds. Let me introduce you; her name is Cordelia Lee."

20 "Yes!" cheered King Edmond, leaping off his throne. He did a little dance and twirled around. Then he gave Jonathan James such a tremendous hug that he lifted his feet off the palace floor.

21 "Finally I have found a new ruler," King Edmond said. "I wanted someone who knows that all the people in a kingdom are important and must be treated kindly. You, my son, will be a wise and good king."

22 The next morning, King Edmond introduced everyone to the new ruler, King Jonathan, and to Cordelia Lee too. Then he hurried off to fish, with his pole tucked under one arm and two big books tucked under the other.

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

"King Edmond's Contest" by Clare Mishica, copyright © 2006 by Clare Mishica. Used by permission of the author.

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: 5 Logic

Performance Indicator: 0401.5.5 Make inferences and draw appropriate conclusions from text.

44 **The author of "King Edmond's Contest" is most likely trying to teach readers that**

F challenges are fun.

G servants work hard.

H people need vacations.

J everyone deserves respect.

Reporting Category: 5 Logic

Performance Indicator: 0401.5.6 Indicate the sequence of events in text.

45 **Which event happens immediately after the king decides he wants to retire?**

A He leaves to go fishing.

B He announces a contest.

C He talks with his subjects.

D He chooses his replacement.

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **7 Literature**

Performance Indicator: **0401.8.6 Identify and interpret similes and metaphors.**

46 **Read this sentence from Paragraph 8.**

To help them out, King Edmond told the people they could each ask him one question, and the very next morning there was a line of people that stretched out over the drawbridge and twisted around and around the castle like a giant snake curled up in the sun.

Which part of the sentence contains a simile?

F To help them out,

G the very next morning there was a line of people

H stretched out over the drawbridge

J twisted around and around the castle like a giant snake

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Directions **Emma wrote this report about her favorite bird. It contains mistakes. Read the report and then answer Numbers 47 through 53.**

(1) Birds come in many different colors, but one special bird changes colors depending on what it eats. (2) This bird is called a flamingo. (3) It is easy to recognize. (4) It has a slender neck with a curved black beak. (5) Its wings are large, and it has short tail feathers. (6) It also has very long legs.

(7) A flamingo's long legs allow it to stand in deep water to search for food. (8) This bird sometimes stands on one leg and curl the other leg under its body. (9) When a flamingo eats it holds its head, upside down in the water and scoops muddy water into its beak. (10) It uses its fat tongue to push the mixture of water and mud through the sides of its beak. (11) After the water is gone, small plants and animals are trapped inside and then swallowed.

(12) The plants and animals that flamingos eat have special chemicals that make the birds' feathers change color. (13) The feathers can be any color from pale pink to dark red. (14) The color of flamingos is determined by the type of food available in the area where it live. (15) For example, flamingos that live near the Caribbean Sea are usually the more brightest pink.

(16) Flamingos live together in large groups called colonies. (17) The behavior of these birds is interesting. (18) They hold their wings out wide. (19) They bow and bend their necks to each other. (20) They turn their heads from side to side. (21) Sometimes they even march, run back and forth, and then sudenly fly away. (22) Scientists think that this behavior is how the birds choose a mate. (23) They call this behavior a dance.

(24) The flamingo is one of the most interesting birds on Earth. (25) The birds' beautiful colors and habits certainly make them unusual. (26) Flamingos definitely stand above the crowd, even on one leg

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**1 Language**
Performance Indicator:	**0401.1.1 Identify the correct use of nouns (i.e., common and proper, plurals, possessives) and pronouns (i.e., subject, object, and agreement) within context.**

47 **Read Sentence 14.**

The color of flamingos is determined by the type of food available in the area where it live.

Which pronoun correctly replaces the underlined word?

A he or she

B they

C them

D correct as is

Reporting Category:	**1 Language**
Performance Indicator:	**0401.1.3 Identify the correct use of adjectives (i.e., comparison forms and articles) and adverbs (i.e., comparison forms and negatives) within context.**

48 **Read Sentence 15.**

For example, flamingos that live near the Caribbean Sea are usually the more brightest pink.

What is the correct way to write the underlined words?

F brightest

G brighter

H more bright

J more brighter

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**1 Language**
Performance Indicator:	**0401.1.4 Identify declarative, interrogative, and exclamatory sentences by recognizing appropriate end marks.**

49 **Read Sentence 26.**

Flamingos definitely stand above the crowd, even on one leg

Choose the best punctuation mark for this exclamatory sentence.

A .

B ,

C ?

D !

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**1 Language**
Performance Indicator:	**0401.1.6 Identify the correct use of commas (i.e., series, dates, addresses, friendly letters, introductory words, compound sentences) within context.**

50 **Read Sentence 9.**

When a flamingo eats it holds its head, upside down in the water and scoops muddy water into its beak.

Which sentence uses a comma correctly?

F When a flamingo eats it holds its head upside down, in the water and scoops muddy water into its beak.

G When a flamingo eats, it holds its head upside down in the water and scoops muddy water into its beak.

H When a flamingo eats it holds its head upside down in the water, and scoops muddy water into its beak.

J When a flamingo eats it holds its head upside down in the water and scoops muddy, water into its beak.

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **1 Language**

Performance Indicator: **0401.1.8 Identify correctly or incorrectly spelled words in context.**

51 **Read Sentence 21.**

Sometimes they even march, run back and forth, and then sudenly fly away.

Which underlined word is not spelled correctly?

A march

B forth

C sudenly

D away

Reporting Category: **3 Writing and Research**

Performance Indicator: **0401.3.9 Select an appropriate title that reflects the topic of a written selection.**

52 **Choose the best title for this report.**

F Living with Flamingos

G Flamingo Feeding Habits

H The Colors of the Flamingo

J All about Flamingos

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **3 Writing and Research**

Performance Indicator: **0401.3.10 Complete a graphic organizer (i.e., clustering, listing, mapping, webbing) to group ideas for writing.**

53 **Emma made this chart while working on her report.**

The Body of a Flamingo
large wings
short tail feathers
long legs

Which words complete Emma's chart?

A thick neck

B straight beak

C fat tongue

D striped feet

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Directions **Read the poem. Then answer Numbers 54 through 57.**

The Walking Horse of Tennessee

© Deborah Cheramie/iStockphoto #2706007

The pioneers who settled the state
Had some horses used for plowing,
But those horses used to work the fields
Were not so good at bowing.

The pioneers wanted a useful horse,
But one that showed some pride,
A stately horse that worked the fields,
And had an easy stride.

This unusual horse was specially made
For brawn[1] and a sense of duty,
Pa was a plow horse and Ma was a pacer,
The foal had both strength and beauty.

[1]**brawn:** with many muscles

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

This special horse walks quite flat,
Stepping high and light.
15 Its feet land very far apart,
Which helps it plow just right.

A canter is another walk —
Hoof steps side to side.
The graceful gait[2] of this working horse
20 Shows beauty and great pride.

The Walking Horse of Tennessee
Still puts on quite a show.
It's strong enough to plow the fields
The pioneers would be happy to know.

[2]**gait:** a way of walking

Reporting Category: **2 Vocabulary**

Performance Indicator: **0401.1.12 Select appropriate antonyms, synonyms, and homonyms within context.**

54 **Read Lines 19 and 20.**

The graceful gait of this working horse
Shows beauty and great pride.

The word graceful means

F mighty.

G slow.

H elegant.

J loud.

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**2 Vocabulary**
Performance Indicator:	**0401.1.14 Use prefixes, suffixes, and root words as aids in determining meaning within context.**

55 **Read Line 9.**

This unusual horse was specially made

The underlined prefix helps the reader to understand that Walking Horses are

A beautiful.

B not common.

C tough.

D not large.

Reporting Category:	**2 Vocabulary**
Performance Indicator:	**0401.1.16 Determine the meaning of unfamiliar words using context clues, dictionaries, and glossaries**

56 **Read Lines 11 and 12.**

Pa was a plow horse and Ma was a pacer,
The foal had both strength and beauty.

What does the word foal mean?

F fast horse

G wild horse

H friendly horse

J baby horse

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **5 Logic**

Performance Indicator: **0401.5.1 Locate information to support opinions, predictions, and conclusions.**

57 **Which line from the poem best supports the opinion that Walking Horses are excellent workers?**

A The pioneers wanted a useful horse,

B But one that showed some pride,

C For brawn and a sense of duty,

D Still puts on quite a show.

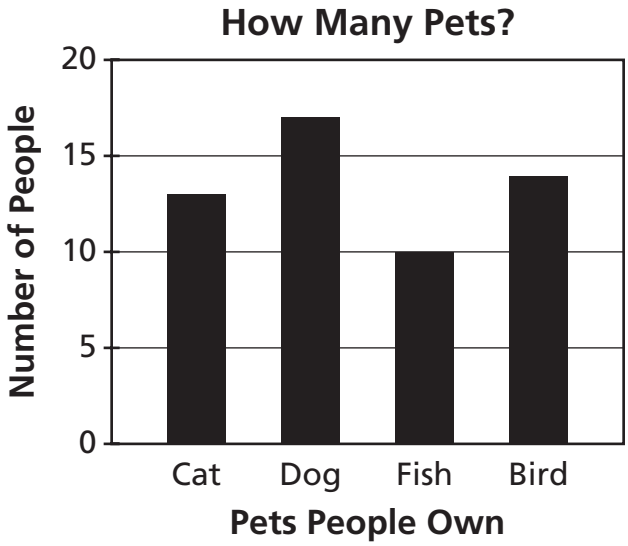
Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Directions Read and answer Number 58.

Reporting Category: 6 Informational Text

Performance Indicator: 0401.6.5 Interpret information using a chart, map, or timeline.

58 Anna made a bar graph to show which types of pets people in her apartment building own.



According to the bar graph, which type of pet do most people in Anna's apartment building own?

F cat

G dog

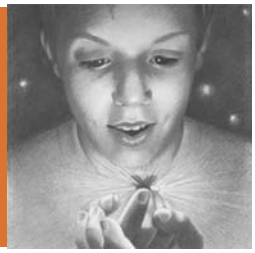
H fish

J bird

STOP

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Mathematics



Reporting Category: **1 Mathematical Processes**

Performance Indicator: **4.1.1 Verify a conclusion using the commutative, associative and distributive properties.**

1 What is one way to show that the number sentence below is true?

$$3(6 + 8) = 42$$

A $3(6 + 8) = (3 + 6) + (3 + 8)$

B $3(6 + 8) = (3 + 6) \times (3 + 8)$

C $3(6 + 8) = (3 \times 6) \times (3 \times 8)$

D $3(6 + 8) = (3 \times 6) + (3 \times 8)$

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **1 Mathematical Processes**

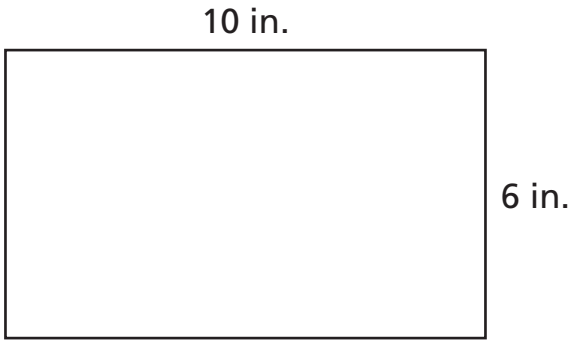
Performance Indicator: **4.1.4 Compare objects with respect to a given geometric or physical attribute and select appropriate measurement instrument.**

2 Juanita drew a rectangle that has an area of 16 square inches.

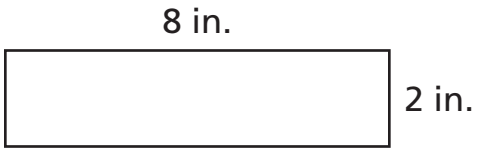
$$\boxed{\text{Area} = \text{length} \times \text{width}}$$

Which figure could not be the figure Juanita drew?

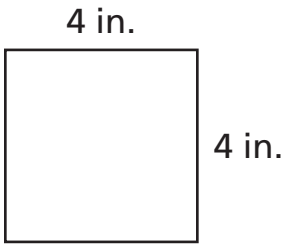
F



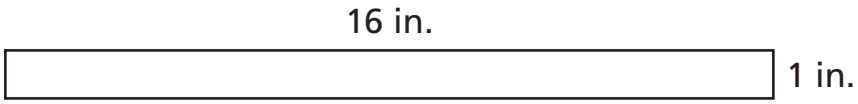
G



H



J



Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **2 Number and Operations**

Performance Indicator: **4.2.1 Read and write numbers from hundredths to hundred-thousands in numerals and in words.**

3 In the year 2010, there were fifteen thousand, seventy-nine airports in the United States. How is this number written in standard form?

A 50,079

B 15,079

C 5,079

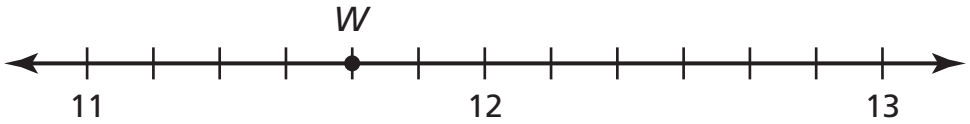
D 1,579

Reporting Category: **2 Number and Operations**

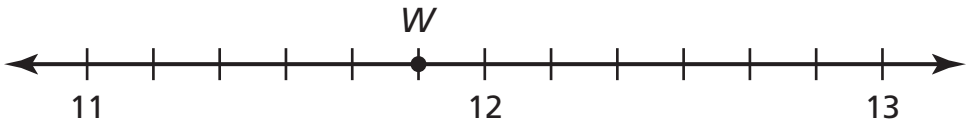
Performance Indicator: **4.2.2 Locate and place mixed numbers on the number line.**

4 Which number line best represents Point *W* located at $12\frac{1}{3}$?

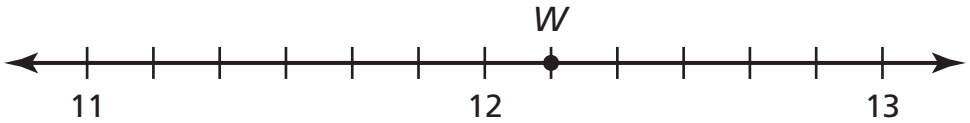
F



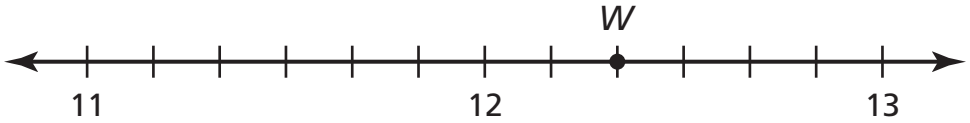
G



H



J



Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **2 Number and Operations**

Performance Indicator: **4.2.3 Identify the place value of a specified digit in a number and the quantity it represents.**

5 The number of visitors on the opening day of the Knoxville World's Fair was 87,659. What is the value of the digit 8 in this number?

A 80

B 8,000

C 80,000

D 800,000

Reporting Category: **2 Number and Operations**

Performance Indicator: **4.2.4 Find factors, common factors, multiples, and common multiples of two numbers.**

6 Which list shows only factors of 32?

F 2, 8, 16

G 2, 14, 18

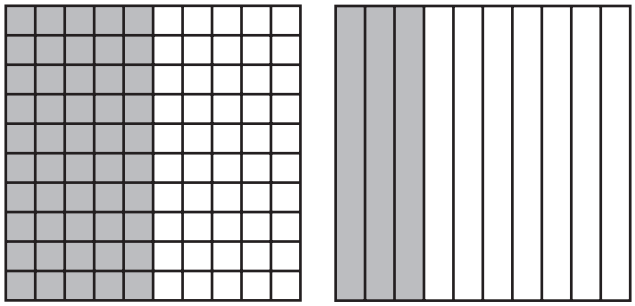
H 32, 64, 96

J 32, 320, 3,200

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

7 Each model below is shaded to represent a part of a whole.



Which statement correctly compares the shaded parts of the models?

A $\frac{1}{2} < 0.3$

B $0.50 > \frac{7}{10}$

C $0.50 > \frac{3}{10}$

D $\frac{1}{5} < 0.03$

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**2 Number and Operations**
Performance Indicator:	**4.2.6 Use the symbols < , > and = to compare common fractions and decimals in both increasing and decreasing order.**

8 Which number sentence is true?

F $0.25 = \frac{2}{5}$

G $0.75 > \frac{3}{4}$

H $0.6 < \frac{1}{6}$

J $0.8 = \frac{4}{5}$

Reporting Category:	**2 Number and Operations**
Performance Indicator:	**4.2.7 Convert improper fractions into mixed numbers and/or decimals.**

9 Which number is equivalent to $\frac{25}{10}$?

A 2.05

B 2.12

C 2.3

D 2.5

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **2 Number and Operations**

Performance Indicator: **4.2.8 Add and subtract proper fractions with like and unlike denominators and simplify the answer.**

10 Add:

$$\frac{6}{18} + \frac{2}{9} =$$

F $\frac{5}{9}$

G $\frac{4}{9}$

H $\frac{8}{27}$

J $\frac{4}{27}$

Reporting Category: **2 Number and Operations**

Performance Indicator: **4.2.9 Add and subtract decimals through hundredths.**

11 Stephen completed a race in 18.9 seconds. Matthew completed the same race in 19.24 seconds. What is the difference between these two amounts of time?

A 0.34 second

B 1.74 seconds

C 17.35 seconds

D 18.65 seconds

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **2 Number and Operations**

Performance Indicator: **4.2.10 Solve contextual problems using whole numbers, fractions, and decimals.**

12 The land area of Kentucky is 39,732 square miles. The land area of Alabama is 11,018 square miles greater than the land area of Kentucky. What is the land area of Alabama?

F 50,750 square miles

G 40,740 square miles

H 28,726 square miles

J 28,714 square miles

Reporting Category: **2 Number and Operations**

Performance Indicator: **4.2.11 Solve problems using whole number multi-digit multiplication.**

13 A worker makes 56 skateboards each week. What is the total number of skateboards the worker made in 45 weeks?

A 101

B 504

C 2,290

D 2,520

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**2 Number and Operations**
Performance Indicator:	**4.2.12 Solve problems using whole number division with one- or two-digit divisors.**

14 Divide: $825 \div 15 =$

F 51

G 54

H 55

J 59

Reporting Category:	**3 Algebra**
Performance Indicator:	**4.3.1 Use letters and symbols to represent an unknown quantity and write a simple mathematical expression.**

15 Sylvia has a box that contains a total of 250 tissues. The number of tissues in Sylvia's box is t more than the number of tissues in Rita's box. Which expression best represents the number of tissues in Rita's box?

A $250 \div t$

B $250 \times t$

C $250 - t$

D $250 + t$

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **3 Algebra**

Performance Indicator: **4.3.3 Represent and analyze patterns using words, function tables, and graphs.**

16 The table below shows the total number of cookies that can be made using different numbers of eggs.

Cookies

Total Number of Cookies	Number of Eggs
48	4
72	6
120	10
144	12
192	16

According to the pattern in the table, what is the total number of cookies that can be made using 24 eggs?

F 384

G 288

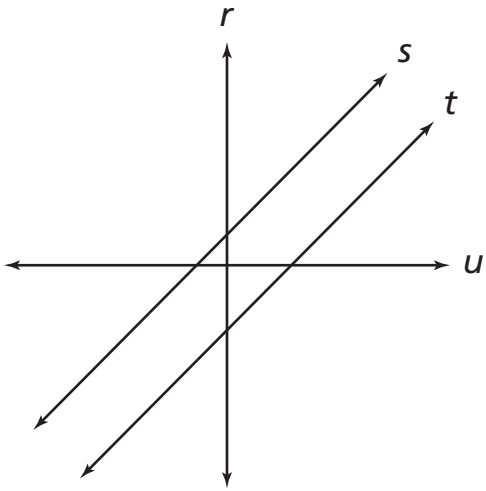
H 216

J 208

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

17 Benito drew the lines below.



Which two lines appear to be parallel?

A Lines *r* and *s*

B Lines *r* and *u*

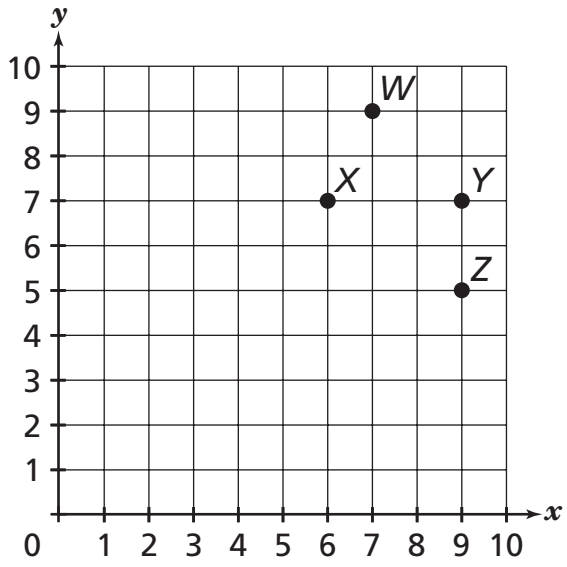
C Lines *s* and *t*

D Lines *s* and *u*

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**4 Geometry and Measurement**
Performance Indicator:	**4.4.2 Graph and interpret points with whole number or letter coordinates on grids or in the first quadrant of the coordinate plane.**

18 Four points are shown on the coordinate grid below.



What are the coordinates of Point *Y*?

F (6, 7)

G (7, 9)

H (9, 5)

J (9, 7)

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **4 Geometry and Measurement**

Performance Indicator: **4.4.4 Identify acute, obtuse, and right angles in 2-dimensional shapes.**

19 Look at the figure shown below.

Which list best describes the four angles in this figure?

A 1 acute angle, 1 obtuse angle, 2 right angles

B 1 acute angle, 2 obtuse angles, 1 right angle

C 2 acute angles, 1 obtuse angle, 1 right angle

D 3 acute angles, 1 obtuse angle, 0 right angles

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**4 Geometry and Measurement**
Performance Indicator:	**4.4.7 Determine appropriate size of unit of measurement in problem situations involving length, capacity or weight.**

20 Tanner poured some milk into the bowl of cereal shown below.

Which is the best estimate of the amount of milk Tanner poured into this bowl?

F 1 cup

G 1 liter

H 1 ounce

J 1 gallon

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**4 Geometry and Measurement**
Performance Indicator:	**4.4.8 Convert measurements within a single system that are common in daily life (e.g., hours and minutes, inches and feet, centimeters and meters, quarts and gallons, liters and milliliters).**

21 Mr. Nañez made 16 gallons of fruit punch. How many pints are equivalent to 16 gallons?

$$\boxed{1 \text{ gallon} = 8 \text{ pints}}$$

A 328 pints

B 128 pints

C 24 pints

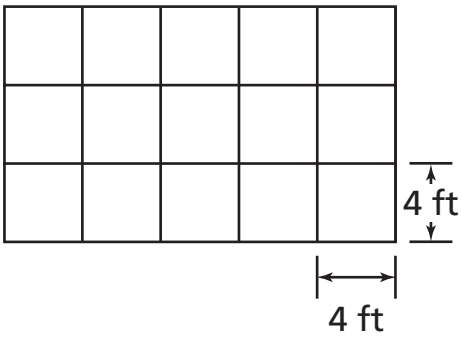
D 2 pints

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **4 Geometry and Measurement**

Performance Indicator: **4.4.9 Solve problems involving area and/or perimeter of rectangular figures.**

22 Each small square in the figure below has a side length of 4 feet.



What is the perimeter of this figure?

F 15 feet

G 16 feet

H 64 feet

J 240 feet

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

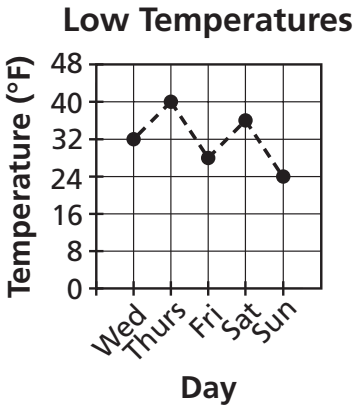
23 The table below shows the low temperature in a town on each of five days.

Low Temperatures

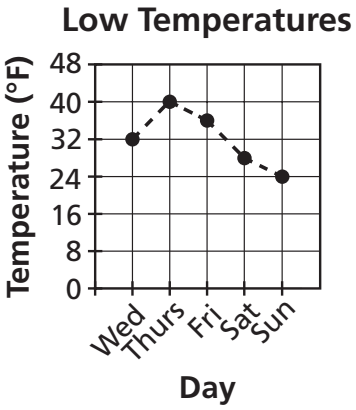
Day	Temperature (°F)
Wed	32
Thurs	40
Fri	28
Sat	36
Sun	24

Which graph best represents this data set?

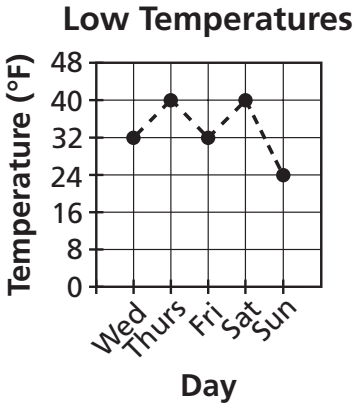
A



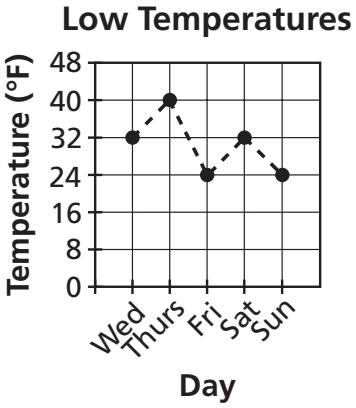
C



B



D

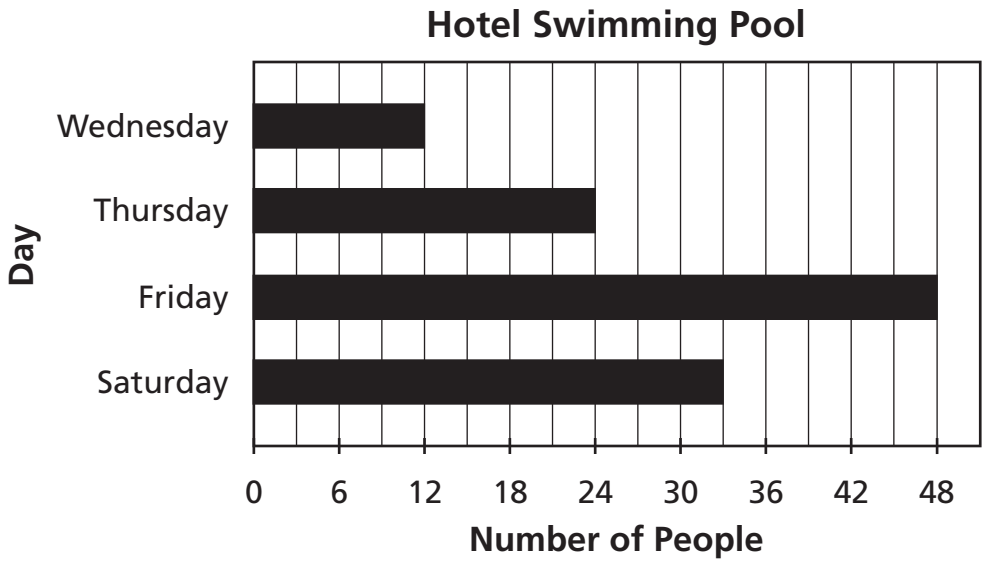


Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **5 Data, Probability, and Statistics**

Performance Indicator: **4.5.2 Solve problems using estimation and comparison within a single set of data.**

24 The graph below shows the number of people who used a hotel swimming pool on each of four days.



Which is the best estimate of the difference between the combined number of people who used the pool on Thursday and Friday and the combined number of people who used the pool on Wednesday and Saturday?

F 110

G 100

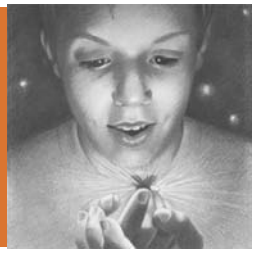
H 30

J 20

STOP

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

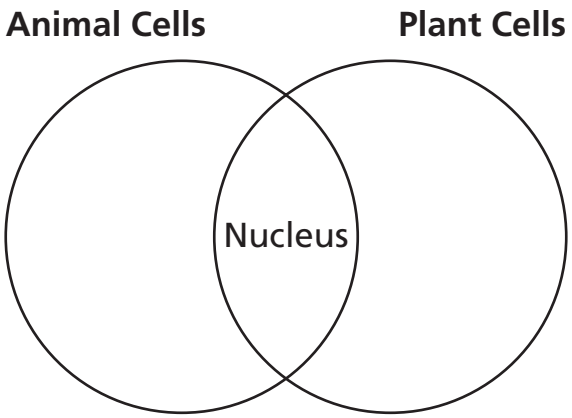
Science



Reporting Category: **LIFE SCIENCE 1: Cells, Matter and Heredity**

Performance Indicator: **0407.1.1 Compare basic structures of plant and animal cells.**

1 **A Venn diagram is shown below.**



Which structure belongs only in the part of the circle labeled plant cells?

A cell membrane

B cell wall

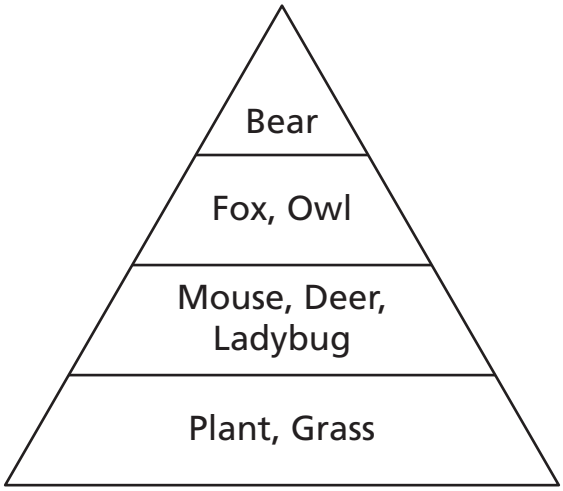
C cytoplasm

D vacuole

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**LIFE SCIENCE 1: Cells, Matter and Heredity**
Performance Indicator:	**0407.3.1 Determine how different organisms function within an environment in terms of their location on an energy pyramid.**

2 **An energy pyramid is shown below.**



Which of the following correctly describes the flow of energy in the pyramid?

F The grass and trees get energy from ladybugs.

G The owl and fox get energy from mice.

H The fox gets energy from bears.

J The deer gets energy from owls.

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**LIFE SCIENCE 1: Cells, Matter and Heredity**
Performance Indicator:	**0407.4.1 Draw conclusions about the relationship between reproduction and the survival of a species.**

3 **A male peacock is shown in the picture below.**

© Jerry Moorman/iStockphoto #8324267

Male peacocks attract females for mating by showing their colorful tail feathers. If many of the male birds were affected by a disease that damaged their tail feathers, what would most likely happen next?

A Feathers on the females would become brighter.

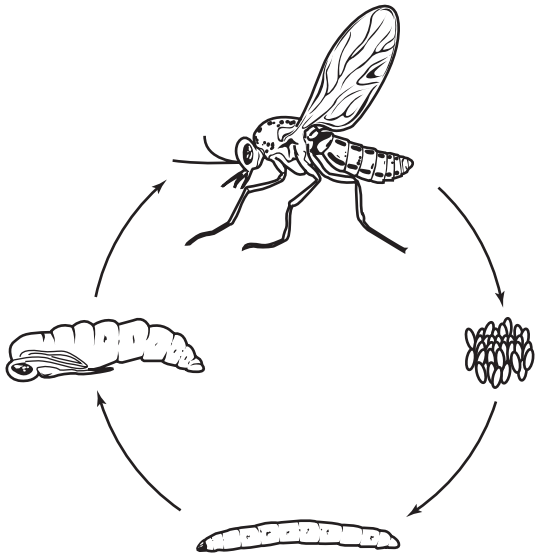
B The peacocks would build smaller nests.

C The females would mate with another species.

D Fewer numbers of young peacocks would hatch.

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

4 **The diagram shows an insect life cycle.**



Which term describes the life cycle of this insect?

F complete metamorphosis

G incomplete metamorphosis

H migration

J pollination

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**LIFE SCIENCE 2: Interdependence, Biodiversity & Change**
Performance Indicator:	**0407.2.1 Recognize the impact of predation and competition on an ecosystem.**

5 **Part of a marine food chain is shown.**

Phytoplankton → Cod Fish → Seal → Orca

Which would <u>most</u> likely happen if there was a sudden decrease in the codfish population?

A The orca population would increase.

B The seal population would decrease.

C The phytoplankton population would increase.

D The seal population would increase.

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**LIFE SCIENCE 2: Interdependence, Biodiversity & Change**
Performance Indicator:	**0407.5.1 Determine how a physical or behavioral adaptation can enhance the chances of survival.**

6 **A beaver is shown below.**

A beaver's flat tail most likely helps it to

F swim in water.

G catch food.

H stay warm.

J grip branches.

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**LIFE SCIENCE 2: Interdependence, Biodiversity & Change**
Performance Indicator:	**0407.5.2 Infer the possible reasons why a species became endangered or extinct.**

7 **Gray bats are an endangered species. Gray bats live in caves. People sometimes visit caves and can disturb the bats. Bats that are disturbed during winter hibernation use up their stores of energy and do not survive the winter. Which of these best explains why gray bats have become endangered?**

A disease

B pollution

C human presence

D climate change

Reporting Category:	**LIFE SCIENCE 2: Interdependence, Biodiversity & Change**
Performance Indicator:	**2.0407.TE.1 Select a tool, technology, or invention that was used to solve a human problem.**

8 **Scientists are tracking the movements of an endangered whale using a radio tag. The whale traveled more than 4,000 miles in three months. Which devices are used with the radio tag to determine the location of the whale?**

F barometers

G lasers

H satellites

J telescopes

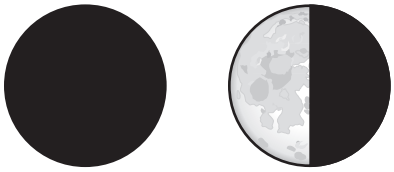
Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**EARTH AND SPACE SCIENCE: Universe, Earth, Atmosphere**
Performance Indicator:	**0407.6.1 Organize the phases of the moon in the correct sequence.**

9 A drawing of a full moon is shown.

What are the next two phases that appear after a full moon?

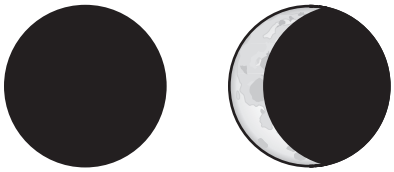
A



B

C

D



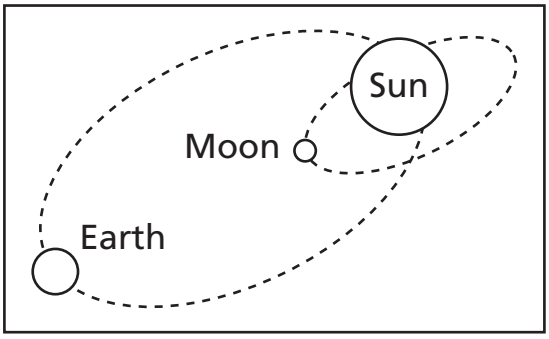
Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

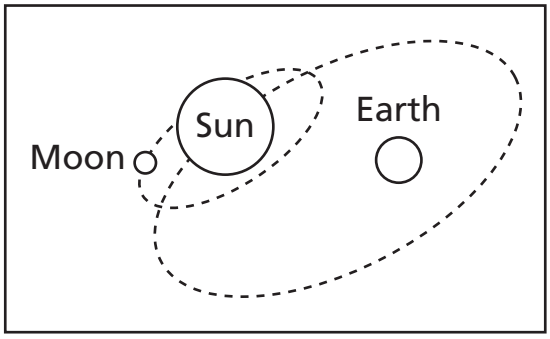
Reporting Category:	**EARTH AND SPACE SCIENCE: Universe, Earth, Atmosphere**
Performance Indicator:	**0407.6.2 Infer that the moon's phases are caused by the revolution of the moon and earth around the sun.**

10 **The arrangement of the sun, moon, and Earth causes the moon to appear to change phases when viewed from Earth. Which diagram correctly shows this arrangement?**

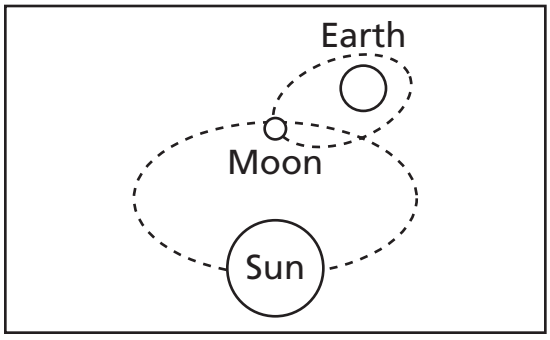
F



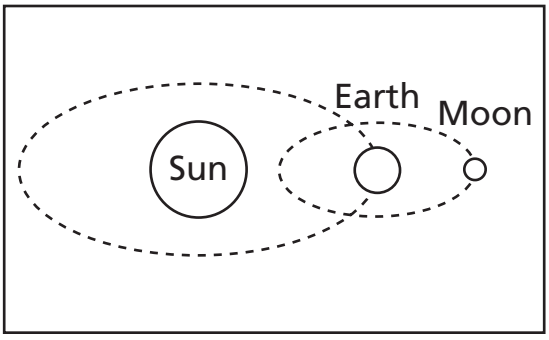
H



G



J



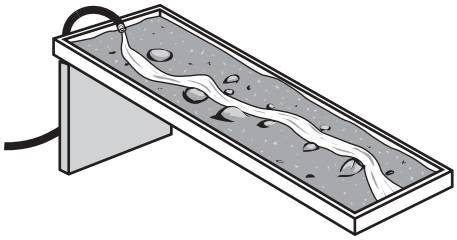
Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**EARTH AND SPACE SCIENCE: Universe, Earth, Atmosphere**
Performance Indicator:	**0407.7.1 Design a simple model to illustrate how the wind and movement of water alter the earth's surface.**

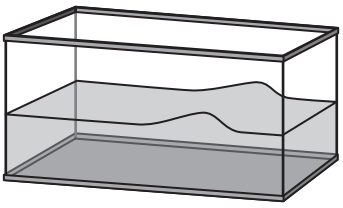
11 **The picture shows a rock bridge that was created by erosion.**

Which model best shows how this bridge was created?

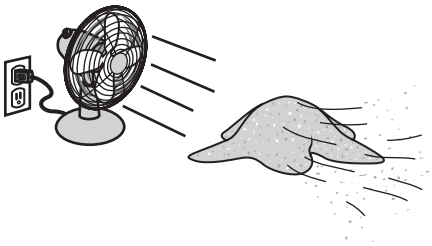
A



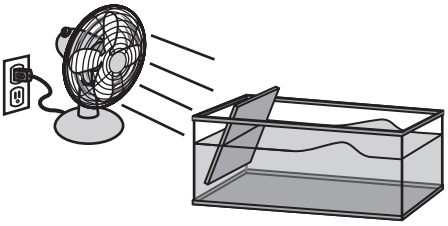
C



B



D

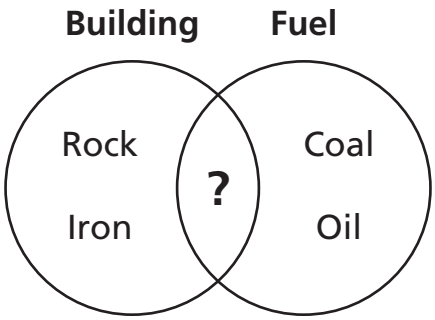


Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**EARTH AND SPACE SCIENCE: Universe, Earth, Atmosphere**
Performance Indicator:	**0407.7.2 Analyze how different earth materials are utilized to solve human problems or improve the quality of life.**

12 **A Venn diagram with some materials and their uses is shown below.**



Which material can be used for building and fuel?

F copper

G gold

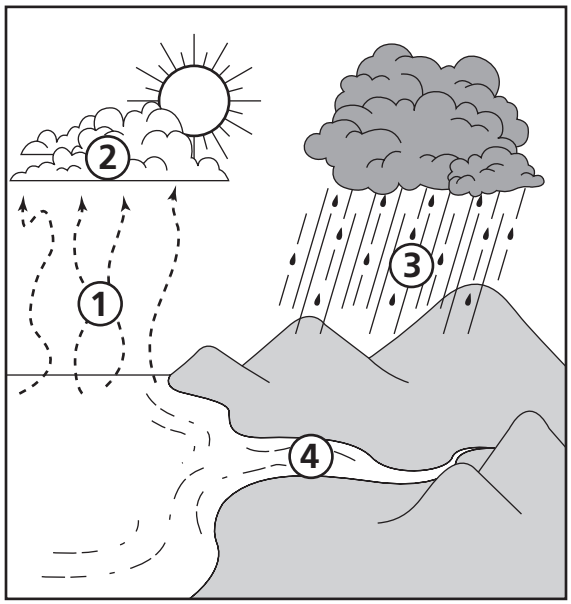
H gasoline

J wood

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**EARTH AND SPACE SCIENCE: Universe, Earth, Atmosphere**
Performance Indicator:	**0407.8.1 Identify the basic features of the water cycle and describe their importance to life on earth.**

13 **A diagram of the water cycle is shown.**



Which number represents evaporation?

A 1

B 2

C 3

D 4

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**EARTH AND SPACE SCIENCE: Universe, Earth, Atmosphere**
Performance Indicator:	**0407.8.2 Distinguish between weather and climate.**

14 **A weather channel stated the temperature was 24°C and the wind was blowing at 3 kilometers per hour. Which term best describes this information?**

F season

G climate

H habitat

J weather

Reporting Category:	**EARTH AND SPACE SCIENCE: Universe, Earth, Atmosphere**
Performance Indicator:	**3.0407.TE.2 Recognize the connection between a scientific advance and the development of a new tool or technology.**

15 **Which of these have most helped scientists learn when dangerous storms are approaching?**

A satellites

B telescopes

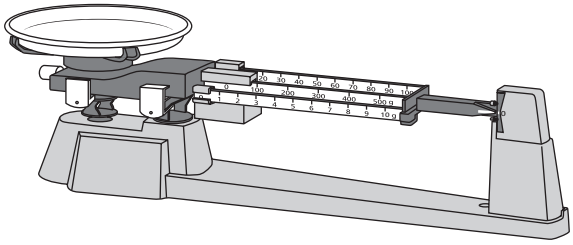
C lasers

D windmills

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**PHYSICAL SCIENCE 1: Matter and Energy**
Performance Indicator:	**0407.9.1 Choose an appropriate tool for measuring a specific physical property of matter.**

16 **A balance is shown below.**



A balance can be used to

F find the length of a plant.

G record the temperature of a classroom.

H measure the mass of a book.

J determine the volume of a rock.

Reporting Category:	**PHYSICAL SCIENCE 1: Matter and Energy**
Performance Indicator:	**0407.9.2 Determine the mass, volume, and temperature of a substance or object using proper units of measurement.**

17 **A student needs to measure the masses of different marbles. In which units should the student record the masses of the marbles?**

A grams

B meters

C liters

D degrees Celsius

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **PHYSICAL SCIENCE 1: Matter and Energy**

Performance Indicator: **0407.9.3 Interpret the causes and effects of a physical change in matter.**

18 **A student made a chart on different things that cause chocolate chips to melt.**

Melting Chocolate Chips

Cause	Effect
1. Baking in oven	Melted chocolate chips
2. Place outside	Melted chocolate chips
3. **?**	Melted chocolate chips

Which of these is best for the student to add to the chart?

F pouring into a bowl

G shaking in a bag

H heating on a stove

J cutting into pieces

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: PHYSICAL SCIENCE 1: Matter and Energy

Performance Indicator: 0407.10.1 Identify different forms of energy, such as heat, light, and chemical.

19 **A battery is shown in the picture.**

Which type of energy does the battery produce?

A sound

B light

C mechanical

D electrical

Go On ▶

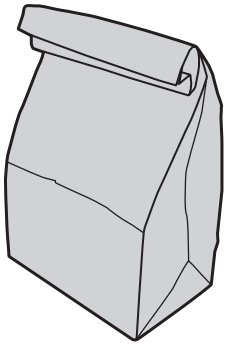
Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **PHYSICAL SCIENCE 1: Matter and Energy**

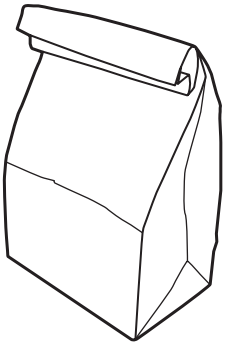
Performance Indicator: **0407.10.2 Determine which surfaces reflect, refract, or absorb light.**

20 **Which bag will absorb the most light?**

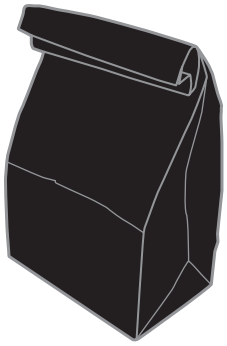
F



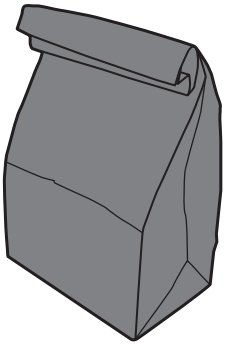
H



G



J



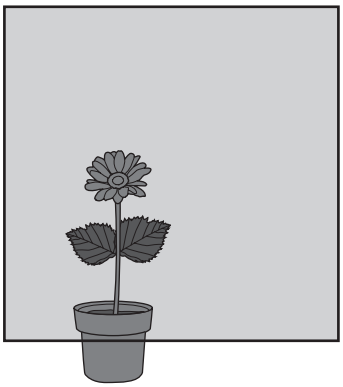
Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: PHYSICAL SCIENCE 1: Matter and Energy

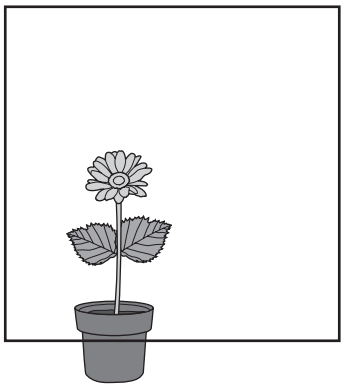
Performance Indicator: 0407.10.3 Determine whether a material is transparent, translucent, or opaque.

21 Which square is opaque?

A

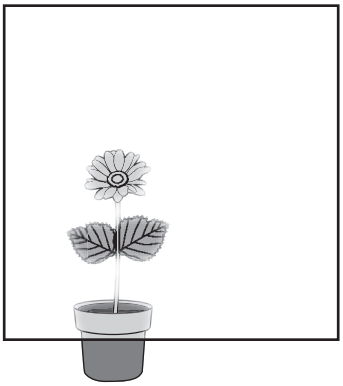


C



B

D



Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **PHYSICAL SCIENCE 1: Matter and Energy**

Performance Indicator: **4.0407.inq.1 Select an investigation that could be used to answer a specific question.**

22 **Students are testing how quickly different amounts of friction will slow down a toy car. Which steps should they follow to answer this question?**

F

1. Place a ramp on a wood floor
2. Put a toy car at the top of the ramp and let go
3. Measure the time it takes the toy car to stop
4. Put the ramp on a carpet
5. Repeat Steps 2 and 3

G

1. Place a ramp on a carpet
2. Put a toy car at the top of the ramp
3. Hold onto the toy car as it rolls down the ramp
4. Measure the time it takes the toy car to stop
5. Repeat Steps 2 and 3

H

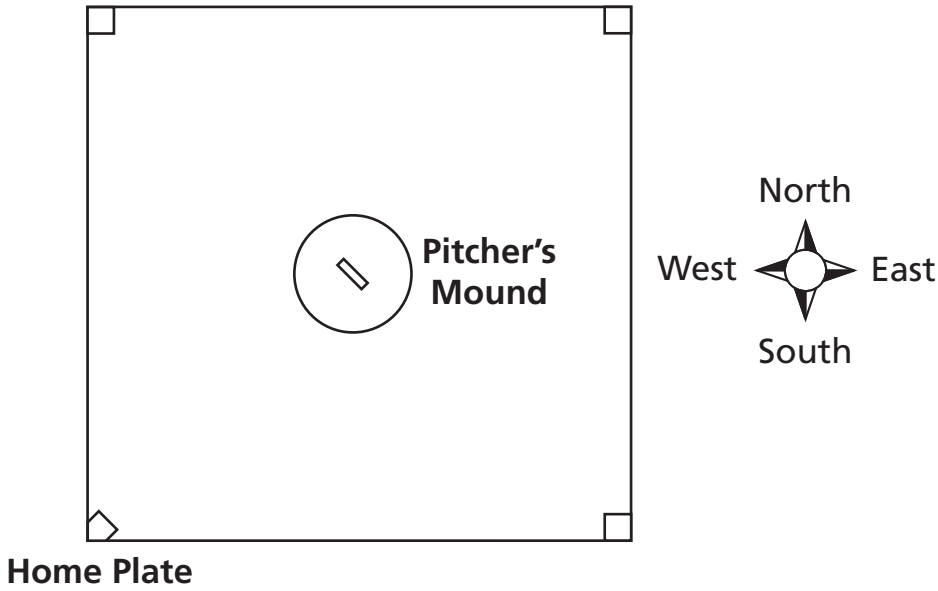
1. Place a ramp on a wood floor
2. Put a toy car at the top of the ramp and let go
3. Measure the time it takes the toy car to stop
4. Replace the first ramp with a longer ramp
5. Repeat Steps 2 and 3

J

1. Place a ramp on a carpet
2. Put a toy car at the top of the ramp and let go
3. Measure the time it takes the toy car to stop
4. Replace the first ramp with a taller ramp
5. Repeat Steps 2 and 3

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

23 **A drawing of a baseball field is shown.**



A player on the pitcher's mound throws a ball towards home plate. Which direction was the ball thrown?

A north

B south

C southwest

D northeast

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

24 **The picture shows a woman using a parachute.**

Which factor helps slow the woman's fall?

F magnetism

G air resistance

H balanced forces

J gravity

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: PHYSICAL SCIENCE 2: Motions, Forces in Nature

Performance Indicator: 0407.11.3 Determine the relationship between speed and distance traveled over time.

25 Four teams traveled the same distance in different times.

Team	Distance (miles)	Time (hour)
W	12	1
X	12	1.5
Y	12	2.5
Z	12	2

Which team was the slowest?

A Team W

B Team X

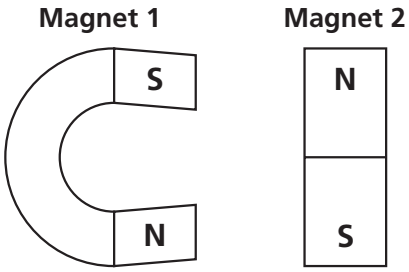
C Team Y

D Team Z

Go On ▶

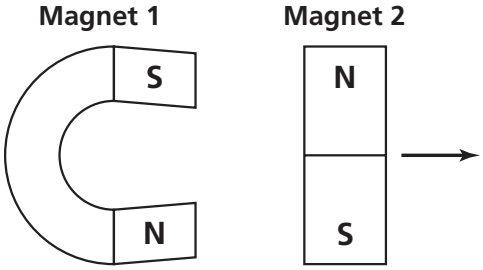
Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

26 A student places two magnets next to each other as shown below.

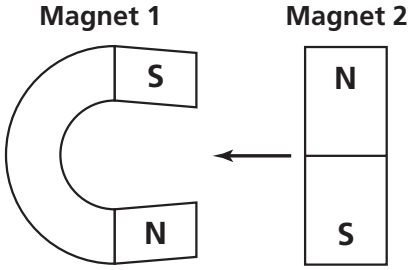


Which picture best shows the direction Magnet 2 will move when it is placed close to Magnet 1?

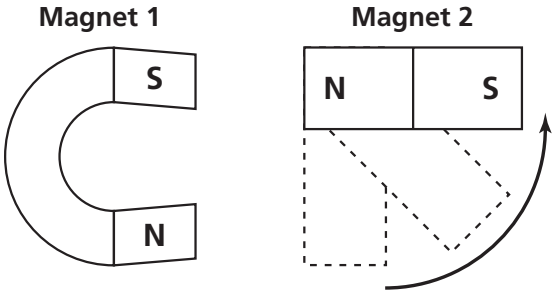
F



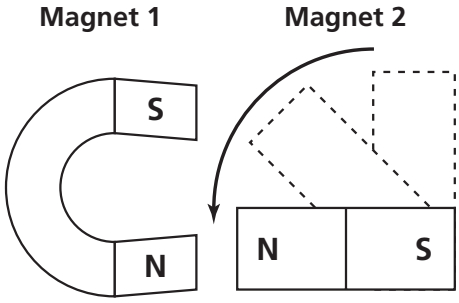
H



G



J

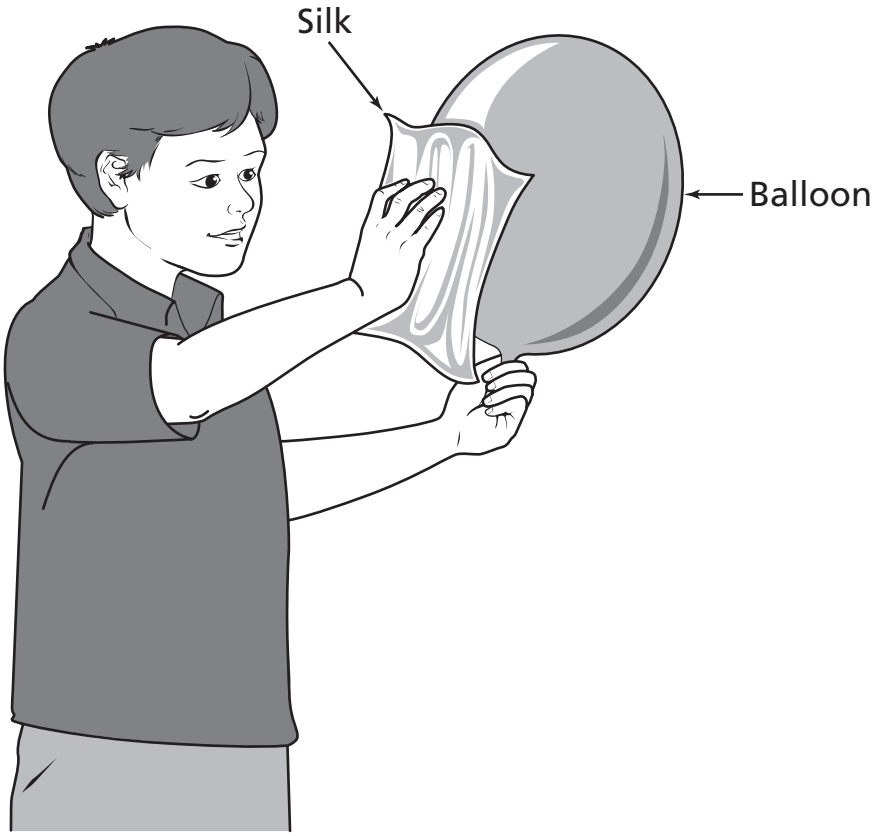


Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **PHYSICAL SCIENCE 2: Motions, Forces in Nature**

Performance Indicator: **0407.12.2 Determine how an electrically charged material interacts with other objects.**

27 **A student rubbed a piece of silk over a balloon filled with air. The student put the balloon and the piece of silk down on a table.**



Which will most likely happen when the student moves the balloon near the silk?

A The balloon will float towards the ceiling.

B The silk will fall to the floor.

C The balloon will be attracted to the silk.

D The silk will be repelled by the balloon.

Go On ▶

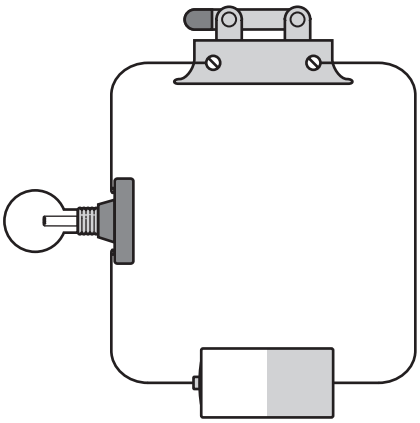
Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: PHYSICAL SCIENCE 2: Motions, Forces in Nature

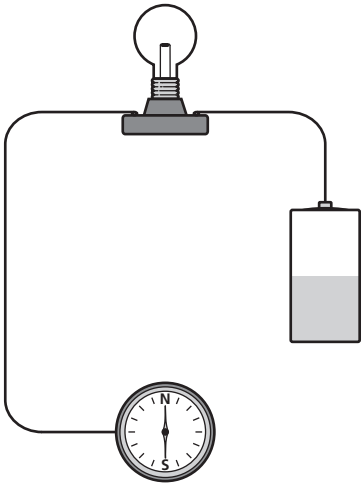
Performance Indicator: 0407.12.3 Determine the path of an electrical current in a simple circuit.

28 Which diagram shows a complete circuit?

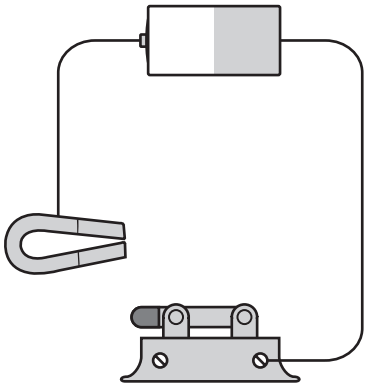
F



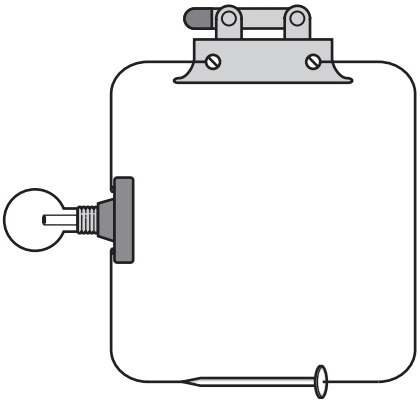
H



G



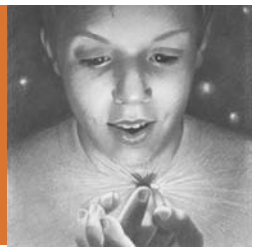
J



STOP

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Social Studies



Reporting Category: **1 Economics**

Performance Indicator: **4.2.1 Recognize the concept of supply and demand.**

1 **Study the diagram below.**

Cause		Effect
Tennessee farmers have a large supply of rice.	→	?

Which result best completes the diagram?

A Manufacturers will make fewer rice products.

B Farmers will keep the price of rice the same.

C Shoppers will pay less for rice at stores.

D Farmers will plant more rice next season.

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **1 Economics**

Performance Indicator: **4.2.2 Interpret a chart of major agricultural produce in Tennessee (i.e., cotton, tobacco, soy beans, rice, corn, cattle, wheat, swine, sheep).**

2 **Study the table below.**

Cattle on Tennessee Farms, 2002 and 2007

	2002	2007
Farms with Beef Cows	44,249	42,344
Farms with Dairy Cows	1,427	1,230

Source: USDA

Which conclusion about cattle farming in Tennessee does the table support?

F Beef production has decreased.

G Dairy production has increased.

H Beef farms have grown in size.

J Dairy cows are smaller than beef cows.

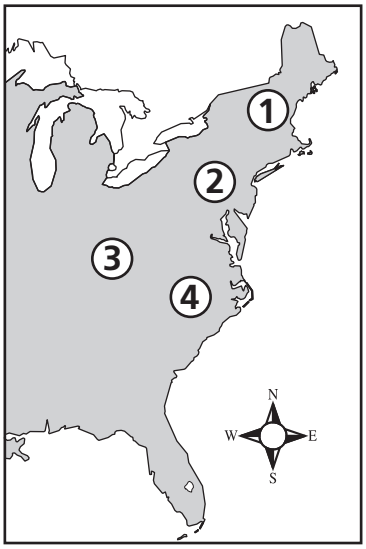
Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **1 Economics**

Performance Indicator: **4.2.3 Identify major industries of Colonial America using a map of the original 13 colonies.**

3 Study the map below.

Colonial America



Based on the map, which area's economy was based on growing tobacco?

A 1

B 2

C 3

D 4

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: 1 Economics

Performance Indicator: 4.2.4 Recognize the difference between a barter system and a money system.

4 **Which photograph shows the barter system being used?**

F

© Alexander Kalina/ iStockphoto #3381885

H

© Carmen Martínez Banús/ iStockphoto #2922297

G

© Lisa F. Young/ iStockphoto #3971020

J

© kali9/iStockphoto #13201914

Reporting Category: 1 Economics

Performance Indicator: 4.2.5 Analyze the impact of European exploration and colonization on the economy of Tennessee.

5 **During the 1700s, which group impacted the Tennessee economy by trading furs?**

A African slaves

B Spanish explorers

C French trappers

D Portuguese sailors

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **1 Economics**

Performance Indicator: **4.6.3 Read and interpret a passage about a political or economic issue which individuals may respond to with contrasting views (i.e., state taxes, federal taxes, slavery, Bill of Rights).**

6 **Study the statement below.**

> I . . . believe that the slave-holding South is now the controlling power of the world . . . Cotton, rice, tobacco . . . command the world [are in charge] . . .
>
> — Senator James Hammond, 1860

Which idea disagrees with the point of view in this statement?

F The federal government has too much power over the states.

G Southern states were wrong to separate from the Union.

H Southern states have no strength.

J Northern states should not accept slavery.

Reporting Category: **2 Governance and Civics**

Performance Indicator: **4.1.3 Determine how various groups resolve conflict (i.e., school, tribal councils, courts).**

7 **Which person helps resolve conflicts by ruling on cases?**

A state representative

B police officer

C newspaper reporter

D court judge

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **2 Governance and Civics**

Performance Indicator: **4.4.1 Identify the 3 branches of federal and state governments.**

8 **Study the photograph below.**

Tennessee Supreme Court

© Dave Newman/iStockphoto #5488949

Which Tennessee leader would most likely work in the building shown in the photograph?

F governor

G chief justice

H mayor

J state senator

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: 2 Governance and Civics

Performance Indicator: 4.4.2 Identify the rights outlined by the Bill of Rights (i.e., Amendments 1, 5, 6, 8).

9 **Which protection is granted to U.S. citizens by the Eighth Amendment?**

A right to a jury trial

B fair punishment for a crime

C right to own property

D freedom of speech

Reporting Category: 2 Governance and Civics

Performance Indicator: 4.4.3 Examine how the Mayflower Compact is a symbol of the first United States government.

10 **Study the passage below.**

> We . . . the Loyal [citizens] of . . . Lord King James . . . plant the first Colony in the Northern Parts of Virginia . . . and combine ourselves together into a civil Body . . . for our better Ordering and Preservation . . .
>
> — Mayflower Compact, 1620

Based on the passage, what was the purpose of the Mayflower Compact?

F to list important religious rules

G to form a plan of government

H to outline a system of education

J to develop an economic plan

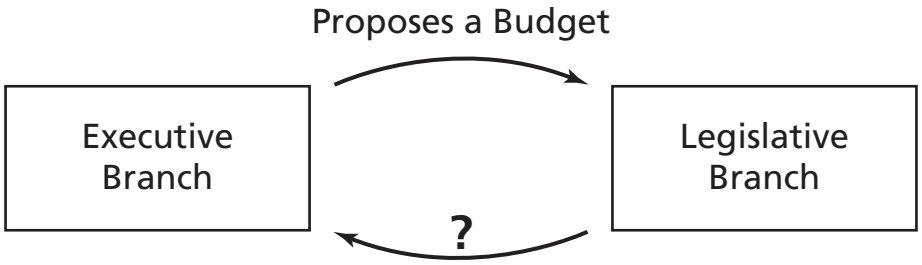
Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **2 Governance and Civics**

Performance Indicator: **4.4.4 Using a chart showing checks and balances, explain how one branch of government can limit the power of others.**

11 **Study the diagram below.**



In the system of checks and balances, which check best completes the diagram?

A Declares Acts Unconstitutional

B Controls Spending

C Interprets Laws

D Chooses Federal Judges

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**2 Governance and Civics**
Performance Indicator:	**4.5.6 Examine the events that contributed to the outbreak of the American Revolution (i.e., taxation, judicial process, lack of representations, quartering of troops).**

12 **Study the declaration below.**

> Only representatives of the people of these colonies are persons chosen . . . by themselves; and that no taxes ever have been . . . [charged to] them but by their . . . legislatures.
>
> — Declaration of the Stamp Act Congress, 1765

Colonists were protesting the tax on

F corn.

G ships.

H tobacco.

J paper.

Reporting Category:	**2 Governance and Civics**
Performance Indicator:	**4.6.1 Recognize how groups work cooperatively to accomplish goals and encourage change (i.e., American Revolution, founding of Tennessee, the failure of the Articles of Confederation, colonies).**

13 **After the American Revolution, how did states work together to fix problems caused by the Articles of Confederation?**

A States asked the courts to change the government.

B States elected a new president to enforce the laws.

C State governors changed laws that were unfair.

D State representatives attended a meeting to change the government.

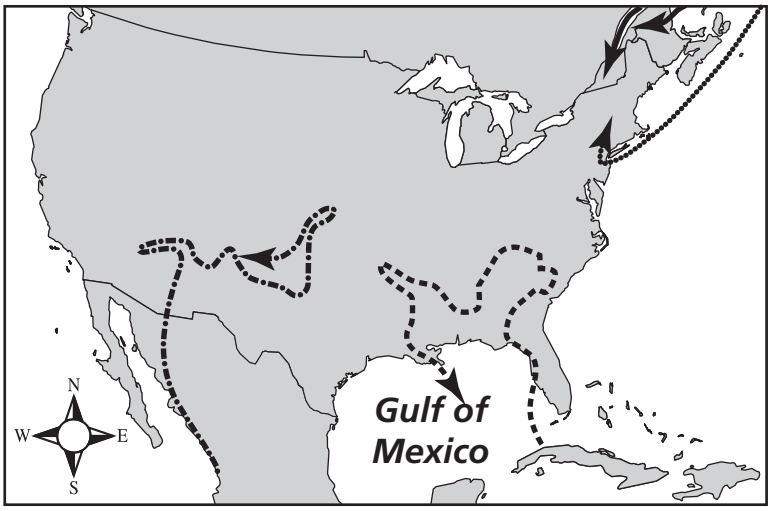
Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**3 Human Geography**
Performance Indicator:	**4.3.1 Identify the routes of the explorers of the Americas on a map (i.e., Columbus, Balboa, Pizarro, DeSoto).**

14 **Study the map below.**

Exploration of North America



Key
Explorer's Routes
Cartier, 1534 – 1535
de Soto, 1539
Coronado, 1540 – 1542
Hudson, 1609

Based on the map, which explorer was searching for gold in present-day southeastern United States?

F Jacques Cartier

G Hernando de Soto

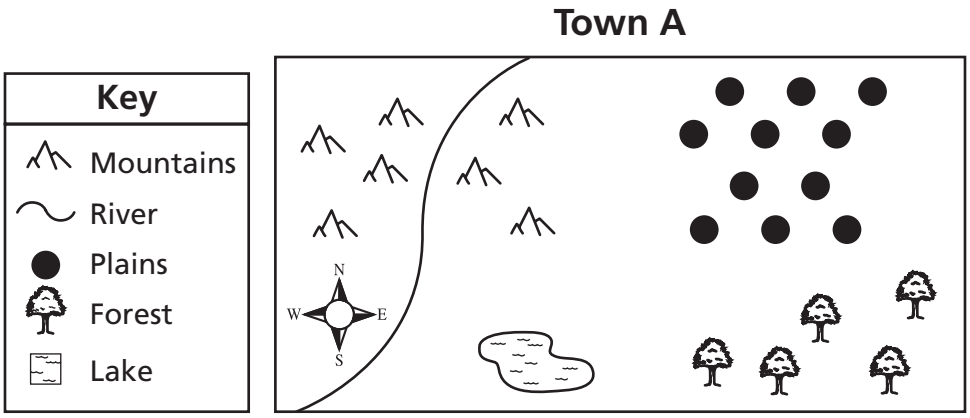
H Francisco Vázques de Coronado

J Henry Hudson

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**3 Human Geography**
Performance Indicator:	**4.3.2 Identify and use key geographical features on maps (i.e., mountains, rivers, plains, valleys, forests).**

15 **Study the map below.**



On the map, which geographical feature is divided by a river?

A Mountains

B Plains

C Forest

D Lake

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**3 Human Geography**
Performance Indicator:	**4.3.3 Recognize the reasons settlements are founded on major river systems (i.e., transportation, manmade boundaries, food and water sources).**

16 **What is one reason many early settlements developed along major rivers?**

F Rivers were useful for developing industries.

G Rivers were important for religious reasons.

H Rivers were good transportation routes.

J Rivers were safe from natural disasters.

Reporting Category:	**3 Human Geography**
Performance Indicator:	**4.3.4 Recognize river systems that impacted early American history (i.e. Mississippi, Mystic, Charles, Hudson).**

17 **Which river was most important to colonial Boston, Massachusetts?**

A Mississippi

B Colorado

C Ohio

D Charles

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**3 Human Geography**
Performance Indicator:	**4.3.5 Determine how physical processes shape the United States' features and patterns (i.e. erosion, volcanoes, plate tectonics, flooding).**

18 **Study the headline below.**

Overflowing Rivers Add Nutrients to the Local Soil

Which physical process most likely caused the events in the headline?

F heavy rains

G volcanic eruptions

H strong winds

J melting snow

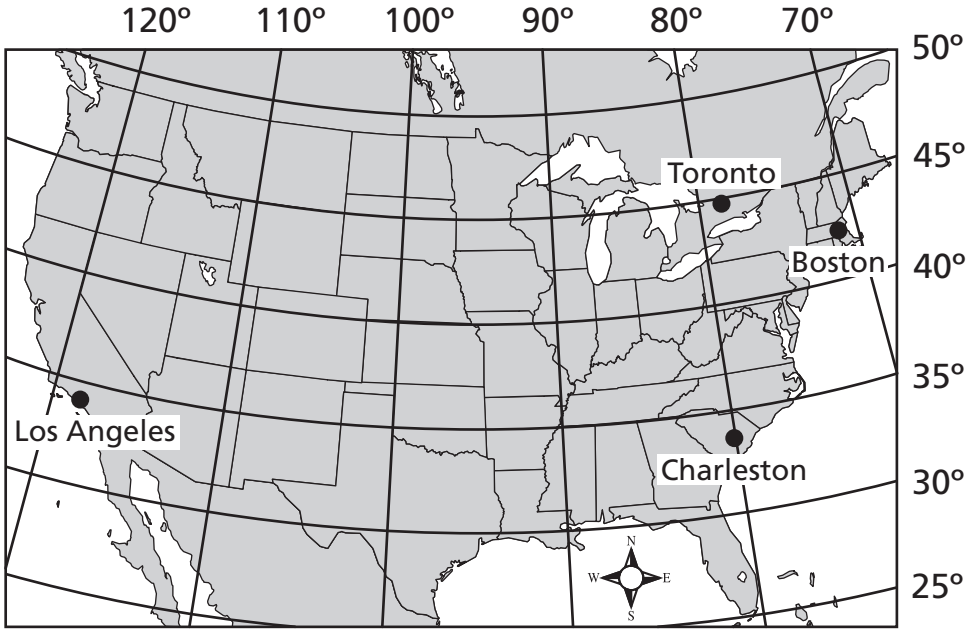
Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**3 Human Geography**
Performance Indicator:	**4.3.6 Use latitude and longitude to identify major North American cities on a map (i.e., Boston, Mexico City, Toronto, Charleston, Savannah, Washington D.C., Philadelphia, Santa Fe, Los Angeles).**

19 **Study the map below.**

Continental United States



Using the map, which city is located near 45° N and 79° W on the map?

A Los Angeles

B Toronto

C Boston

D Charleston

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: 3 Human Geography

Performance Indicator: 4.3.7 Determine how density, distribution, and growth rate affected United States settlement patterns.

20 **Before the Civil War, what most likely encouraged urban development in the United States?**

F lack of housing in major cities

G increased demand for agricultural products

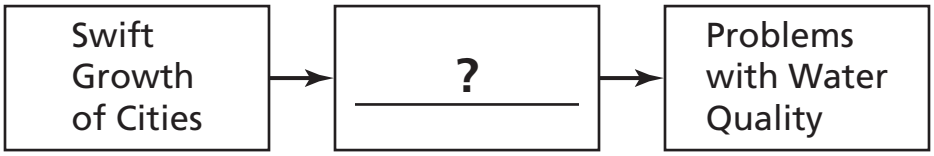
H lack of natural resources

J increase in the number of immigrants

Reporting Category: 3 Human Geography

Performance Indicator: 4.3.8 Identify cause and effect relationships between population distribution and environmental issues (i.e., water supply, air quality, solid waste).

21 **Study the diagram below.**



Which phrase best completes this cause and effect diagram?

A Little Rainfall

B Poor Trash Collection

C Empty Buildings

D Places Near Rivers

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **4 US History Era 1,2,3**

Performance Indicator: **UH1.4.1.1 Identify pre-Colonial Native American groups (i.e., Cherokee, Creek, Chickasaw, Aztec, Mayans, Olmec, Mississippi Mound Builders).**

22 **Study the drawing below.**

Structures like this were built by Native Americans in

F Florida.

G Mississippi.

H Pennsylvania.

J Minnesota.

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**4 US History Era 1,2,3**
Performance Indicator:	**UH1.4.1.2 Identify cultural groups who inhabited North America in the 17th century (i.e., Puritans, Quakers, Spanish, French).**

23 **Which group colonized Louisiana in the 17th century?**

A French

B Spanish

C Dutch

D Portuguese

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**4 US History Era 1,2,3**
Performance Indicator:	**UH1.4.1.4 Examine how Native American Culture changed as a result of contact with European cultures (i.e., decreased population, spread of disease, increased conflict, loss of territory, increase of trade).**

24 **Study the passage below.**

> We [Native Americans] are now about to take our final leave and kind farewell to our native land, the country that the Great Spirit gave our Fathers. We are on the eve of leaving that country that gave us birth. It is the land of our Nation, and it is with [sadness] that we are forced by the [government] . . . to quit the scenes of our childhood . . .
>
> — Letter from George Hicks to Chief Ross, November 1838

Based on the passage, why did George Hicks and Chief Ross have to leave the land?

F The chief served as a government scout.

G The tribe moved in search of new resources.

H The tribe was unable to find food sources.

J The government was taking tribal lands.

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**4 US History Era 1,2,3**
Performance Indicator:	**UH1.4.1.5 Identify various racial and ethnic groups in Tennessee at the founding of statehood (i.e., Cherokee, Creek, Shawnee, English, Scottish, French, American born pioneers).**

25 **Study the list below.**

Groups in 1790s Tennessee

- Cherokee
- English
- ?

Which group should be added to this list?

A Seminole

B Iroquois

C Powhatan

D Shawnee

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **4 US History Era 1,2,3**

Performance Indicator: **UH1.4.1.6 Read and interpret facts from a historical passage about an early American Spanish mission.**

26 **Study the passage below.**

> An early writer describes the Mission San Gabriel Arcángel:
>
> The water . . . came down into the [valley] nearest to the mission, on the Angeles road . . . This [valley was thick with trees], cleared of all [difficulties], served to raise the first crops ever produced at the Mission . . .

How did changes described in the passage affect the environment?

F The road was improved so clergy could travel easily.

G The water was drained away so buildings could be built.

H The trees were removed so that plants could be grown.

J The forest was cut down to sell the wood from the trees.

Reporting Category: **4 US History Era 1,2,3**

Performance Indicator: **UH1.4.5.1 Identify Native American groups in Tennessee before European exploration (i.e., Cherokee, Creek, Chickasaw).**

27 **Which Native American group lived in what is now Tennessee, before European exploration?**

A Maya

B Aztec

C Apache

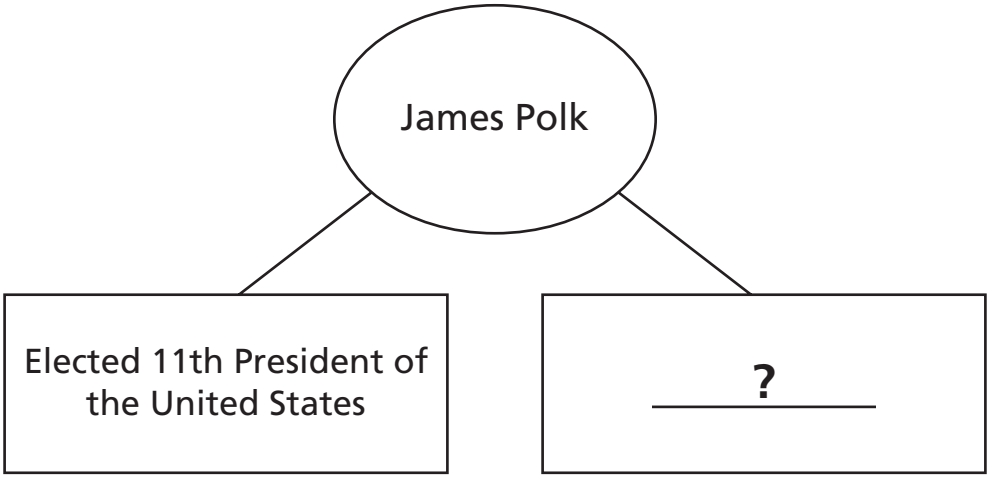
D Creek

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **4 US History Era 1,2,3**

Performance Indicator: **UH1.4.5.2 Identify major Tennessee political leaders (i.e., Andrew Jackson, Sam Houston, James Polk, Sequoyia, David Crockett, Nancy Ward).**

28 **Study the diagram below.**



Which action best completes the diagram?

F Expanded territory of the United States

G Worked to increase the number of European immigrants

H Fought for Texas independence from Mexico

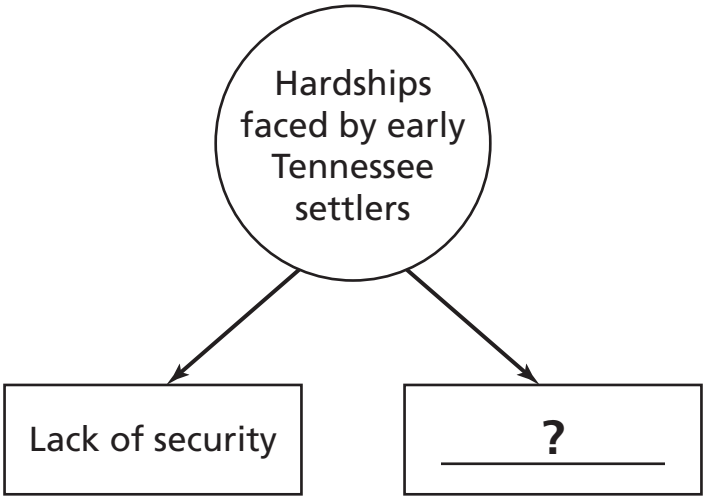
J Removed Native Americans from southern states

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**4 US History Era 1,2,3**
Performance Indicator:	**UH1.4.5.4 Determine the hardships faced by early Tennessee settlers in the late 1700's (i.e., security, isolated communities, lack of access to goods, natural geography).**

29 **Study the diagram below.**



What best completes the diagram?

A Unfair local governments

B Isolated communities

C Limited natural resources

D Expensive farmland

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**4 US History Era 1,2,3**
Performance Indicator:	**UH1.4.5.5 Determine the reasons for colonial settlement (i.e., religious, economic, individual freedom).**

30 **Why did many early colonists settle in Massachusetts?**

F to have religious freedom

G to receive a free education

H to escape paying for debts

J to work in new industries

Go On ▶

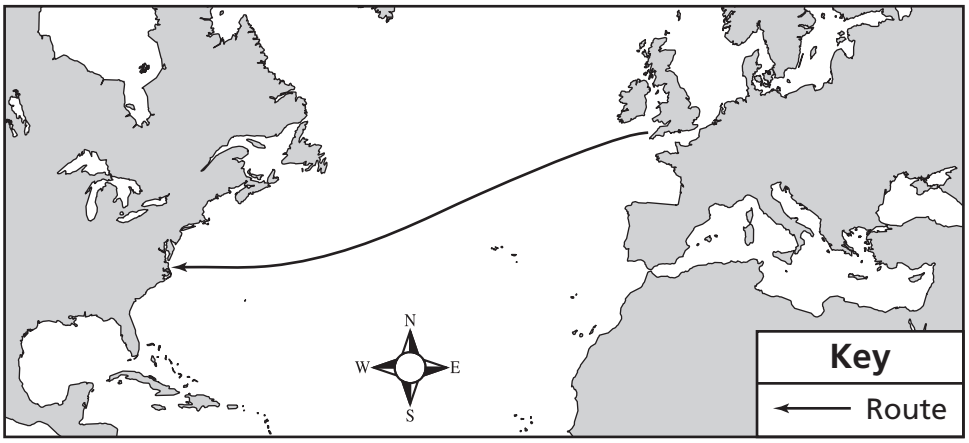
Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **4 US History Era 1,2,3**

Performance Indicator: **UH1.4.5.8 Interpret a timeline, graph, or map depicting slave and indentured servants coming from Europe to live in North America.**

31 **Study the map below.**

Route Used to Travel to North America



Based on the map, indentured servants came to North America from

A Europe.

B Asia.

C Australia.

D Africa.

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**4 US History Era 1,2,3**
Performance Indicator:	**UH1.4.5.10 Recognize the accomplishments that John Sevier contributed to Tennessee history (i.e., State of Franklin's one and only governor, Tennessee's first governor, United States Congressman, soldier).**

32 **Study the list below.**

John Sevier's Accomplishments

- Served as a soldier
- Served in the Tennessee State Senate
- _____?_____

Which accomplishment completes the list?

F Helped purchase territory from France

G Served as United States congressman

H Encouraged the settlement of Texas

J Served as president of the United States

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **4 US History Era 1,2,3**

Performance Indicator: **UH1.4.5.11 Interpret a visual contrasting life before and after the American Revolution (i.e., education, family size, transportation, politics).**

33 **Study the information below.**

Before the American Revolution	After the American Revolution
In the 1600s and 1700s, children whose parents could afford to pay [teachers] had the best chance of receiving an education. Or, children could attend schools [supported] by . . . parents who . . . together [paid teachers] . . . — New Jersey Department of Education	In 1828, the state [carried out] a study to learn about the condition of education. . . . During this period, laws were [passed] to provide . . . state and local [money] for . . . schools . . . and require schools to be free to all children aged 5 to 18. — New Jersey Department of Education

Based on the information, how did education in New Jersey change after the American Revolution?

A Few children were taught basic skills.

B Students had to pay for an education.

C Children learned mainly about math.

D More students could get an education.

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**5 US History Era 4,5,6**
Performance Indicator:	**UH2.4.1.2 Identify cultural groups who inhabited North America in the 17th century (i.e., Puritans, Quakers, Spanish, French).**

34 **Study the list below.**

North America During the 1600s

- Explored the Mississippi River Valley
- Became fur traders
- Settled in Canada

Which group is best described by the list?

F Spaniards

G French

H Puritans

J Quakers

Reporting Category:	**5 US History Era 4,5,6**
Performance Indicator:	**UH2.4.5.2 Identify major Tennessee political leaders (i.e., Andrew Jackson, Sam Houston, James Polk, Sequoyia, David Crockett, Nancy Ward).**

35 **Which leader became the president of the Republic of Texas?**

A James Polk

B Sam Houston

C Andrew Jackson

D John Sevier

Go On ▶

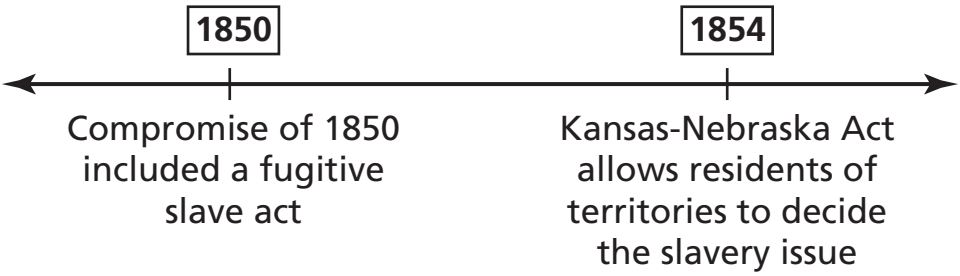
Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **5 US History Era 4,5,6**

Performance Indicator: **UH2.4.5.3 Interpret a timeline that depicts major historical pre-Civil War events.**

36 **Study the timeline below.**

Selected U.S. History Events, 1850 – 1854



Which conclusion is supported by the timeline?

F Slavery was a political issue for the United States at this time.

G Plantation owners supported the abolition of slavery.

H Antislavery laws were only passed in southern states.

J Slavery was legal in every state in the Union during this time.

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**5 US History Era 4,5,6**
Performance Indicator:	**UH2.4.5.7 Determine why the United States Constitution was necessary (i.e., no single currency, no judicial branch, no enforcement of laws, small and large states having unequal representation).**

37 **One issue that made the United States Constitution necessary was the need for**

A a national religion.

B an educational system.

C a single currency.

D an executive position.

Go On ▶

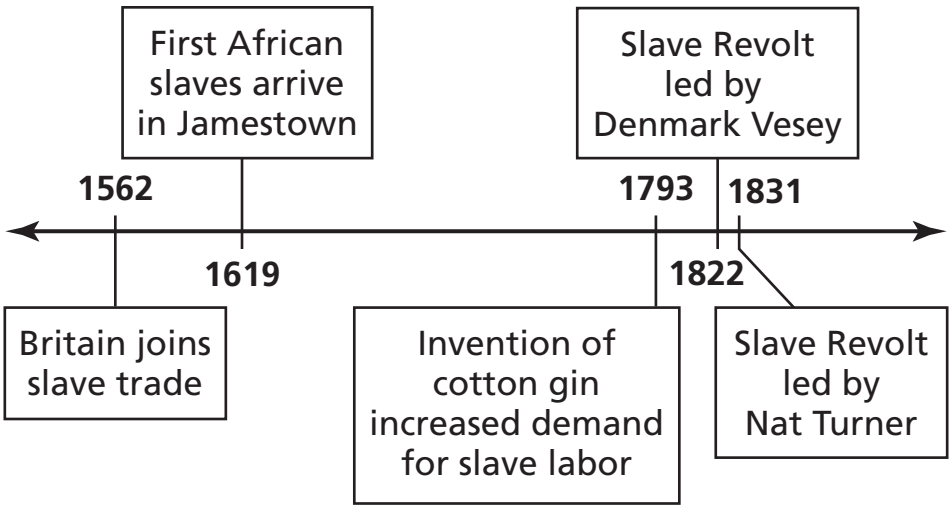
Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **5 US History Era 4,5,6**

Performance Indicator: **UH2.4.5.8 Interpret a timeline, graph, or map depicting slave and indentured servants coming from Europe to live in North America.**

38 **Study the timeline below.**

Slavery Timeline



Which statement is supported by the timeline?

F Expansion of rights for slaves came in 1619.

G Fewer states allowed slavery after 1793.

H An increase in the number of slaves led to revolts.

J Fewer farms required slavery after the invention of the cotton gin.

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category: **5 US History Era 4,5,6**

Performance Indicator: **UH2.4.5.9 Determine the influence Lewis and Clark's expedition had on westward expansion.**

39 **What was a result of Lewis and Clark's expedition?**

A treaties with Spanish colonists

B routes to the Great Lakes

C system to name plants

D maps of western lands

Reporting Category: **5 US History Era 4,5,6**

Performance Indicator: **UH2.4.5.12 Read and interpret a passage about the Trail of Tears.**

40 **Study the letter below.**

> We arrived at this place about two weeks ago. Joel Nail and his party came in company with us. . . . We have had very bad weather. We are about 200 miles from our country on Red River. It will be some time in February before we get to where we want to settle. There are 1200 [Cherokee] in company, and we [have] to travel slow, as there are so many sick people. I am afraid a great many will die before we get home.
>
> — Letter of George W. Harkins, Ouachita River, December 28, 1831

Which event is being described in the letter?

F Louisiana Purchase

G Trail of Tears

H Boston Tea Party

J Purchase of Texas

Go On ▶

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reporting Category:	**5 US History Era 4,5,6**
Performance Indicator:	**UH2.4.5.13 Analyze how the Louisiana Purchase influenced the growth of the United States (i.e., increased size, encouraged expansion, increased natural resources).**

41 **Which statement explains the effect of the Louisiana Purchase on the United States?**

A Restrictions on freed slaves in the territory were canceled.

B Immigration from Europe to the East Coast increased.

C A greater amount of natural resources became available.

D The requirements for admittance to the Union were changed.

Reporting Category:	**5 US History Era 4,5,6**
Performance Indicator:	**UH2.4.6.2 Determine how the issue of slavery caused political and economic tensions between government policy and people's beliefs (i.e., abolitionists, plantation owners, state's rights, central government, Loyalists).**

42 **Which group most likely supported slavery before the Civil War?**

F plantation owners

G northern leaders

H factory workers

J western gold miners

STOP

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Reading and Language Arts
Answer Key

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

16	F
17	D
18	G
19	C
20	J
21	C
22	H
23	A
24	G
25	A
26	G
27	D
28	G
29	D
30	J

31	A
32	J
33	C
34	G
35	A
36	G
37	D
38	J
39	B
40	G
41	B
42	F
43	C
44	J
45	B

46	J
47	B
48	F
49	D
50	G
51	C
52	J
53	C
54	H
55	B
56	J
57	C
58	G

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Mathematics
Answer Key

1	D
2	F
3	B
4	J
5	C
6	F

7	C
8	J
9	D
10	F
11	A
12	F

13	D
14	H
15	C
16	G
17	C
18	J

19	A
20	F
21	B
22	H
23	A
24	H

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Science
Answer Key

1	B
2	G
3	D
4	F
5	B
6	F
7	C
8	H

9	C
10	J
11	A
12	J
13	A
14	J
15	A
16	H

17	A
18	H
19	D
20	G
21	B
22	F
23	C
24	G

25	C
26	H
27	C
28	F

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Social Studies
Answer Key

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

12	J
13	D
14	G
15	A
16	H
17	D
18	F
19	B
20	J
21	B
22	G

23	A
24	J
25	D
26	H
27	D
28	F
29	B
30	F
31	A
32	G
33	D

34	G
35	B
36	F
37	C
38	H
39	D
40	G
41	C
42	F

Copyright © 2012 by Tennessee State Department of Education. All rights reserved.

Tennessee Comprehensive Assessment Program

Achievement Test ~ Grade 4

Item Sampler

Version B