

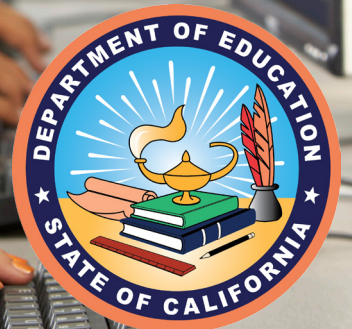


California Assessment of
Student Performance and Progress

Grades
6•7•8

Parent Guide to the Smarter Balanced Summative Assessments

Overview and Sample Questions



California Department of Education



Acknowledgments

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Introduction

The purpose of this guide is to provide information about the Smarter Balanced Summative Assessments, including sample test items for English language arts/literacy (ELA) and mathematics. This information will help parents better understand their children's test results. The Smarter Balanced Summative Assessments are part of the California Assessment of Student Performance and Progress (CAASPP) System, which replaces the previous Standardized Testing and Reporting (STAR) Program.

Every spring, students in grades three through eight and grade eleven take the **Smarter Balanced Summative Assessments** for ELA and mathematics. Results from these assessments are just one piece of information to help teachers, parents/guardians, and students understand how well a student is meeting the grade-level standards.

The Smarter Balanced System includes additional resources to improve teaching and learning. These resources include formative assessment tools and interim assessments. **Formative assessment** is a process that teachers use every day to check on student understanding. It includes a variety of informal and formal strategies to help both teachers and students assess what students are learning. This information can then be used by both teachers and students to decide what they must do next or differently to help students learn the material they have not learned.

From time to time, teachers may also give tests to check how well students have learned the material they have been taught **over a period of time** and what may need to be reviewed or retaught. These types of tests, called **interim assessments**, may be given at the end of a few days (such as a mathematics quiz or a spelling test), after a unit of instruction (such as a chapter test or unit writing assignment), or after a few weeks (such as a quarterly test). More information about the Smarter Balanced Interim Assessments is available on the CDE's Interim Assessments Web page at <http://www.cde.ca.gov/ta/tg/sa/sbacinterimassess.asp>.

A glossary of important terms used in this handbook is provided at the end.

Information on other assessments in the CAASPP System, as well links to important resources and sample responses to a constructed response item, are provided in the appendixes of this guide.

How the Online Smarter Balanced Assessments Are Different from Previous California Tests

The new Smarter Balanced Summative Assessments are very different from the old STAR tests in several ways:

- They are aligned with California’s new content standards for ELA and mathematics.
- They reflect the critical thinking and problem solving skills that students will need to be ready for college and the 21st century job market.
- They are taken on a computer and are adaptive, which means that during the test, the questions will become more or less difficult on the basis of how the student performs. If the student answers a question correctly, the next question may be a bit more challenging; if the student answers it incorrectly, the next question may be less difficult.
- They provide many more supports for students who need them, including students learning English and students with disabilities, as described in the section below.

Accessibility Supports and Accommodations

The computer-based Smarter Balanced Summative Assessments provide all students with greater flexibility than traditional pencil-paper tests. For example, students can increase the size of an image using the “Zoom In” option or highlight key words as they read a passage. Additional accessibility supports also are available for English learners and students with individualized education programs (IEPs) or Section 504 plans. For example, some students may access translations or American sign language.

For more information, please see the CDE Student Assessment Accessibility Supports Web page at <http://www.cde.ca.gov/ta/tg/ca/accesssupport.asp>.

Item and Task Types

The Smarter Balanced assessment system includes a variety of item types, including:

- Selected-response items, which prompt students to choose one or more answers.
- Technology-enhanced items, which might prompt students to edit text or draw an object.
- Constructed-response items, which prompt students to write a short written or numerical response.
- Performance tasks, in which students engage in a complex set of tasks to demonstrate their understanding. (Students may be asked to conduct research and then write an argumentative essay, using sources as evidence. Or they may be asked to solve a complex problem in mathematics. Performance tasks integrate knowledge and skills across many areas and standards.)

Parents can take the Practice Test to see the different types of questions that students will be given on the Smarter Balanced Assessments. The Practice Test is posted on the CAASPP.org portal Practice and Training Tests Web page at <http://www.caaspp.org/practice-and-training/index.html>.

How Student Performance Is Reported on the Smarter Balanced Assessments

Student performance is reported in several ways, as explained below.

Overall Score and Achievement Level

For each grade level and subject area, students receive a score from approximately 2000 to 3000. The overall score falls into one of four achievement levels:

- **Standard Exceeded:** The student has exceeded the achievement standard and demonstrates advanced progress toward mastery of the knowledge and skills needed for likely success in future coursework.
- **Standard Met:** The student has met the achievement standard and demonstrates progress toward mastery of the knowledge and skills needed for likely success in future coursework.
- **Standard Nearly Met:** The student has nearly met the achievement standard and may require further development to demonstrate the knowledge and skills needed for likely success in future coursework.
- **Standard Not Met:** The student has not met the achievement standard and needs substantial improvement to demonstrate the knowledge and skills needed for likely success in future coursework.

See the CDE's Smarter Balanced Scale Score Ranges Web page at <http://www.cde.ca.gov/ta/tg/ca/sbscalerange.asp>.

Area Achievement

The test reports show how a student performed in key areas, also called **claims**, in ELA and mathematics.

- **ELA Areas:** Reading, Writing, Listening, and Research/Inquiry
- **Mathematics Areas:** Problem Solving & Modeling/Data Analysis, Concepts & Procedures, and Communicating Reasoning

For each area, a student’s performance is represented as “**Above Standard,**” “**Near Standard,**” or “**Below Standard.**”

A sample student score report is provided on the CDE’s CAASPP Student Score Report Information Web page at <http://www.cde.ca.gov/ta/tg/ca/caasppssrinfo.asp>.

The CDE video *Understanding Your Child’s Score Report* is posted on the CAASPP Student Score Report Information Web page at <http://www.cde.ca.gov/ta/tg/ca/caasppssrinfo.asp>. This video describes and explains the CAASPP Student Score Report. A Spanish version of the video is available on this site.

Although the results of the state tests are important, they are just one way to assess the progress of students. Students and parents should review the test results in combination with report cards, class assignment grades, and teacher feedback.





How Reports are Used

Results from the Smarter Balanced Summative Assessments provide one piece of information about a student’s academic performance that can:

- Help facilitate conversations between parents/guardians and teachers about student performance.
- Serve as a tool to help parents/guardians and teachers work together to improve student learning.
- Help schools and school districts identify strengths and areas that need improvement in their educational programs.
- Provide the public and policymakers with information about student achievement.

Student Performance in English Language Arts/Literacy

The Smarter Balanced Summative Assessments for ELA are organized by four areas, or claims.

ELA Areas (Claims) For Grades Six, Seven, and Eight		
	Reading	Demonstrating understanding of literary and nonfiction texts
	Writing	Producing clear and purposeful writing
	Listening	Demonstrating effective communication skills
	Research/Inquiry	Investigating, analyzing and presenting information

For more information, see the Smarter Balanced Assessments Web page at <http://www.smarterbalanced.org/smarter-balanced-assessments/>.

Grade Six ELA

In grade six, students **read a range of challenging books, articles, and texts**, and are expected to demonstrate their understanding of the material by answering questions and contributing to class discussions. In writing, students continue to work on their use of **language, sentence structure, and organization of ideas**. They are also expected to **integrate information from different sources** and respond to challenging content through **written interpretation and analysis**.

For more information, see the *Parent Roadmap—Supporting Your Child in Grade Six, English Language Arts*, which is posted on the Council of the Great City Schools Web page at <http://www.cgcs.org/site/default.aspx?PageType=3&ModuleInstanceID=416&ViewID=7b97f7ed-8e5e-4120-848f-a8b4987d588f&RenderLoc=0&FlexDataID=722&PageID=330>.

A Spanish version of the publication is available on the same Web page at <http://www.cgcs.org/site/default.aspx?PageType=3&ModuleInstanceID=427&ViewID=7b97f7ed-8e5e-4120-848f-a8b4987d588f&RenderLoc=0&FlexDataID=784&PageID=365>.

Grade Six Sample Test Items for ELA

This section provides sample ELA test items for grade six.

Notes About Sample Test Items

The test items that students see online appear and function differently than the sample items shown in this document. For example, students may be asked to “drag,” “select,” or “click” their response. Parents can experience these different functionalities on the Training Test available on the CAASPP.org portal Practice and Training Tests Web page at <http://www.caaspp.org/practice-and-training/index.html>.

The sample test items presented in this guide represent the kinds of passages and questions that grade six students at different levels of achievement would likely answer correctly. For example, a student at the “Standard Met” achievement level would typically receive and correctly answer an item associated with that achievement level.

Please note that these sample items represent only a few of the standards that are assessed on the Smarter Balanced Summative Assessments for ELA. (An online version of the sample items is in development.)

For each sample test item, the following information is included:

- ELA area for the item
- ELA state standard(s) that the item measures
- Correct answer(s)

Grade Six Sample Test Item—Reading

Achievement Level: Standard Nearly Met

Read the text and answer the questions. (Note: This text will be used for the next two questions.)

Sweet Licorice, Sour Lemons

Every time you put something in your mouth, your taste buds start working to sort out the flavor of the food you're eating, whether it is sweet, salty, sour, or bitter. But taste buds are much more complicated than you might think. How do they work?

First of all, your tongue is covered with little bumps called papillae. The papillae are very small on the tongue's tip, but in the middle and back of the tongue and in the throat, they are much larger and rougher. Yet it's not the papillae that help you taste. It's the groups of buds on the papillae—altogether nearly 10,000 buds. In turn, each bud is made of many taste cells, which are so tiny, you'd need a microscope to see them.

Taste is different from some of the other senses. Seeing and hearing, for example, are senses that tell you about things that happen away from your body. But taste, like the sense of touch, tells only about things that come into direct contact with your body—your tongue in this case.

And taste is often called a chemical sense, because you actually taste the dissolved chemicals in food. When these chemicals touch the taste cells in your taste buds, nerves send messages to the brain, and you can taste what you eat. It sounds as though this process would take a long time, but it only takes a few seconds for you to recognize many flavors. Taste is, however, much slower than the other senses.

Sometimes it seems as though your sense of taste doesn't work at all. You may notice that you can't taste food when you have a cold and a stuffy nose. That's because you also use your sense of smell to help you taste. Just as you have taste receptors in your mouth, you have smell receptors in the nasal cavity behind your nose. As you chew food, some microscopic particles of the food float up your throat into the nasal cavity.

Taste also depends on the sense of touch. The tongue has touch receptors that tell you about the texture of food, whether it is crunchy or mushy, smooth or grainy. There are also

Grade Six Sample Test Item—Reading
Achievement Level: Standard Nearly Met (continued)

receptors that tell you if something is peppery hot or minty cool. The temperature of certain foods can affect the way your taste buds respond. Sweet foods taste sweeter when warm, and bitter foods taste more bitter when cold. So eating food isn't simply a matter of tasting it in your mouth—you smell and touch it, too.

Since there are thousands of different tastes, you'd think there would be thousands of different types of taste buds. But there are actually only four basic types of tastes and taste buds: sweet, salty, sour, and bitter. All other tastes you sense are combinations of these.

The four types of taste buds are located on certain parts of the tongue. Sweet buds are on the tip of your tongue, the first to get touched. Farther back on the sides of the tongue are the salty and sour buds. Buds that taste bitter food are near the back and are the last to get a taste of anything. This is why you quickly taste sugar, but often you can't taste bitter food until you've swallowed it.

As you grow up, your taste for foods changes. Most babies like mild, bland food because they have many more taste buds than adults and are very sensitive to flavors. Babies even have buds on their cheeks. Your parents may enjoy heartier, spicier foods than you do, and your grandparents may prefer even stronger flavors, because the sense of taste weakens with age.

In prehistoric times, people needed a strong sense of taste to warn them if something was unsafe to eat. We don't need our taste buds for survival anymore, but taste can be a protector. Many insects and animals use it to test their food. Birds won't eat a monarch butterfly, for example, because it has such a bitter taste.

Insects and animals have different ways of tasting, too. Fish have taste cells on several parts of their bodies, and butterflies have them on their feet!

"Sweet Licorice, Sour Lemons" by D. Taylor, from Cricket. Copyright © 1992 by Carus Publishing Company. Reprinted by permission of Carus Publishing Company.

Grade Six Sample Test Item—Reading Achievement Level: Standard Nearly Met (continued)

Read the sentence from the text.

Every time you put something in your mouth, your taste buds start working to sort out the flavor of the food you're eating, whether it is sweet, salty, sour, or bitter.

What does the phrase "to sort out" suggest about the author's point of view in the text?

- A. The author believes that taste is an involved process.
- B. The author believes that taste is the most important of our senses.
- C. The author believes that tasting different flavors is a problem for many people.
- D. The author believes it's difficult to tell the difference between the four main flavors.

Area

Reading

Demonstrating understanding of literary and nonfiction texts

Standard(s)

Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.

Answer

A

Grade Six Sample Test Item—Reading

Achievement Level: Standard Exceeded

Read the text and answer the questions.

Signs of Change

Jess glanced around the spare room, reminding himself that it wasn't the spare room anymore. From now on, it would be Grandpa Iverson's room. His grandfather had just moved halfway across the state because Mom needed him. She had received a promotion at work, which meant that she had to switch from the day shift to the night shift.

"I feel more comfortable knowing that Grandpa is here to look after you," Mom said. "You know I trust you completely," she added, squeezing Jess's arm, "but I'd worry if you were here alone."

Grandpa Iverson had been reluctant to relocate at first, since the move meant leaving all that was familiar to him, but ultimately he said it was a small inconvenience compared to the privilege of spending more time with his grandson.

The day Grandpa moved in, Mom took Jess aside and whispered with a wink, "You keep an eye on him too."

"Is he watching me or am I watching him?" Jess asked. Mom did not respond directly, but her demeanor sent a clear message: she expected his full cooperation.

The first day of her new job, Mom asked Jess to come directly home from school to keep Grandpa company. "It's a difficult adjustment for him," she said. "I'm sure spending time with you will make it easier. Eventually, you'll both develop new routines."

Jess did as she requested, but he was disappointed because he and his friends had been practicing skateboarding tricks for an upcoming competition. If Jess missed too many practices, he would have to withdraw from the competition. Missing just one practice session could diminish his chances for success.

Grade Six Sample Test Item—Reading
Achievement Level: Standard Exceeded (continued)

As Jess poured himself a glass of milk, he heard a big crash from somewhere upstairs. He raced up the steps to find Grandpa kneeling on the floor, gathering up a pile of coins and putting them back into a metal box. “I’ve collected coins since I was a kid,” Grandpa explained. “Although there’s probably nothing of real value here, they are treasures to me.”

Grandpa placed the box in a pile of stuff marked KEEP. There was another pile nearby marked GIVE AWAY. “I am organizing a life’s worth of treasures,” he said with a sigh, “because I can’t keep everything.”

Jess picked up a tattered old magazine entitled *Life*, dated February 10, 1961. On the cover was a picture of a monkey in a space suit with the headline, “Back from Space: A Confident ‘Ham.’” Jess skimmed the story about America’s first monkey in space, and then he scanned several more issues of *Life*. “These are fascinating, Grandpa. You can’t give them away.”

“Then I relinquish them to you,” Grandpa said.

“Thanks!” Jess set the magazines aside and pointed to a chess set in the discard pile. “I thought you loved chess.”

“I do,” said Grandpa, “but who will play with me here?”

Jess knew he should offer to learn, but chess had never interested him, so he put the game back and picked up a pair of old binoculars. He adjusted the lenses, and when they worked correctly, he surveyed his neighborhood from the window. He could make out license plate numbers, signs in store windows, and even a word or two on a notice tacked to an old maple tree. The first few letters were blurred, but the last three were “ess,” and he made out the words, “Elmwood Park,” which was where his skateboard friends gathered.

“I think someone left me a message,” Jess said, pointing out the window, “out there on that tree.”

“That’s peculiar. Why wouldn’t your friend leave it in the mailbox?” asked Grandpa.

Jess shrugged and said, “I’m going to check it out.”

Grade Six Sample Test Item—Reading
Achievement Level: Standard Exceeded (continued)

“I’m coming too,” Grandpa said. “Your mother’s instructions were very clear: I’m to ‘keep you company,’ so I must accompany you.” Grandpa emphasized the words, apparently pleased with his play on words.

Clearly, Grandpa was taking his role of caretaker a bit too seriously. Jess did not want to test his grandfather’s authority on the very first day, however, so he waited for Grandpa before bounding down the stairs to the ground floor of the building.

Jess had no trouble finding the notice he had spied. It was a small poster, and the first letters were blurry. Up close, however, the letters became clear: “Chess: Elmwood Park 4:30.”

“Chess, not Jess,” said Grandpa with a laugh. “Let’s check it out.”

Jess hesitated, saying, “It’s probably for kids.”

“We won’t know unless we go over there,” Grandpa declared. “Let’s bring the chess set and see what we find.”

Jess ran back to the apartment, grabbed Grandpa’s chess set and his own skateboard, and dashed back to the street.

In a few minutes they reached the park where they discovered about twenty chess players gathered around tables by the fountain. There were players of all ages, some even about Grandpa’s age. Grandpa lingered near one particularly lively game, and when it ended, the winner invited him to play the next round. As soon as Grandpa sat down, his eyes focused on the chessboard.

Between moves, Jess interrupted just long enough to say, “I’ll be at the skate park on the other side of the fountain.”

Grandpa waved him away and said, “I’ll meet you later.”

“We may not have to change our routines much after all,” Jess thought with a grin, as he skated off to meet his pals.

Grade Six Sample Test Item—Reading Achievement Level: Standard Exceeded (continued)

Read the sentences from the text.

If Jess missed too many practices, he would have to withdraw from the competition. Missing just one practice session could diminish his chances for success.

What does the use of the word diminish suggest? Select all that apply.

- A. Jess thinks practice is unimportant.
- B. Jess is less likely to win the competition.
- C. Jess is uninterested in going to practice.
- D. Jess thinks he will miss additional practices.
- E. Jess feels that skateboarding practice is too difficult for him to do well.
- F. Jess feels he should attend practice because it is key to his improvement.

Area

Reading

Demonstrating understanding of literary and nonfiction texts

Standard(s)

Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of a specific word choice on meaning and tone.

Answer

B and F

Grade Seven ELA

In grade seven, students continue to develop the ability to **cite relevant evidence** when interpreting or analyzing a text or supporting their points in speaking and writing. They also **build academic vocabulary** as they read **more complex texts**, including stories, plays, historical novels, poems, and informational books and articles. Students **construct short research projects**, and also write a range of well-developed and organized **stories, essays, reports, and persuasive papers**.

For more information, please see the *Parent Roadmap—Supporting Your Child in Grade Seven, English Language arts*, which is posted on the Council of the Great City Schools Web page at <http://www.cgcs.org/site/default.aspx?PageType=3&ModuleInstanceID=416&ViewID=7b97f7ed-8e5e-4120-848f-a8b4987d588f&RenderLoc=0&FlexDataID=723&PageID=330>.

A Spanish version of the publication is available on the same Web page at <http://www.cgcs.org/site/default.aspx?PageType=3&ModuleInstanceID=427&ViewID=7b97f7ed-8e5e-4120-848f-a8b4987d588f&RenderLoc=0&FlexDataID=785&PageID=365>.

Grade Seven Sample Test Items for ELA

The sample test items below represent the kinds of passages and questions that grade seven students at different levels of achievement would likely answer correctly. For example, a student at the “Standard Nearly Met” achievement level would typically receive and correctly answer an item associated with that achievement level.

Grade Seven Sample Test Item—Reading

Achievement Level: Standard Met

Now You See It, Soon You Won't

Engineers are developing technology to makes things—POOF—seem to disappear.

Could we soon make objects, even ourselves, invisible? The answer is yes, invisibility is possible. Engineers and researchers are working on it. But before researchers can make something invisible, they have to know why we can see things in the first place. We see things because of light.

What Is Light?

Light is a type of energy wave. For the Earth, the biggest source is the Sun. When light from the Sun travels to us, it is white. And what about colors? Isaac Newton's experiments proved that white light is made up of many different kinds of waves. Colors are simply different wavelengths of light.

The longest waves, or wavelengths, that humans can see are red. The shortest are violet. Red wavelengths bounce off of red things, like tomatoes, so that is what our eyes see. All the other colored wavelengths soak into the tomato. Because of this, we see only red.

The same is true with green. All the light waves—except the green ones—say, in grass, soak into the grass. We see green.

When all the light waves soak into an object, our eyes see the color black. Almost no waves bounce off of a black cat.

The human eye can see something only if a light hits it. Once light hits an object, one of two things needs to happen for us to see something.

One: Some light waves bounce back.

Two: Some light waves soak in.

If neither of these things happens, anything would be invisible.

Grade Seven Sample Test Item—Reading Achievement Level: Standard Met (continued)

How to Make Things Invisible

For our tomato, or any other object, to be invisible, engineers need to do two things. They need to stop all the light waves from bouncing back. And they need to stop all the light waves from soaking in. If light could bend around an object, the light would not bounce off the object or soak into it. Remember that the human eye cannot see something unless a light wave bounces back or soaks into the object. Engineers wondered what they could do to manipulate the light waves away from objects so they were invisible.

To solve this problem, researchers thought about properties of light. Put a straw in a glass of water. From the side, it looks like the straw is bent. This means that light can bend. What is really happening is that the water slows the light down. If you tried to race someone while you were in water and they were on dry land, the water would slow you down. You would probably lose the race.

When the light waves pass through a prism, the wavelengths change speeds, or bend, too. But prisms do even more. They bend the different wavelengths of light differently. We see rainbows because red is not bent as much as green, which is not bent as much as violet. The way light bends in water and prisms proves that manipulation of light is possible.

Not Magic, But Metamaterials

Researchers are working with a material they've designed, called a metamaterial. In Greek, meta means "changed or altered." Metamaterials are ordinary materials, such as fiberglass and copper, arranged in intricate patterns on a molecular level, like a fabric woven with microscopic threads. Objects made from metamaterials, known as cloaks, help guide light waves around an object. Metamaterials make light curve like a river streams around a rock. The light splits and travels around the cloak, combining again on the other side. Because the light doesn't bounce off the object or soak into it, the object can't be seen.

The science is not quite there for light waves humans can see. To date, it has only worked with one type of wavelength, such as microwaves, which are very long waves. The best way to think of seeing microwaves is like seeing ripples in a pond.

**Grade Seven Sample Test Item—Reading
Achievement Level: Standard Met (continued)**

So if we were aliens with microwave vision, current metamaterial cloaks could hide any object from our alien sight.

To make any object vanish for our human eyes, a metamaterial cloak would need to manipulate all the light waves, or colors, that we can see. Visible light waves are very short, so the cloak needs to have very small features, which are hard to make. This is one of the biggest challenges researchers face. With current metamaterials, a cloak could make a human disappear, but only if you shined one type of light wave at the cloak at a time. That could work by putting red cellophane over a flashlight, for example, but it would be impossible to wrap the Sun with red cellophane! Curving one type of wavelength around an object is a start, though, toward the goal of invisibility.

Invisibility Ideas

The possibilities for using metamaterials are endless. Ashwin Atre, a materials science engineer, thinks that invisibility would be amazing, but he'd love to work on manipulating light waves for something else. He'd like to create super-fast computers fueled by and made from light.

Excerpt from "Now You See It, Soon You Won't" by Susan Koch, from *Odyssey*. Copyright 2014 by Carus Publishing. Reprinted by permission of Carus Publishing.

Grade Seven Sample Test Item—Reading Achievement Level: Standard Met (continued)

Which sentence from the text best supports the conclusion that researchers are learning to control light?

- A. “When all the light waves soak into an object, our eyes see the color black.”
- B. “The human eye can see something only if a light hits it.”
- C. “In Greek, meta means ‘changed or altered.’”
- D. “Objects made from metamaterials...help guide light around an object.”

Area

Reading

Demonstrating understanding of literary and nonfiction texts

Standard(s)

Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

Answer

D

Grade Seven Sample Test Item—Reading

Achievement Level: Standard Exceeded

Stone Doctors

Have you ever wondered how an ancient stone statue or monument can survive thousands of years buried in the earth or under the ocean? The answer may surprise you—the long time spent underground or underwater can actually help preserve it. The environment surrounding a buried artifact or monument that has had no exposure to oxygen, sunlight, wind, and rain for many years becomes balanced and experiences little change. It is as if the artifact's life clock has stopped and it is in a long, peaceful sleep.

But remove a “peacefully sleeping” artifact or monument from that environment and expose it to the sun, rain, heat, frost, and/or wind, then its life clock starts ticking again.

The goal of the archaeologist, when excavating, is to harm each find as little as possible. So archaeologists work hard, not only to discover artifacts, but also to preserve what they uncover. To keep a monument's life clock going after so many hidden centuries, archaeologists work with conservators. Like an artifact doctor, conservators examine, record, treat, and design special storage units for excavated artifacts.

Mud As Glue

When you excavate a site, you find many artifacts made of stone, metal, wood, bone, and ceramics. While only a few artifacts are found in perfect condition, all are found dirty. Most are also broken, stained, and scratched. One exceptionally well-preserved find is the statue of Queen Tiye found at Mut Temple in 2006. Carved of very hard stone, it was little affected by its burial environment.

Archaeologists excavating the Isheru area during the 2008 season found many decorated stone fragments covered with thick mud. Even though the lake was emptied of its water, the lakebed is still very muddy. So, while it was tempting to clean off the mud and peek at the decoration on the surface, the archaeologists brought them to a conservator first for a thorough cleaning with gentle tools. Without this careful examination, artifacts may lose important original materials such as beautiful paint. Once these are removed, gone is the story behind the original use of the artifact. Sometimes, all that holds a piece of pottery together is a layer of mud. If you try to “clean” off the mud, the artifact will quickly fall apart into dozens of pieces.

Grade Seven Sample Test Item—Reading

Achievement Level: Standard Exceeded (continued)

Salt Contaminates

Sometimes, recovered artifacts are contaminated with chemicals that cause damage. For example, at the Isheru site, the artifacts were not only wet and muddy, but they also were contaminated with salts. The salts found in underground water can penetrate deep inside an artifact. When the artifact is excavated, it dries, and the salts change their form from liquid to crystal. You have probably seen this process yourself.

Imagine dropping a tablespoon of salt in a glass of water and then letting the water evaporate. After the water is gone, you will see the salt you added at the bottom of the glass. In this process, the salt has changed from a crystal to a liquid, and then back again to a crystal. Because salts swell when they dry, salts in crystal form are actually much larger than those in liquid form. If this crystallization happens too quickly, it can cause cracking inside the artifact and may eventually break it completely to pieces. To counter-act this effect, conservators often remove salts by soaking artifacts in clean water.

While excavating the lakebed, archaeologists found a stone torso of Ramesses II. The surface was completely covered with years of accumulated hard mineral crust. Unlike the salts described above, these minerals were so hard that they could not be removed by soaking in clean water. Rather, a conservator removed the crust, inch by inch, by carefully chipping it off with tiny tools. Once the work was done, we could finally see the beautiful, red granite body.

Back to ‘Sleep’!

You might be surprised to learn that at the end of each season in Mut Temple, after all finds have been recorded, we bury them again! So, you can say that after we woke them from a long sleep, we let them go back to sleep.

From “Stone Doctors” by Kariya Hiroko, from *Dig* magazine. Copyright 2009 by Carus Publishing. Reprinted by permission of Carus Publishing.

Grade Seven Sample Test Item—Reading

Achievement Level: Standard Exceeded (continued)

The following question has two parts. First, answer part A. Then, answer part B.

Part A

Which statement **best** summarizes the central ideas of the text?

- A. Archaeologists dig into the earth to find artifacts as proof of ancient civilizations, and conservators clean and replace the artifacts that are uncovered.
- B. Archaeologists work to find and carefully remove artifacts of ancient peoples, and conservators work to clean and preserve the artifacts that are excavated.
- C. Archaeologists dig in the earth to uncover artifacts of ancient peoples, and conservators work to reverse and repair any damage done to the artifacts that are found.
- D. Archaeologists work to find and preserve artifacts to understand ancient civilizations, and conservators work to help them understand the artifacts that are unearthed.

Part B

Which sentence from the text **best** supports your answer in part A?

- A. “To keep a monument’s life clock going after so many hidden centuries, archaeologists work with conservators.”
- B. “While only a few artifacts are found in perfect condition, all are found dirty.”
- C. “Carved of very hard stone, it was little affected by its burial environment.”
- D. “So, while it was tempting to clean off the mud and peek at the decoration on the surface, the archaeologists brought them to a conservator first for a thorough cleaning with gentle tools.”

Area

Reading

Demonstrating understanding of literary and nonfiction texts

Standard(s)

Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary.

Answer

Part A: Answer B
Part B: Answer D

Grade Eight ELA

In grade eight, students read **major works of fiction and nonfiction from all over the world and from different time periods**. They continue to learn how to understand what they read and **evaluate an author’s assumptions and claims**. They also conduct research that will require the **analysis of resources and accurate interpretation of literary and informational text**. In their writing, then **connect information and ideas** efficiently and effectively.

For more information, please see the *Parent Roadmap—Supporting Your Child in Grade Eight, English Language Arts*, which is posted on the Council of the Great City Schools Web page at <http://www.cgcs.org/site/default.aspx?PageType=3&ModuleInstanceID=416&ViewID=7b97f7ed-8e5e-4120-848f-a8b4987d588f&RenderLoc=0&FlexDataID=724&PageID=330>.

A Spanish version of the publication is available on the same Web page at <http://www.cgcs.org/site/default.aspx?PageType=3&ModuleInstanceID=427&ViewID=7b97f7ed-8e5e-4120-848f-a8b4987d588f&RenderLoc=0&FlexDataID=786&PageID=365>.

Grade Eight Sample Test Items for ELA

The sample test items below represent the kinds of passages and questions that grade eight students at different levels of achievement would likely answer correctly. For example, a student at the “Standard Nearly Met” achievement level would typically receive and correctly answer an item associated with that achievement level.

Grade Eight Sample Test Item—Reading

Achievement Level: Standard Nearly Met

Marks the Spot!

It was official. Khufu had been crowned king of Egypt, and one of his first duties was to find a place to build his tomb. It would be his own special site, a new place that was away from the pyramids of the kings that had ruled before him.

Khufu had plans to build an enormous complex, one that would include smaller pyramids for his mother and his wives, and many tombs for the rest of his family and the members of his court. To do so, he needed a very large area. He also had to follow religious tradition and choose a site that lay on the west side of the Nile River, in the direction of the setting sun. According to the ancient Egyptians, the sun died every night in the west and was born again in the east the next morning. Therefore, it was customary to bury people on the west bank of the river so that they could travel with the sun god through the night and be reborn with him at dawn.

Exactly What Was Needed

For the Egyptians, the desert was the perfect cemetery. As it lay beyond the reaches of the Nile's floodwaters, the tombs and bodies remained safe and dry. The desert was also the best place to find stone to build tombs. Equally important was the fact that by using the desert, the Egyptians kept the fertile strip of land along the eastern bank of the Nile for farmland.

But why pick Giza? When choosing a site, Khufu had had to keep other requirements in mind as well. The pyramid had to be near the city of Memphis, Egypt's capital at the time and the center of his government. Memphis traced its origins to the beginning of Egyptian history. It had been founded by a king named Menes, who chose the area because it was at the point where Upper and Lower Egypt met.

As the meeting point for many trade routes, Memphis was filled with government offices, temples, and houses for the officials who ran the country. The city's chief deity was Ptah, the creator god. The Egyptians also honored Ptah as the patron of craftsmen—the people who made pottery, carved statues, and painted the pictures that covered the walls of tombs and temples.

Grade Eight Sample Test Item—Reading

Achievement Level: Standard Nearly Met (continued)

Near a God's City

The pyramid also needed to be near Heliopolis. Located on the east bank of the Nile, the city was sacred to the sun god Re, the most important deity in Egypt at the time. Re was worshipped in a temple at Heliopolis that was surrounded by statues and obelisks. Obelisks are tall pillars that are topped by small pyramids and acted as symbols of the sun. The Egyptians often covered the tops with gold so that they would reflect and shine in the sunlight. Egyptologists think that there might have been a special large obelisk in the temple at Heliopolis. Perhaps Khufu thought that his pyramid had to have a view of the temple and its obelisk.

Giza, however, was not the only site in the western desert that was near Memphis and had a view of Heliopolis. Khufu chose Giza because it had a large, flat plateau that was high above the floodplain and because there was a lot of good-quality building material in the area. Giza was also close enough to the Nile for Khufu's construction teams to transport additional building materials and supplies to the site by boat. Excavations offer evidence that workers dug a huge harbor at the foot of the Giza Plateau so that the imported goods could be brought as close as possible to the pyramid site.

A Family Affair

While his own tomb complex was being built, Khufu planned for the burials of his family and courtiers. Three small pyramids were erected to the east of his pyramid, perhaps for his mother and two of his wives. Two huge cemeteries were laid out like miniature towns to the east and west of Khufu's pyramid. Arranged in rows along narrow streets, the tombs were houses for the dead. Members of Khufu's immediate family were given tombs in the eastern cemetery. The western cemetery was mostly for courtiers.

The tombs in these cemeteries are solid rectangles with sides that slope inward. Egyptologists call them mastabas, because they look like benches (mastabas in Arabic) found outside traditional Egyptian homes. The mastabas were built of limestone, just as the pyramids were. The small rooms inside were decorated with images of the dead person in front of tables piled high with food. Relatives of the dead person came to these rooms to visit their loved ones, to say prayers for their souls, and to bring their spirits more food and drink. The bodies of the deceased were placed in huge stone coffins that were in rooms dug into the stone below the mastabas.

Grade Eight Sample Test Item—Reading Achievement Level: Standard Nearly Met (continued)

Khufu ordered the construction of a great many tombs in these two cemeteries. Only after they were built did he assign them to specific people: Some were family members, others were courtiers and officials who had proved themselves worthy of a burial site near that of the king. Every person who was given a tomb then placed his or her name in the tomb chapel and chose the decorations. After Khufu died, the cemetery remained in use for hundreds of years.

“Marks the spot!” by Salima Ikram and Janice Kamrin. Copyright © 2012 by Carus Publishing Company. Reprinted by permission of Carus Publishing Company.

This question is based on the text above, “Marks the Spot!”

What is the **most likely** reason the author included subheadings in the text?

- A. to decrease the time it takes to read the text
- B. to make clear the author’s purpose for writing the text
- C. to inform the reader what each section of the text is about
- D. to help the reader quickly determine the main idea of the text

Area	Reading Demonstrating understanding of literary and nonfiction texts
Standard(s)	Compare and contrast the structure of two or more texts and analyze how the differing structure of each text contributes to its meaning and style.
Answer	C

Grade Eight Sample Test Item—Reading

Achievement Level: Standard Met

Read the text and answer the questions.

Perusal

from *Tower of the Five Orders*

by Deron R. Hicks

Perusal—Reading or examining, typically with great care

Hay-on-Wye

Wales, United Kingdom

Friday, June 1

2:52 p.m.

Two small hazy windows and a narrow wooden door adorned the first story of the building that stood unimpressively at the bottom of Castle Street. The sign hanging above the door read simply BOOKS.

It would have been easy to pass by the store with little notice, and several months ago Julian had almost done just that. Hay-on-Wye, after all, was filled with any number of large and impressive bookstores, with rooms and rooms of ancient books and manuscripts. And it was those very bookstores that had drawn Julian to this small Welsh town on the border with England. The town boasted more than forty bookstores—almost one for every fifty residents.

He was looking for a book that might help him uncover the secret to the symbol he was researching—the symbol that he believed held the key to the real Letterford family treasure. But what book? Julian wasn't entirely sure. He had searched high and low in bookstores and libraries throughout the United Kingdom. He just knew the answer was out there somewhere. And this little bookstore on Castle Street? It hardly seemed worth the effort.

And then he hesitated.

It might be worth a few minutes of his time to look around inside.

And so three months ago Julian had walked into the little bookstore at the bottom of Castle Street.

The simple little bookstore, it turned out, occupied two stories, a full basement and a deep subbasement—all filled from floor to ceiling with books. The store itself occupied almost the entire block. It was cavernous,

Grade Eight Sample Test Item—Reading Achievement Level: Standard Met (continued)

dark, dusty, and dim. It did not offer coffee, lattes, scones, Wi-Fi, comfy chairs, magazines, or any other amenity. It simply had books—and a lot of them.

As Julian quickly learned, however, the proprietor of this particular bookstore—a small hunched woman by the name of Adda Craddock—was far more adept at acquiring books than she was at maintaining them in any semblance of order. Although she had shelved the books under general categories such as history, religion, and travel, the sheer volume on any particular subject rendered those categories useless. History books occupied an entire floor and were not otherwise divided into themes, periods, or subcategories. As far as Ms. Craddock was concerned, history was simply history.

She roamed among her books constantly, claiming to have some notion as to where certain books might or might not be. In his first trip to the bookstore, Julian had requested her assistance in locating books on symbols, particularly volumes from the sixteenth or seventeenth century. He had explained that he was looking for anything that might help him understand the significance of the symbol for the Greek letter sigma— Σ .

Julian had been obsessing over the subject of symbols ever since the discovery of the Shakespeare manuscripts the previous Christmas. In particular, he obsessed over the symbol for sigma engraved on the box in which the manuscripts had been found. No one else—not even Colophon—had seemed to notice the symbol. Others had simply taken it for granted. The family had been far too excited about the manuscripts. But the symbol concerned Julian. It was clear that it represented more than just ownership of the family business.

The manuscripts, he was convinced, were not the true treasure. They were simply another step in the quest. The symbol, he hoped, would provide the answer.

Ms. Craddock had assured Julian that she had at least three books on symbology and, true to her word, located them within a few minutes. He was impressed. Unfortunately, the books did not contain the information he was seeking. Ms. Craddock, however, promised to keep an eye out for any more books and to let Julian know if she found anything.

And find books she had.

Three times over the course of the next three months, Julian had traveled to Ms. Craddock's shop to review large stacks of dusty books that were related in some way to symbols. However, notwithstanding the bookstore proprietor's diligent efforts, this had proven to be a time-consuming approach. Hay-on-Wye was not the easiest place to reach. And the volumes had failed to provide any new insights into the

Grade Eight Sample Test Item—Reading
Achievement Level: Standard Met (continued)

symbol on the box. Julian had given up hope of finding anything of value in Ms. Craddock's store—when he received a letter from her informing him that she had located another book in which he might be interested. It was not a book on symbols, she warned. But the trip, she assured him, would be worth the effort.

And so there Julian stood—one last time—at the front of the store, as Ms. Craddock pulled a small brown book from beneath her counter and handed it to him.

"It was part of a large estate my late husband purchased many, many years ago," she explained. "A French family, I believe."

Julian looked at the book and gasped.

On the cover—directly beneath the book's title—was the Greek letter sigma— Σ .

He carefully opened the book.

On the frontispiece—the page opposite the title page—was an engraving of a hawk holding a spear.

He thumbed quickly through the rest of the book until he reached the last page. There, at the bottom of the page and following the last line of the text, was the printer's mark—the stamp used to identify the book's publisher. Julian recognized it instantly: a crescent moon over crossed quills. It was the Letterford family crest.

"Perusal" by Deron R. Hicks, from *Tower of the Five Orders*. Copyright © 2013 by Houghton Mifflin Harcourt Publishing Company. Reprinted by permission of Houghton Mifflin Harcourt Publishing Company.

Grade Eight Sample Test Item—Reading Achievement Level: Standard Met (continued)

The following question has two parts. First, answer part A. Then, answer part B.

Part A

Select the statement that **best** describes how the author develops the idea that Julian is trying to solve a mystery.

- A. by describing the unusual appearance of the bookstore
- B. by presenting detailed dialogue between Julian and Ms. Craddock
- C. by revealing Julian’s thoughts through the use of third-person point of view
- D. by showing the advancing action that reveals the final answer to the mystery

Part B

Which evidence from the text **best** supports your answer in part A?

- A. “It was cavernous, dark, dusty, and dim. It did not offer coffee, lattes, scones, Wi-Fi, comfy chairs, magazines, or any other amenity.”
- B. “The manuscripts, he was convinced, were not the true treasure. They were simply another step in the quest. The symbol, he hoped, would provide the answer.”
- C. “Ms. Craddock, however, promised to keep an eye out for any more books and to let Julian know if she found anything.”
- D. “It was not a book on symbols, she warned. But the trip, she assured him, would be worth the effort.”
- E. “And so there Julian stood—one last time—at the front of the store, as Ms. Craddock pulled a small brown book from beneath her counter and handed it to him.”
- F. “There, at the bottom of the page and following the last line of the text, was the printer’s mark—the stamp used to identify the book’s publisher.”

Area

Reading

Demonstrating understanding of literary and nonfiction texts

Standard(s)

Analyze how a text makes connections among and distinctions between individuals, ideas, or events (e.g., through comparisons, analogies, or categories).

Answer

Part A: Answer C
Part B: Answer B

Note: Students must correctly answer both Part A and Part B in order to receive the point. There is no partial credit for answering just one part correctly.

Grade Eight Sample Test Item—Reading

Achievement Level: Standard Exceeded

Read the text and answer the questions.

Christopher Columbus

by Eva March Tappan

One man who was thinking most earnestly about India was named Christopher Columbus. He was born in Genoa and had been at sea most of his life since he was fourteen. He had read and studied and thought until he was convinced that the world was round and that the best way to reach China and Japan was not to make the wearisome overland journey through Asia, but to sail directly west across the Atlantic.

He had asked the city of Genoa to provide money for the expedition; and he had also asked the king of Portugal; but to no purpose. Finally he appealed to Ferdinand and Isabella, king and queen of Spain.

This was why, toward the end of the fifteenth century, a company of learned Spaniards met together at Salamanca to listen to the schemes of a simple, unknown Italian sailor. Columbus told them what he believed. Then they brought forward their objections. "A ship might possibly reach India in that way," said one gravely, "but she could never sail uphill and come home again." "If the world is round and people are on the opposite side, they must hang by their feet with their heads down," declared another scornfully.

Another objection was that such an expedition as Columbus proposed would be expensive. Moreover, he demanded the title of admiral of whatever lands he might discover and one tenth of all precious stones, gold, silver, spices, and other merchandise that should be found in these lands. This was not because he was greedy for money, but he had conceived the notion of winning the Holy Sepulchre at Jerusalem from the Turks and to do this would require an enormous fortune.

Columbus had formed a noble scheme, but there seemed small hope that it would be carried out by Spanish aid, for the Spaniards were waging an important war with the Moors, or Mohammedans. The Moors had a kingdom in the south of Spain containing a number of cities. In the capital, Granada, was the palace and fortress of the Alhambra, a wonderfully beautiful structure, even in ruins as it is today. Granada was captured, but even then the Spaniards seemed to have no time to listen to Columbus.

Grade Eight Sample Test Item—Reading Achievement Level: Standard Exceeded (continued)

At length he made up his mind to leave Spain and go for aid to the king of France. With his little son Diego he started out on foot. The child was hungry, and so they stopped at the gate of the convent of La Rabida, near the town of Palos, Spain, to beg for the food that was never refused to wayfarers. The prior was a student of geography. He heard the ideas of Columbus, put faith in them, and invited some of his learned friends to meet the stranger. "Spain must not lose the honour of such an enterprise," the prior declared, and he even went himself to the queen. He had once been her confessor, and she greeted him kindly. King Ferdinand did not believe in the undertaking, but the queen became thoroughly interested in it. She was Queen of Aragon by her marriage to Ferdinand, but she was Queen of Castile in her own right, and she exclaimed, "I undertake the enterprise for my own crown of Castile and will pledge my jewels to raise the necessary funds."

Thus, after eighteen years' delay, the way opened for Columbus, and he set sail from Palos with three small vessels; however, even after they were at sea Columbus must have felt as if his troubles were just beginning, for his sailors were full of fears. They were not cowards, but no one, they thought, had ever crossed the Atlantic, and there were legends that in one place it was swarming with monsters, and that in another the water boiled with intense heat. There was real danger, also, from the jealous Portuguese, for it was rumored that they had sent out vessels to capture Columbus's little fleet. It is small wonder that the sailors were dismayed by the fires of the volcanic peak of Teneriffe, but they were almost equally alarmed by every little occurrence. The mast of a wrecked vessel floated by, and they feared it was a sign that their vessel, too, would be wrecked. After a while, the magnetic needle ceased to point to the north star, and they were filled with dread lest they should lose their way on the vast ocean. One night a brilliant meteor appeared, and then they were sure that destruction was at hand.

The good east wind was sweeping them gently along; but even that worried them, for they feared it would never alter, and how could they get home? Some of them had begun to whisper together of throwing Columbus overboard, when one day they saw land-birds and floating weeds and finally a glimmering light. Then the sailors were as eager to press onward as their leader.

Early on the following morning land appeared. Columbus, wearing his brilliant scarlet robes and bearing the standard of Spain, was rowed ashore. He fell upon his knees and kissed the ground, thanking God most heartily for his care. Then he took possession of the land for Spain.

Excerpt from *Heroes of the Middle Ages* by Eva March Tappan. Copyright ©2006 by Yesterday's Classics. Reprinted by permission of Yesterday's Classics.

Grade Eight Sample Test Item—Reading Achievement Level: Standard Exceeded (continued)

Read the sentence from the text.

The good east wind was sweeping them gently along; but even that worried them, for they feared it would never alter, and how could they get home?

How does the underlined phrase impact the reader's interpretation of the meaning of the text? Select **three** options.

- A. The weather delayed the sailors.
- B. The weather quickened the journey.
- C. The weather slowed down the journey.
- D. The sailors were happy about the conditions.
- E. The sailors lacked knowledge about weather.
- F. The sailors remained suspicious of positive events.

Area

Reading

Demonstrating understanding of literary and nonfiction texts

Standard(s)

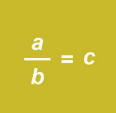


Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. A) Interpret figures of speech (e.g. verbal irony, puns) in context.

Answer

B, E, and F

Student Performance in Mathematics

The Smarter Balanced Summative Assessments for Mathematics are organized by areas, or **claims**.

Mathematics Areas (Claims) For Grades Six, Seven, and Eight		
	Concepts & Procedures	Applying mathematical concepts and procedures
	Problem Solving & Modeling/Data Analysis	Using appropriate tools and strategies to solve real world and mathematical problems
	Communicating Reasoning	Demonstrating ability to support mathematical conclusions

For more information, please see the Smarter Balanced Assessments Web page at <http://www.smarterbalanced.org/smarter-balanced-assessments/>.

Grade Six Mathematics

In grade six, students learn the concept of **rates and ratios** and use these tools to solve word problems. They work on quickly and accurately dividing **multi-digit whole numbers** and adding, subtracting, multiplying, and dividing **multi-digit decimals**. Students extend their previous work with fractions and decimals to understand the concept of **rational numbers**—any number that can be made by dividing one integer by another, such as $\frac{1}{2}$, 0.75, or 2. Students also learn how to write and solve **equations**—mathematical statements using symbols, such as $20+x = 35$ —and apply these skills in solving **multi-step word problems**.

For more information, please see the *Parent Roadmap—Supporting Your Child in Grade Six, Mathematics*, which is posted on the Council of the Great City Schools Web page at <http://www.cgcs.org/site/default.aspx?PageType=3&ModuleInstanceId=429&ViewID=7b97f7ed-8e5e-4120-848f-a8b4987d588f&RenderLoc=0&FlexDataID=735&PageID=366>.

A Spanish version of the publication is available on the same Web page at <http://www.cgcs.org/site/default.aspx?PageType=3&ModuleInstanceId=431&ViewID=7b97f7ed-8e5e-4120-848f-a8b4987d588f&RenderLoc=0&FlexDataID=790&PageID=367>.

Grade Six Sample Test Items for Mathematics

This next section provides sample test items for grade six mathematics

The test items that students see online appear and function differently than the sample items shown in this document. For example, students may be asked to “drag, select, or click” their response. Parents can experience these different functionalities on the CAASPP.org portal Practice and Training Tests Web page at <http://www.caaspp.org/practice-and-training/index.html>.

The sample test items presented here represent the kinds of questions that Grade Six students at different levels of achievement would likely answer correctly. For example, a student at the “Standard Met” achievement level would typically receive and correctly answer an item associated with that achievement level.

Please note that these sample items represent only a few of the standards that are assessed on the Smarter Balanced Summative Assessments in mathematics. (An online version of the sample items is in development.)

For each sample test item, the following information is included:

- Mathematics area for the item
- Mathematics state standard(s) that the item measures
- Correct answer(s)

Grade Six Sample Test Item—Communicating Reasoning

Achievement Level: Standard Nearly Met

Evan’s car can travel 84 miles on 3 gallons of gas. Using this rate, he constructs a table showing the number of miles that his car can travel on different amounts of gas.

Part A

Click on each of the errors in Evan’s table.

Part B

Select the number of miles Evan’s car can travel on 1 gallon of gas.

A.

Gallons of Gas	2	4	6	8	10
Miles Traveled	56	112	156	224	300

B. Evan’s car travels miles on 1 gallon of gas.

24
26
28
30

Area

Communicating Reasoning

Demonstrating ability to support mathematical conclusions

Standard(s)

Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.

Answer

A. (6,156) and (10,300)
B. 28

Grade Six Sample Test Item—Concepts & Procedures

Achievement Level: Standard Met

Consider the equation showing the distributive property.

$$27 + 12 = 3(9 + \square)$$

Enter the unknown value that would make the equation true.

← → ↶ ↷ ✖

1	2	3
4	5	6
7	8	9
0	.	-

Area**Concepts & Procedures**

Applying mathematical concepts and procedures

Standard(s)

Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor.

Answer

4

Grade Seven Mathematics

In grade seven, students further develop their understanding of rates and ratios, using **tables, graphs, and equations to solve real-world problems involving proportional relationships**. Students also work on quickly and accurately solving **multi-step problems** involving **positive and negative rational numbers**—any number that can be made by dividing one integer by another, such as $\frac{1}{2}$, 0.75, or 2. Additionally, students expand their knowledge of geometry and apply the properties of operations to solve real world problems involving the **measurement of multi-dimensional objects**.

For more information, please see the *Parent Roadmap—Supporting Your Child in Grade Seven, Mathematics* posted on the Council of the Great City Schools Web page at <http://www.cgcs.org/site/default.aspx?PageType=3&ModuleInstanceId=429&ViewID=7b97f7ed-8e5e-4120-848f-a8b4987d588f&RenderLoc=0&FlexDataID=734&PageID=366>.

A Spanish version of the publication is available on the same Web page at <http://www.cgcs.org/site/default.aspx?PageType=3&ModuleInstanceId=431&ViewID=7b97f7ed-8e5e-4120-848f-a8b4987d588f&RenderLoc=0&FlexDataID=791&PageID=367>.

Grade Seven Sample Test Items for Mathematics

The sample test items below represent the kinds of questions that grade seven students at different levels of achievement would likely answer correctly. For example, a student at the “Standard Nearly Met” achievement level would typically receive and correctly answer an item associated with that achievement level.

Grade Seven Sample Test Item—Communicating Reasoning

Achievement Level: Standard Nearly Met

Click in the box next to the **two** statements that are **always** true for all real numbers a and b .

	<p>Statement 1 The sum of $-a$ and b is greater than 1.</p>
	<p>Statement 2 The sum of $-a$ and a equals 0.</p>
	<p>Statement 3 $a - (-b) = a - b = -b + a$</p>
	<p>Statement 4 $a - b = a + -b = -b + a$</p>

Area

Communicating Reasoning

Demonstrating ability to support mathematical conclusions

Standard(s)

Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.

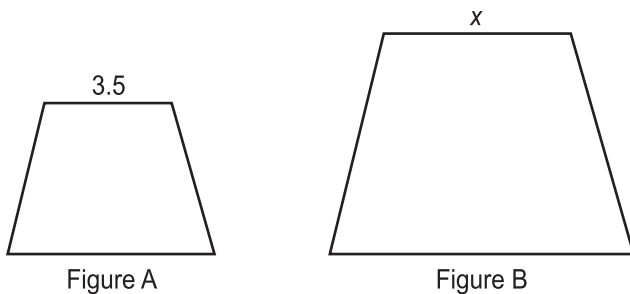
Answer

Statement 2 and Statement 4

Grade Seven Sample Test Item—Concepts & Procedures

Achievement Level: Standard Met

Figure A is a scale image of Figure B, as shown.



The scale that maps Figure A onto Figure B is $1:4\frac{1}{2}$.

Enter the value of x .

Area

Concepts & Procedures

Applying mathematical concepts and procedures

Standard(s)

Verify experimentally the properties of rotations, reflections, and translations.

Answer

15.75

Grade Seven Sample Test Item—Problem Solving & Modeling/Data Analysis

Achievement Level: Standard Met

A shipping company charges \$2.65 plus \$0.40 per ounce to ship a package from New York to Los Angeles.

Write an equation to show the relationship between c , the total cost to ship a package from New York to Los Angeles using the shipping company, and w , the weight of the package, in ounces.

← → ↶ ↷ ✖

1	2	3	c	w		
4	5	6	+	-	*	÷
7	8	9	<	=	>	
0	.	-	$\frac{\square}{\square}$	\square^\square	()	

Area**Problem Solving & Modeling/Data Analysis**

Using appropriate tools and strategies to solve real world and mathematical problems

Standard(s)

“Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.”

Answer

$$c = 0.40w + 2.65$$

[Scoring note: Accepts equivalent equations as correct]

Grade Eight Mathematics

In grade eight, students take their understanding of **unit rates and proportional relationships** to a new level, connecting these concepts to **points on a line** and ultimately using them to **solve linear equations** that require them to **apply algebraic reasoning** as well as knowledge of the **properties of operations**. Students also expand their understanding of numbers beyond rational numbers to include numbers that are **irrational**—meaning that they cannot be written as a simple fraction, such as the square root of 2 or $\sqrt{2}$.

For more information, please see the *Parent Roadmap—Supporting Your Child in Grade Eight, Mathematics* posted on the Council of the Great City Schools Web page at <http://www.cgcs.org/site/default.aspx?PageType=3&ModuleInstanceID=429&ViewID=7b97f7ed-8e5e-4120-848f-a8b4987d588f&RenderLoc=0&FlexDataID=733&PageID=366>.

A Spanish version of the publication is available on the same Web page at <http://www.cgcs.org/site/default.aspx?PageType=3&ModuleInstanceID=431&ViewID=7b97f7ed-8e5e-4120-848f-a8b4987d588f&RenderLoc=0&FlexDataID=792&PageID=367>.

Grade Eight Sample Test Items for Mathematics

The sample test items below represent the kinds of passages and questions that grade eight students at different levels of achievement would likely answer correctly. For example, a student at the “Standard Nearly Met” achievement level would typically receive and correctly answer an item associated with that achievement level.

Grade Eight Sample Test Item—Concepts & Procedures

Achievement Level: Standard Nearly Met

A taxi cab company charges a fixed rate of \$2 and an additional \$1.60 for every mile traveled.

Enter an equation in the form of $y = mx + b$ that represents the amount (y), in dollars, charged by the taxi cab company for x miles.

← → ↶ ↷ ✖

1	2	3	x	y					
4	5	6	+	-	*	÷			
7	8	9	<	≤	=	≥	>		
0	.	-	$\frac{\square}{\square}$	\square^{\square}	()		$\sqrt{\square}$	$\sqrt[n]{\square}$	π

Area

Concepts & Procedures

Applying mathematical concepts and procedures

Standard(s)

Construct a function to model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.

Answer

 $y = 1.6x + 2$

[Scoring note: Accepts equivalent equations as correct]

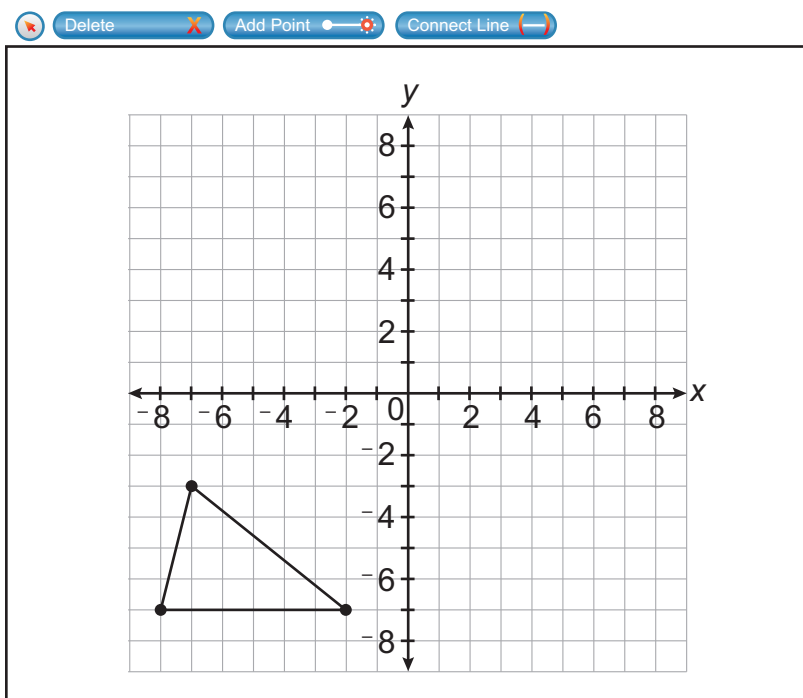
Grade Eight Sample Test Item—Concepts & Procedures

Achievement Level: Standard Met

Consider this figure.

Use the Add Point and Connect Line tools to draw the image of the figure after the following transformations:

- A vertical translation up 4 units.
- A horizontal translation to the right 7 units.



Area Concepts & Procedures
Applying mathematical concepts and procedures

Standard(s) Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates.

Answer Triangle with vertices of (-1,-3), (5,-3), and (0,1)

Grade Eight

Grade Eight Sample Test Item—Problem Solving & Modeling and Data Analysis

Achievement Level: Standard Met

China is the most populous country on Earth. India is the second most populous country on Earth. Japan is the tenth most populous country on Earth.

The population of China is approximately 1.4×10^9 .

The population of Japan is approximately 1.3×10^8 .

The population of India can be expressed in the form $a \times 10^b$, where a is approximately 1.2.

Enter a reasonable value for b .

Area**Problem Solving & Modeling and Data Analysis**

Using appropriate tools and strategies to solve real world and mathematical problems

Standard(s)

Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other.

Answer

[Scoring note:
Programmed to accept a range of responses]

Grade Eight Sample Test Item—Problem Solving & Modeling and Data Analysis Achievement Level: Standard Met

At the school football game, a customer bought 4 hot dogs and 3 hamburgers for a total of \$13.50. Another customer bought 2 hot dogs and 5 hamburgers for \$15.50.

Enter the price, in dollars, of a hamburger.

← → ↶ ↷ ✖

1	2	3
4	5	6
7	8	9
0	.	-

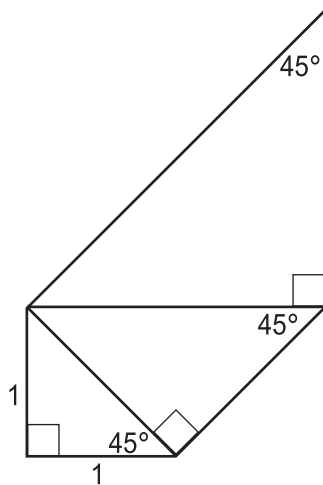
Area	<p>Problem Solving & Modeling and Data Analysis</p> <p>Using appropriate tools and strategies to solve real world and mathematical problems</p>
Standard(s)	<p>Analyze and solve pairs of simultaneous linear equations.</p>
Answer	<p>2.50</p>

Grade Eight

Grade Eight Sample Test Item—Problem Solving & Modeling and Data Analysis

Achievement Level: Standard Exceeded

Steven is making a pattern of a spiral as shown in the figure.



He started by making an isosceles right triangle with legs of length 1. He then made a new isosceles right triangle, using the hypotenuse of the first triangle as one of the legs of the new right triangle. He will continue making right triangles using this pattern until he has made a triangle with a hypotenuse with a length of 8.

Determine how many of these triangles, including the three shown in the figure, Steven will make.

← → ↶ ↷ ✖

1	2	3
4	5	6
7	8	9
0	.	-

Area

Problem Solving & Modeling and Data Analysis

Using appropriate tools and strategies to solve real world and mathematical problems

Standard(s)

Apply the Pythagorean Theorem to determine unknown side lengths in right triangles in real-world and mathematical problems in two and three dimensions.

Answer

6

Glossary

accessibility supports and accommodations

Tools and supports that help students access the test questions so they can best demonstrate what they know and are able to do. The Smarter Balanced tests include:

- **Universal Tools** available to all students based on their preference. These include online tools such as highlighting, digital notepads, and zooming in and out as well as other supports like scratch paper or breaks between test sections.
- **Designated Supports** available for a student when an educator or support team determines a special need. These include such tools as color contrast or masking as well as language supports for English learners, such as translated test directions or bilingual glossaries.
- **Accommodations** specially identified for students with IEPs or 504 plans. These include online tools, such as text-to-speech, closed captioning, and on-screen ASL translation as well as other supports, such as read aloud or use of a scribe.

achievement level

A score or descriptive statement that represents how well the student knows the standards for the subject area and grade level. For the Smarter Balanced tests, there are four achievement levels labeled as Standard Exceeded, Standard Met, Standard Nearly Met, and Standard Not Met.

assessment

A term generally used to mean the same thing as test.

CAASPP

California Assessment of Student Performance and Progress, which is the new state assessment system. The CAASPP system includes tests that public school students take at the end of the school year in different subject areas and grade levels.

claim or area	Broad sets of knowledge and skills within a subject area, such as Reading within English Language Arts/Literacy or Problem Solving in Mathematics. On the Smarter Balanced tests, students will get results in key areas based on groups of test questions that measure similar or related knowledge or skills.
college and career ready	A phrase that indicates a student is leaving high school well-prepared to succeed in college and the workplace.
Common Core State Standards	Academic content standards adopted by California that describe what students should know and be able to do at each grade level in order to graduate from high school ready for college and a career. The Common Core State Standards challenge students to develop a deep understanding of subject matter, learn how to think critically, and apply what they are learning to the real world.
computer adaptive test	A test given on a computer in which the questions change or adapt on the basis of a student’s answers, so each student gets a customized test. When a student answers incorrectly, the computer assigns easier or less complex questions. When a student gets answers correct, the computer gives the student harder or more complex questions.
computer-based test	A test given on a computer.
content standards	Statements of academic expectations that describe what students should know and be able to do in a subject area.
formative assessment	A process teachers use during instruction to check on student understanding.
interim assessment	A test given at regular intervals, such as a chapter test, to evaluate what students have learned.

performance task	A connected set of questions and activities, based on a theme or scenario, in which students apply their knowledge and skills to real-world problems. In the Smarter Balanced assessments, students do a performance task in English language arts/literacy and one in mathematics. The performance task includes a classroom activity, done with the teacher, to introduce vocabulary and make sure all students have basic knowledge and understanding about the topic. Students then go to the computer to read materials, respond to several shorter questions, and complete a longer essay or problem.
scale score	Each year, in each subject area, a student will get an overall score between approximately 2000 and 3000. This score represents how well a student did on the test, and it corresponds to one of four achievement levels: Standard Exceeded, Standard Met, Standard Nearly Met, and Standard Not Met.
Smarter Balanced Assessment Consortium	A state-led public agency, currently supported by member states and territories, that developed new tests that align to the new Common Core State Standards and measure student progress toward college and career readiness.
STAR	The Standardized Testing and Reporting Program, the previous California assessment system that has been phased out.
summative assessment	An assessment designed to be given near the end of the school year to evaluate a student's knowledge and skills relative to a specific set of academic standards.
test item	A question, problem, or task on a test. Test items may take different forms such as multiple choice, fill-in the blank or short answer, or constructed response (where students may write sentences or essays, or show how they solve a mathematics problem).

Appendix A: Other Assessments in the California Assessment of Student Performance and Progress System

California Alternate Assessment

Students in grades three through eight and grade eleven who have significant cognitive disabilities and whose individual education program requires that an alternate test be administered are eligible to take the California Alternate Assessment (CAA) instead of the Smarter Balanced Summative Assessments.

Required Assessments for Science

Students in grades five, eight, and ten continue to take the science assessments that were part of the California STAR program. These include the California Standards Test (CST); the California Modified Assessment (CMA), which can be taken by eligible students with disabilities; and the California Alternate Performance Assessment (CAPA), which may be taken by students with significant cognitive disabilities.

Optional Assessment: Reading/Language Arts

The Standards-based Test in Spanish (STS) for Reading/Language Arts is available for students in grades two through eleven who receive instruction in Spanish. This paper-based test, part of the previous STAR program, can be given to Spanish-speaking English learners who are learning language arts in Spanish and to English speakers who are learning Spanish through an immersion or dual language program.

Appendix B: Additional Resources

The links below provide additional information on the new state standards and CAASPP assessments.

Common Core State Standards

- **California Department of Education**

<http://www.cde.ca.gov/re/cc/ccssresourcesparents.asp>

This Web page containing information for parents and students includes links to informational fliers, videos, Web sites, and other resources.

- **California State PTA**

<http://capta.org/focus-areas/education/common-core/>

This site provides informational fliers and documents, in multiple languages, about the standards and what children are learning at each grade level.

New Assessments

- **California Department of Education**

<http://www.cde.ca.gov/ta/tg/ca/index.asp>

This website provides variety of resources about the CAASPP system. The Students & Parent tab includes links to videos, fact sheets, practice and training tests, and other related information.

- **California State PTA**

<http://capta.org/focus-areas/education/student-assessments/>

This site provides information about the new assessments as well as a sample student report of test results.

- **Smarter Balanced Assessment Consortium**

<http://www.smarterbalanced.org/parents-students/>

This Web site, from the developers of the new ELA and mathematics tests, provides information about the new assessments, a downloadable fact sheet for parents, and links to other resources.

- **California Assessment of Student Performance and Progress**

https://login3.cloud1.tds.airast.org/student/V112/Pages/LoginShell.aspx?c=California_PT&v=112

This Web site provides access to training and practice tests that parents and students can use to experience what the new assessment is like, including how the technology works and the kinds of questions and tasks that are on the new tests.

Appendix C: Scoring Rubric and Sample Responses (Constructed Response)

This item is worth a possible two points (0, 1, or 2) and is hand scored.

Scoring Rubric

Score	Rationale
2	<p>A response:</p> <ul style="list-style-type: none"> • Gives sufficient evidence of the ability to determine/summarize the theme/lesson/author’s message/main idea, or what happens after or during a key event • Includes specific examples/details that make clear reference to the text • Adequately explains the theme/lesson/author’s message/main idea, or what happens after or during a key event with clearly relevant information based on the text
1	<p>A response:</p> <ul style="list-style-type: none"> • Gives limited evidence of the ability to determine/summarize the theme/lesson/author’s message/main idea, or what happens after or during a key event • Includes vague/limited examples/details that make reference to the text • Explains the theme/lesson/author’s message/main idea, or what happens after or during a key event with vague/limited information based on the text
0	<p>A response:</p> <ul style="list-style-type: none"> • Gives no evidence of the ability to determine/summarize the theme/lesson/author’s message/main idea, or what happens after or during a key event <p>OR</p> <ul style="list-style-type: none"> • Gives the theme/lesson/author’s message/main idea, or what happens after or during a key event, but includes no examples or no examples/details that make reference to the text <p>OR</p> <ul style="list-style-type: none"> • Gives the theme/lesson/author’s message/main idea, or what happens after or during a key event, but includes no explanation or no relevant information from the text

Sample responses that would earn a “0,” a “1,” and a “2” are provided on the next pages.

The scoring rubric and sample responses are based on the Grade 3 constructed response item on pages 29–31.

Sample Responses

Score: 0 Points

they all are very close

That it is a very strong bond

They are like bestfriends

The pets relationship with each other is that they all trust each other.

The relationship between the pets is a good one.

The pets relationship with one another is nice and good. This is how the relationship is between the pet and one another.

Score: 1 Point

The inference can be made that the pets get along because it seems that they have a bond that keeps them together, and that is why the cat made the decision, to go with his friends/family or to stay behind.

They love each other and want to be around each other. When the labrador left to follow Mr. Longridge, each of the other animals followed the labrador.

Based on the text I believe that the animals have a good relationship with each other. They did things together and it seems like they treat each other as siblings.

The pets are close friends and stay by each other even on adventures away from the one place they know best.

I think the pets are all close, because after the young dog got up the old one followed and the cat followed after that

An inference that can be made is that they care about each other. An example of this is that when the young dog was at the gate instead of going on he waited for the others.

The pets like and trust each other. When one animal left, they all followed even those that were hesitant.

Score: 2 Points

I believe after reading this this text that the pets have a very close bond. I make this assumption from the fact that in the text, when the dog started running down the dirt road the cat was hesitant, but it only took a few seconds before the cat realized that she wanted to go with the dog, and left. There has to be an amazing relationship there if they would rather chase after one another than be without one another

the inference I can make is that their relationship is very strong. I know this because in the text it said that one dog looked back at the other animals as a sign of invitation to go along with him to go after their owner. The rest followed him and that shows that they depend a lot on each other and stick together

It seems that the pets had a close relationship with one another. It even says that they were both waiting by the gate, making it seem that they were next to each other. In addition it says, "He remained like this for several minutes, while the cat watched closely, then slowly the Labrador walked down the driveway and stood at the curve, looking back as though inviting the others to come. The old dog rose to, now, somewhat tiffly and followed." This shows that in fact the pets do have a relationship with one another. In this piece extracted from the article it does make it seem that they all interacted with one another, making it seem that they were close.

The pets' relationship would be most likely described as a strong relationship they have with one another as clearly showed in paragraph six. In paragraph six it states, "The cat remained utterly still for a full minute, blue eyes blazing in the dark mask. Then, with a curious hesitating run, he set off in pursuit. The dogs were waiting by the gate when he turned the corner, the old dog peering wistfully back, as though he hoped to see his friend Mrs. Oakes materialize with a juicy bone; but when the Labrador started up the road he followed. The cat still paused by the gate, one paw lifted delicately in the air—undecided, questioning, hesitant; until suddenly, some inner decision reached, he followed the dogs." This clearly shows their relationship as a tight one because it states many times they followed each other everywhere.

A inference that can be made from the pets relationship with one another is that they all trust each other a fair amount. Evidence of this is shown when the young dog rose and walked down the driveway the old dog rose and then the cat followed suit thus showing a trust between the animals.

I think all of Mr. Longridge's pets have good relationship because they all go outside together. After, John left they all stayed in the yard. But, when one of them left then all of them followed because they are friends so I think they just wanted to stick together." Twenty minutes passed by and no move was made; then suddenly the young dog rose, stretched himself, and stood looking intently down the drive. He remained like this for several minutes, while the cat watched closely, then slowly the Labrador walked down the driveway and stood at the curve, looking back as though inviting the others to come. The old dog rose too, now, somewhat stiffly, and followed. Together they turned the corner, out of sight" (Burnford Paragraphs).