

Item Sampler

Grade 7



Cognia Interim Assessments

Item Development Overview

CogniaTM uses Evidence-Centered Design (ECD), a principled design approach, to develop test and item specifications. ECD provides a conceptual framework for the design, development, and implementation of assessments that elicit evidence to support valid inferences about what students know and can do.

Item, Task, and Stimulus Specifications

Cognia item and task specifications describe in detail how each standard or cluster of standards is measured. Item and task specifications:

- · Identify a targeted cluster of standards
- Define the content limits of the cluster of standards (what can and cannot be included in items assessing that cluster)
- · Detail allowable vocabulary to be used in items measuring the standards
- · Provide item or task models to outline item types that are appropriate for the targeted standards
- · Include sample items

Stimulus specifications provide guidelines for:

- · Passage selection
- · Development of graphic stimuli to support passages and items

Further, for mathematics, Cognia content experts created detailed item specifications and "focus points" for each practice, breaking each practice into two or three discrete focus points. Cognia Interim Assessments mathematics items address a range of practice focus points.

Item Development Process

Approximately 8800 new items have been developed for these assessments. Drafted items are internally reviewed by content specialists and professional editors for:

- Alignment to standards and item specifications
- Technical quality (accuracy of right answers, usefulness of wrong answer choices, and accuracy and alignment of rubrics to the demands of the items)
- · Consistency with universal design (UD) principles
- · Avoidance of bias or sensitivity issues; including consideration of global use
- · Appropriateness of vocabulary level, item contexts, and reading level

Reviews for Content, Bias, and Sensitivity

All new items are reviewed by educator committees before being selected for field testing. Educators and other expert stakeholders from around the world participate in the review committees. Close to 130 professionals took part in more than 20 content reviews, and more than 85 participated in bias and sensitivity reviews. The international review committee included members from China, Colombia, Egypt, India, Saudi Arabia, and the United States.

For more information, see the Cognia Interim Assessments Overview

Directions

Today you will take a test in mathematics. For this test, you will answer selected-response questions. Some of the questions may look different from test questions you have seen before, and some may ask about material that is new to you, but it is important to do your best. If you are not sure of the answer to a question, you should still try to answer it.

You may NOT use a calculator to answer the questions in this section.

Alignment

Concepts and Procedures Standard: 07.EE.02.03

Mathematical Processes Standard: 2

Key: C

1. During a trivia game, a player receives 2 points for each correct answer and $-\frac{1}{2}$ point for each incorrect answer. During round 1, Annette answers 5 questions correctly and 6 questions incorrectly.

What is Annette's score at the end of round 1?

- A -3 points
- **B** −1 point
- **c** 7 points
- **D** 13 points

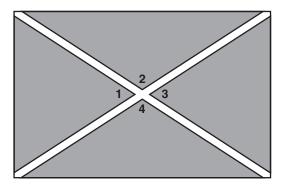
Alignment

Concepts and Procedures Standard: 07.G.02.05

Mathematical Processes Standard: 4

Key: C

2. This diagram shows a rectangular park with diagonals that represent sidewalks.



If the measure of $\angle 1 = 66^{\circ}$, what is the measure of $\angle 2$?

- **A** 24°
- **B** 104°
- **C** 114°
- **D** 294°

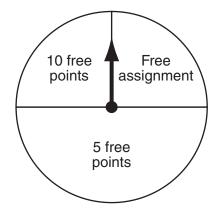
Alignment

Concepts and Procedures Standard: 07.SP.03.08.c

Mathematical Processes Standard: 4

Key: A

3. There are 12 boys and 14 girls in Mr. Rowe's class. Each week, Mr. Rowe puts pieces of paper with each student's name in a box and randomly pulls one out. The chosen student spins the arrow on the spinner shown.



Which expression can be used to find the probability that this week a boy will be chosen and the arrow will land on "Free assignment"?

- **A** $\frac{12}{26} \times \frac{1}{4}$
- **B** $\frac{12}{26} + \frac{1}{4}$
- $c \frac{12}{14} \times \frac{1}{4}$
- **D** $\frac{12}{14} + \frac{1}{4}$

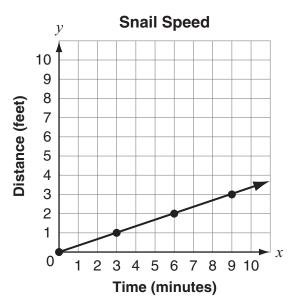
Alignment

Concepts and Procedures Standard: 07.RP.01.02.b

Mathematical Processes Standard: 8

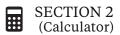
Key: B

4. The motion of a snail is shown on this graph.



What is the speed of the snail's motion?

- A 0 feet per minute
- **B** $\frac{1}{3}$ foot per minute
- $C = \frac{1}{2}$ foot per minute
- **D** 3 feet per minute



Directions

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You MAY use a calculator to answer the questions in this section.

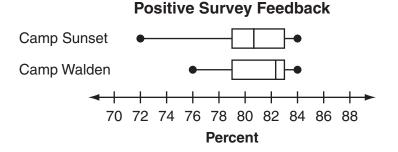
Alignment

Concepts and Procedures Standard: 07.SP.02.04

Mathematical Processes Standard: 3

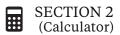
Key: C

5. Nadine is researching summer camps. This box-and-whisker plot shows the distribution of positive feedback for the same activities at two different camps.



Based on these data alone, which camp should Nadine attend and why?

- A Camp Sunset, because the feedback for the activities is more consistent and she is more likely to have a positive experience with her activities there
- **B** Camp Sunset, because the feedback for the activities is less consistent, so she is more likely to have a positive experience with her activities there
- **C** Camp Walden, because the feedback for the activities is more consistent and she is more likely to have a positive experience with her activities there
- **D** Camp Walden, because the feedback for the activities is less consistent, so she is more likely to have a positive experience with her activities there



Alignment

Concepts and Procedures Standard: 07.RP.01.01

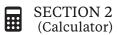
Mathematical Processes Standard: 1

Key: D

- **6.** Dave is trying to decide which of these is the better deal for the same laundry detergent.
 - 210-fluid ounce bottle that will wash 140 loads of laundry for \$10.99
 - 162-fluid ounce bottle that will wash 108 loads of laundry for \$12.39

Which unit should Dave use to directly compare the two laundry detergents for the **better** deal?

- A loads
- **B** dollars
- **C** fluid ounces per load
- **D** dollars per fluid ounce



Alignment

Concepts and Procedures Standard: 07.NS.01.03

Mathematical Processes Standard: 1

Key: A

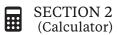
Use the problem below to answer questions 8 and 9.

Kate bought a sketch notebook, a box of 12 colored pencils, a package of 15 erasers, and a box of 13 pastel chalk sticks.

- The box of colored pencils cost \$9.01.
- The package of erasers cost \$0.98.
- The box of pastel chalk sticks cost \$5.01.
- The sales tax rate for all the items is 8%.
- The amount of sales tax was \$1.62.
- The total cost was \$21.87.

What is the cost of the sketch notebook?

- 7. What information is **not** necessary to solve the problem?
 - A the sales tax rate
 - **B** the cost of the package of 15 erasers
 - **c** the cost of the box of 12 colored pencils
 - **D** the cost of the box of 13 pastel chalk sticks



Alignment

Concepts and Procedures Standard: 07.NS.01.03

Mathematical Processes Standard: 3

Key: A

- **8.** In Heather's solution to the problem, she wrote and solved an equation. Her work is shown.
 - Step 1: 1.08(x + 9.01 + 0.98 + 5.01) = 21.87
 - Step 2: 1.08x + 1.08(9.01) + 1.08(0.98) + 1.08(5.01) = 21.87
 - Step 3: 1.08x + 9.73 + 1.06 + 5.41 = 21.87
 - Step 4: 1.08x = 5.67
 - Step 5: x = 5.25

The cost of the sketch notebook is \$5.25.

Is Heather's solution correct?

- **A** Yes, it is correct.
- **B** No, because in step 5 the 5.25 should be 6.12.
- **C** No, because in step 4 the 5.67 should be 1.62.
- **D** No, because in step 2 only the x should be multiplied by 1.08.

Alignment

Concepts and Procedures Standard: 07.G.01.01

Mathematical Processes Standard: 2

Key: A

9. A rectangular room is 15 feet long and 12 feet wide. A scale drawing of the room uses a scale of $\frac{1}{4}$ inch to 3 feet.

What are the dimensions of the room in the scale drawing?

- A $1\frac{1}{4}$ inches long and 1 inch wide
- **B** $2\frac{1}{2}$ inches long and 2 inches wide
- **c** $3\frac{3}{4}$ inches long and 3 inches wide
- **D** 5 inches long and 4 inches wide

Directions

Today you will take a test in reading. For this test, you will read passages and then answer questions about the passages. Some of the questions may look different from test questions you have seen before, and some may ask about material that is new to you, but it is important to do your best. If you are not sure of the answer to a question, you should still try to answer it.

You will now read two passages and answer the questions that follow. Some of the questions may ask you to compare the two passages.

This passage tells about Otter, who came to America in 1867 to join his father and other Chinese Americans building the Transcontinental Railroad.

Passage 1

from Dragon's Gate

by Laurence Yep

- Shadowy men worked in the dim light, breath steaming from their mouths as they used hammers and chisels to smooth the walls. At the point where the tunnel began to narrow, men swung pickaxes to widen it chip by chip.
- The crew lifted the big pickaxes over their heads in a slow, ragged rhythm and smashed at the rock, each at his own pace. Their lean bodies contorted with the effort as they threw all their weight into their blows. Despite the padding in their coats, I could see muscles rippling beneath the cloth. Even the muscles of their throats strained as they tried to crack the walls.
- The dim light glittered off the sharp tips of the pickaxes; and as they dove toward the stone, they seemed more like weapons than tools.
- 4 "This is like a battlefield," I said to Father.
- "It's war," he grunted. "Because the mountain can kill you in a dozen different ways before you can blink an eye. And victory is twenty centimeters a shift."
- As we passed, men turned to stare at me curiously and stopped what they were doing. Father signed to a middle-aged man with a sour face like a pickled cucumber. "Bright Star."
- 7 Bright Star gave him a sour look. "Why do I have to work at the point all the time?"
- 8 "Do you have to argue every time? It's your turn."
- Then Father nodded to a fellow as thin as the shaft of his pickax. "Noodles."
- Setting down their tools, the two men reluctantly stepped in behind us.
- The tunnel grew narrower the farther in we went. Pretty soon we were picking our way over mounds of rubble. The walls were rougher here and marked by black blast marks. When I looked closer at the rubble scattered around, I noticed that it too was sooty.

- 12 Curious, I worked my way slowly down the tunnel, mound of rubble by mound, meter by meter, toward the source of that strange song. As we passed a lantern, its light shimmered in broken waves along the dark, cold walls of the tunnel until it was just a distant glow.
- 13 With each meter the walls grew rougher and the air more and more stifling. And with each step, the metallic music grew louder and louder until I was at the end of the tunnel before a blackened, jagged wall. Pitting its face were lines of holes, as if giant bullets had been shot at the rock.
- Before that wall was a man with a drill to match Father's. He was standing with his legs braced, holding the tip of the drill against the wall. As he worked, he sucked at something that hung on a gold chain around his neck and his head wagged from side to side as if he were some mechanical toy.
- In front of him was a man swathed from head to toe in scarves. Only his eyes showed through the mask made of the scarves. He wore so many coats it was a wonder he could swing his big sledgehammer; but swing he did, and with such violence that if he missed the butt end of the drill: he was sure to smash the skull of the man holding it.
- The only light came from a kerosene lantern on the floor, so their shadows reared behind them, almost appearing to belong to two giants rather than to ordinary men. The air was so bad at the end of the tunnel that I didn't see how they could breathe, let alone work.

Dragon's Gate, copyright © 1993 by Laurence Yep.

This passage is taken from a speech made in the U.S. House of Representatives to honor Chinese railroad workers of the 1800s.

Passage 2

Chinese-American Contribution to the Transcontinental Railroad

Hon. John T. Doolittle of California in the U.S. House of Representatives Thursday, April 29, 1999

- 1 Mr. Speaker, today I rise to honor the Chinese-American community and pay tribute to its ancestors' contribution to the building of the American transcontinental railroad.
- On May 8th, the Colfax Area Historical Society in my Congressional District will place a monument along Highway 174 at Cape Horn, near Colfax, California to recognize the efforts of the Chinese in laying the tracks that linked the east and west coasts for the first time.
- With the California Gold Rush and the opening of the West came an increased interest in building a transcontinental railroad. To this end, the Central Pacific Railroad Company was established, and construction of the route East from Sacramento began in 1863. Although the beginning of the effort took place on relatively flat land, labor and financial problems were persistent, resulting in only 50 miles of track being laid in the first two years. Although the company needed over 5,000 workers, it only had 600 on the payroll by 1864.
- Chinese labor was suggested, as they had already helped build the California Central Railroad, the railroad from Sacramento to Marysville and the San Jose Railway. Originally thought to be too small to complete such a momentous task, Charles Crocker of Central Pacific pointed out, "the Chinese made the Great Wall, didn't they?"
- The first Chinese were hired in 1865 at approximately \$28 per month to do the very dangerous work of blasting and laying ties over the treacherous terrain of the high Sierras. They lived in simple dwellings and cooked their own meals, often consisting of fish, dried oysters and fruit, mushrooms and seaweed.
- Work in the beginning was slow and difficult. After the first 23 miles, Central Pacific faced the daunting task of laying tracks over terrain that rose 7,000 feet in 100 miles. To conquer the many sheer embankments, the Chinese workers used techniques they had learned in China to complete similar tasks. They were lowered by ropes from the top of cliffs in baskets, and while suspended, they chipped away at the granite and planted explosives that were used to blast tunnels. Many workers risked their lives and perished in the harsh winters and dangerous conditions.
- By the summer of 1868, 4,000 workers, two thirds of which were Chinese, had built the transcontinental railroad over the Sierras and into the interior plains. On May 10, 1869, the two railroads were to meet at Promontory, Utah in front of a cheering crowd and a band. A Chinese [and Irish] crew was chosen to lay the final ten miles of track, and it was completed in only twelve hours.

Without the efforts of the Chinese workers in the building of America's railroads, our development and progress as a nation would have been delayed by years. Their toil in severe weather, cruel working conditions and for meager wages cannot be under appreciated. My sentiments and thanks go out to the entire Chinese-American community for its ancestors' contribution to the building of this great Nation.

"Chinese-American Contribution to the Transcontinental Railroad," by Hon. John T. Doolittle of California in the U.S. House of Representatives, Thursday, April 29, 1999. In the public domain.

Alignment

Standard: RL.07.04

Key: D

- 1. In Passage 1, what does the narrator mean when he describes Bright Star as having "a sour face like a pickled cucumber"?
 - A Bright Star looks weak and sick.
 - **B** Bright Star looks mean and evil.
 - **C** Bright Star looks old and wrinkled.
 - **D** Bright Star looks miserable and resentful.

Alignment

Standard: RL.07.06

Key: D

- 2. In Passage 1, how does the narrator's point of view change as he walks deeper into the tunnel?
 - **A** He grows even fonder of his father.
 - **B** His fears threaten to overcome him.
 - **C** His mind wanders to more pleasant things.
 - **D** He becomes more keenly aware of his surroundings.

Alignment

Standard: RL.07.03

Key: C, B

This question has two parts. Be sure to answer both parts of the question.

- **3.** According to Passage 2, why was it difficult to build the railroad through the Sierra Nevadas?
 - **A** The workers took frequent breaks whenever they got tired.
 - **B** The clothing the workers wore kept them from working efficiently.
 - **C** The terrain was steep and the workers had to dig tunnels through mountains.
 - **D** Not many workers could fit into the cramped work space at one time.

Which choice from Passage 1 provides the **best** evidence for the answer to the previous question?

- A "Where the tunnel began to narrow, men swung pickaxes to widen it chip by chip."
- **B** "Even the muscles of their throats strained as they tried to crack the walls."
- **C** "Men turned to stare at me curiously and stopped what they were doing."
- **D** "He wore so many coats it was a wonder he could swing his big sledgehammer."

Alignment

Standard: RL.07.06

Key: C

- **4.** Which list of words from Passage 2 contains words that **most** clearly reveal the speaker's point of view on the treatment of Chinese American railroad workers?
 - A efforts, workers, building
 - **B** development, progress
 - C severe, cruel, meager
 - **D** sentiments, thanks

Alignment

Standard: RL.07.02

Key: C

- **5.** Which of the following statements reflects the **main** idea of Passage 2?
 - A Chinese workers were needed to help build railroads because the Central Pacific Railroad Company had only 600 workers in 1864 and needed over 5,000.
 - **B** Chinese workers faced a range of dangers while building railroads, including the explosives used to blast tunnels and exposure to freezing cold in winter.
 - **C** Chinese workers worked for low pay under terrible conditions and should be honored for making a valuable contribution to the development of the United States.
 - **D** Chinese workers used a variety of clever techniques, such as lowering themselves in baskets over steep embankments, to get to places they could not otherwise have reached.

Alignment

Standard: RL.07.09

Key: A

- **6.** How is Passage 1 related to John T. Doolittle's speech in Passage 2?
 - A Passage 1 puts human faces on the events described in Passage 2.
 - **B** Passage 1 shows exceptions to events that are described in Passage 2.
 - C Passage 1 explains what happened after the events described in Passage 2.
 - **D** Passage 1 is a romanticized version of the real-life events described in Passage 2.

Alignment

Standard: RL.07.09

Key: B

- **7.** Which historical detail in Passage 2 is expanded upon in Passage 1?
 - **A** Chinese railroad workers lived simply and cooked their own meals.
 - **B** Chinese railroad workers often endured cruel and dangerous conditions.
 - **C** Chinese railroad workers were hired after the project was delayed by years.
 - **D** Chinese railroad workers suspended themselves from the tops of cliffs to blast tunnel holes.

Directions

Today you will take a test in language usage. For this test, you will read a passage and answer questions. Some questions might ask about how to improve the passage. Other questions might ask you to correct errors in the passage. Some of the questions may look different from test questions you have seen before, and some may ask about material that is new to you, but it is important to do your best. If you are not sure of the answer to a question, you should still try to answer it.

Read the passage. Then answer the questions that follow.

A Dramatic Difference

- **1.** Many of us can agree that there is nothing quite like a good movie; through the magic of special effects, we can be transported deep within a volcano or to the outer reaches of the universe. **2.** In the same way, with all that movies can do, why should we ever go to a play? **3.** Though movies have their merits, a recent study shows that watching live theater can benefit us by increasing our knowledge and allowing us to witness the characters' experiences in a powerful way. **4.** For these reasons, people, particularly students, should have opportunities to attend live theater performances.
- **5.** Jay Greene of the University of Arkansas points out that plays "are meant to be seen performed live. . . . **6.** The story can be conveyed in a movie, but it doesn't engage the viewer in the same way." **7.** It is this engagement that allows students to develop a deeper understanding of literature. **8.** Greene and a team of researchers looked at two different groups: students who had only read or seen a movie of Shakespeare's *Hamlet* and students who attended a live performance. **9.** The researchers found that students who went to the play better understood the plot and the challenging vocabulary. **10.** The researchers also assessed the students on their acceptance of other people and ideas, as well as their recognition of human emotions. **11.** Students who saw the live performance scored higher on both assessments.
- **12.** A super play equals a super realistic experience for those studying literature. **13.** There are reasons that theater has existed since the ancient Greeks first stepped onto a stage around 700 B.C.E.

"A Dramatic Difference" © 2016 by Cognia, Inc.

Alignment

Standard: W.07.01.a

Key: D, A

This question has two parts. Be sure to answer both parts of the question.

- **1.** What is one way the writer effectively introduces the main argument of the passage?
 - **A** by providing a definition
 - **B** by giving historical background
 - **C** by recalling personal memories
 - **D** by acknowledging an alternate claim

Which choice provides the **best** evidence for the answer to the previous question?

- A "movies have their merits,"
- **B** "a recent study shows that watching live theater can benefit us"
- **C** "witness the characters' experiences in a powerful way."
- **D** "should have opportunities to attend live theater"

Alignment

Standard: W.07.01.c

Key: B

- **2.** How should the underlined words in sentence 2 be changed to provide the **best** transition to the ideas that follow?
 - A NO CHANGE
 - **B** In fact,
 - C In addition,
 - **D** In contrast,

Alignment

Standard: W.07.01.c

Key: A

- **3.** How should the underlined words in sentence 4 be changed to provide the **best** transition to the ideas that follow?
 - A NO CHANGE
 - **B** In the meantime,
 - **C** As an illustration,
 - **D** In the same way,

Alignment

Standard: L.07.02.b

Key: A

- **4.** How should the underlined word in sentence 10 be changed?
 - A NO CHANGE
 - **B** acceptence
 - **C** acceptanse
 - **D** acceptince

Alignment

Standard: W.07.01.d

Key: B

- **5.** How should sentence 12 be changed to maintain the style of the passage?
 - A NO CHANGE
 - **B** A high-quality play brings literature to life.
 - **C** A first-rate play can make literature seem real in a way.
 - **D** A terrific play means that literature is right in front of your face.

Alignment

Standard: W.07.01.e

Key: C

- **6.** The writer would like to add a concluding statement that restates the main points in the passage. Which sentence would be **best** to add after sentence 13?
 - **A** Many students would be grateful for the chance to audition at a local theater.
 - **B** It truly is an excellent way for people to come together and get to know their neighbors.
 - **C** Not only is live theater a compelling way to tell a story, it also gives audience members glimpses into other points of view.
 - **D** If theaters distributed surveys regarding the interests of their audience members, they would achieve greater success.

