

Grade 5 Math

Common Core Standards Assessed (PARCC)	PARCC Released Item	LEMON TREE Artifact/Interim Assessment	Alignment Analysis															
<p>5.OA.A.1 5.OA.A.2 5.OA.A.3 5.NBT.B.6</p>	<p>14. Katie went to a craft store to purchase the supplies she needs to make two types of jewelry. This table shows the costs of the supplies Katie needed.</p> <p align="center">Costs of Supplies</p> <table border="1" data-bbox="397 472 532 558"> <thead> <tr> <th>Item</th> <th>Cost per item</th> </tr> </thead> <tbody> <tr> <td>bead</td> <td>\$0.05</td> </tr> <tr> <td>charm</td> <td>\$0.45</td> </tr> </tbody> </table> <p>This table shows the supplies needed to make each piece of jewelry.</p> <p align="center">Supplies Needed</p> <table border="1" data-bbox="397 636 602 722"> <thead> <tr> <th>Type of Jewelry</th> <th>Beads</th> <th>Charms</th> </tr> </thead> <tbody> <tr> <td>bracelet</td> <td>25</td> <td>4</td> </tr> <tr> <td>necklace</td> <td>48</td> <td>1</td> </tr> </tbody> </table> <p>Katie purchased the exact amount of supplies to make 1 bracelet and 2 necklaces.</p> <p>Part A Write an expression to determine the cost of supplies to make 1 bracelet. Enter your expression in the space provided.</p> <div data-bbox="370 940 813 1186"> <p>← → 🗑️ [A] [x]</p> <div style="border: 1px solid gray; padding: 5px; width: 250px; height: 100px; display: flex; align-items: center;"> <div style="flex: 1; border-right: 1px solid gray; margin-right: 5px;"></div> <div style="border: 1px solid gray; padding: 2px;"> <p>Math symbols</p> <p>+ - × ÷</p> <p>⊗ ⊞ (-) </p> <p>= < > ≠</p> <p>\$ ° ?</p> </div> </div> </div> <p>Part B Write an expression to determine the cost of supplies to make 2 necklaces. Enter your expression in the space provided.</p> <div data-bbox="370 1297 813 1543"> <p>← → 🗑️ [A] [x]</p> <div style="border: 1px solid gray; padding: 5px; width: 250px; height: 100px; display: flex; align-items: center;"> <div style="flex: 1; border-right: 1px solid gray; margin-right: 5px;"></div> <div style="border: 1px solid gray; padding: 2px;"> <p>Math symbols</p> <p>+ - × ÷</p> <p>⊗ ⊞ (-) </p> <p>= < > ≠</p> <p>\$ ° ?</p> </div> </div> </div>	Item	Cost per item	bead	\$0.05	charm	\$0.45	Type of Jewelry	Beads	Charms	bracelet	25	4	necklace	48	1	<p>5.OA.A2.11. Tony is 8 years old. His sister Anna is 4 years less than twice his age. Write a mathematical expression for Olivia's age.</p> <p>A. $(8 - 4) \times 2$ B. $(2 \times 8) - 4$ C. $(4 - 2) \times 8$ D. None</p> <p>5.OA.A2.11. Tony is 8 years old. His sister Anna is 4 years less than twice his age. Write a mathematical expression for Olivia's age.</p> <p>A. $(8 - 4) \times 2$ B. $(2 \times 8) - 4$ C. $(4 - 2) \times 8$ D. None</p>	<p>Content: Match. Although the LEMON TREE item purports only to assess 5.OA.A.1-3, 5.NBT.B.6 is assumed in the operations included.</p> <p>Context: Mismatch The LEMON TREE items are multiple choice; the student does not need to formulate a mathematical expression or write an equation, despite the injunction to "write" an expression in the question directions. The questions require that the student identify a mathematical expression that is correct given the word problem before it, however neither question requires the student to solve the expression.</p> <p>The mode of student</p>
Item	Cost per item																	
bead	\$0.05																	
charm	\$0.45																	
Type of Jewelry	Beads	Charms																
bracelet	25	4																
necklace	48	1																

Part C

Katie started with \$40. How much did she have left after purchasing the supplies?

Enter your answer in the space provided. Enter **only** your answer.



Math symbols

+	-	×	÷
$\frac{\square}{\square}$	\square^{\square}	()	
=	<	>	≠
\$	°	?	

16. Maria bought wood, paper, and string to make one kite. The list shows the amount and the unit cost of each item she bought.

- 12 square feet of paper at \$1 per square foot
- 4 feet of wood at \$3 per foot
- 14 yards of string at \$2 per yard

Part A

What was the total cost of the items Maria bought? Show all the steps you took to find your answer. Be sure to label your answer.

Enter your answer and show your work in the space provided.



Math symbols

+	-	×	÷
$\frac{\square}{\square}$	\square^{\square}	()	
=	<	>	≠
\$	°	?	

Part B

Maria will make 4 more kites for her friends. Determine how much paper, wood, and string are needed and the total cost to make the 4 kites. Show all the steps you took to find your answer. Be sure to label your answer.

Enter your answer and show your work in the space provided.



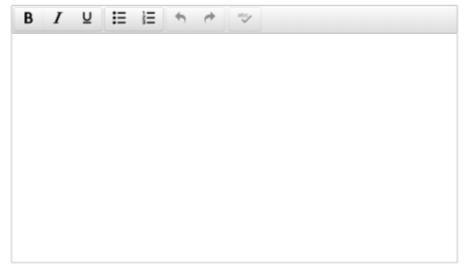
Math symbols

+	-	×	÷
$\frac{\square}{\square}$	\square^{\square}	()	
=	<	>	≠
\$	°	?	

response for the PARCC items, in contrast, is not multiple choice. Instead, the student must actually construct a mathematical expression that matches the information of the word problem using the keyboard tools, but also write out all the steps to solve the expression. Additionally, the student must consider the data presented in the tables regarding cost and unit price and decide how to employ them in the expression. Parts A and B are linked: once the student writes and solves the first expression, the problem requires that they use the data in different amounts, which entails adding another operation to the expression. They must then solve the expression correctly, documenting all the steps to get their answer.

			<p>Cognitive Type: Mismatch</p> <p>The LEMON TREE items fall at the level of Understanding, particularly since they are multiple choice and the correct answer is one of the four choices given.</p> <p>The PARCC items, because they require that students synthesize a mathematical expression from tables of component parts and because they must both write the expression and solve it with all steps documented and then change the expression in the linked item by adding another operation and solve that correctly with all steps documented falls at the level of Applying. The PARCC items are more cognitively demanding than those on the LEMON TREE Interim Assessment.</p>
--	--	--	--

Grade 5 ELA

Common Core Standards Assessed (PARCC)	PARCC Released Item	LEMON TREE Artifact/Interim Assessment	Alignment Analysis
<p>RI.5.5 RI.5.6 RI.5.9 W.5.2.A-E</p>	<p>[The PARCC Assessment is made up of two articles and a short video covering the same event – a penguin rescue after an oil spill. Students may view either the articles or the video by clicking the appropriate bar. The text or video viewer will appear in the box below. “The Amazing Penguin Rescue” by Lauren Tarshis is approximately 1000 words in length. “The Amazing Penguin Rescue” by Dyan deNapoli is approximately 730 words in length. The video is under 2 minutes in length. Students read each article and view the video separately, answering questions after each. The Writing assignment is at the end of the section, the last item in the set.]</p> <p>Today you will research how penguins are rescued after a large oil spill. You will read two articles, and then you will view a video. As you review these sources, you will gather information and answer questions about the rescue of penguins so you can write an essay.</p>  <p>Read the passage from the article by Lauren Tarshis titled “The Amazing Penguin Rescue.” Then answer the questions.</p> <p align="center">from “The Amazing Penguin Rescue” by Lauren Tarshis</p> <p>1 Imagine you are an African penguin living on an island in the middle of the South Atlantic Ocean. You live with tens of thousands</p> <p>Write an essay comparing how the articles by Lauren Tarshis and Dyan deNapoli and the video describe penguin rescue efforts after oil spills. Support your essay with information from all three sources.</p> 	<p>[The LEMON TREE Interim #1 assessment is made up of three unrelated non-fiction pieces which are approximately 400, 300 and 200 words each. The second selection has sub-headings. None of the paragraphs is numbered. Questions follow the title of each piece.]</p> <p>Wyoming’s History: The Wild West at its Best!</p> <p>Directions: Read the passage about Wyoming’s History and answer the questions that follow it.</p> <p>5.1. 3. What statement would you include in a summary of the passage?</p> <p>a. In fact, livestock outnumber people in the state of Wyoming.</p> <p>b. The outlaws in the gang were also well-known rustlers who stole cattle from nearby ranches.</p> <p>c. There was plenty of water from rivers and lakes, and it was wide open, beautiful country.</p> <p>d. Wyoming is a large state with few people living in it.</p> <p>5.2. 4. What is the main idea of the passage?</p> <p>a. Wyoming is an interesting state with a rich history.</p> <p>b. Wyoming had famous outlaws living in a hole in the wall.</p> <p>c. Wyoming has a lot of horses and cattle on the range.</p>	<p>Content: Mismatch</p> <p>The standard assessed by the LEMON TREE Interim #1 is really only RI.5.1. This is clearly stated on the assessment instrument, which is given in the fall. The PARCC, which is given in March, assesses three different standards and includes a writing standard. Since there are only 5 months between Interim #1 and the PARCC, auditors would expect to see more than one standard being assessed. Students are not being given enough opportunity to practice their mastery of the standards prior to the PARCC.</p> <p>Context: Mismatch</p>

		<p>d. Wyoming has a lot of outlaws on the range.</p> <p>5.1. 5. What statement DOES NOT help you infer the reason Wyoming was nicknamed “The Equality State”?</p> <p>a. Women were not allowed to vote in any state in the U.S., but Wyoming allowed it.</p> <p>b. It is nicknamed “The Equality State,” because it led states in one important step to equality.</p> <p>c. In 1924, it was the first state to elect a woman governor.</p> <p>d. In 1890, Wyoming became the 44th state in the United States.</p> <p>5.1. 6. What statement supports why some people might think Wyoming is a “boring” state?</p> <p>a. Criminals also came to Wyoming.</p> <p>b. Wyoming became the 44th state in the United States.</p> <p>c. Wyoming has more animals than people in it and is a large rectangle.</p> <p>d. Women were not allowed to vote in the U.S., but Wyoming allowed it.</p> <p>A Brief History of Refrigeration</p> <p>Directions: Answer the multiple choice questions below about the information that you read about refrigeration.</p> <p>5.1. 7. What is the likely reason that drip pans were located at the bottom of iceboxes?</p> <p>a. They were required to make the icebox function.</p> <p>b. They were added to make the icebox look more attractive.</p>	<p>There are key differences between the two assessments. The LEMON TREE instrument is a collection of unrelated articles, none of which exceeds approximately 400 words in length. The PARCC item includes two articles and a video on the same topic – students must use text and visual/audio media. The PARCC articles are considerably longer at 1000 and 730 words. The LEMON TREE assessment is made up of straightforward multiple-choice questions relating to main idea and details which illustrate the main idea. Some questions require students to infer information from the text.</p> <p>The PARCC asks students to write a comparison between two articles and a video. Students must compare</p>
--	--	--	--

		<p>c. They were used to collect water.</p> <p>d. They were needed for dripping fruits and vegetables.</p> <p>5.1 8. Why are iceboxes not in use today?</p> <p>a. A better way of refrigeration is used.</p> <p>b. It became too difficult to sell ice.</p> <p>c. Freeze dried food are more popular.</p> <p>d. Homes today are built without them.</p> <p>5.1. 9. Which detail from the text would best explain why food preservation is important?</p> <p>a. This not the only time period in history that attempts had been made to preserve food.</p> <p>b. During the winter months, water from lakes and ponds was frozen, cut into blocks and stored in underground cellars underneath piles of hay or wood chips.</p> <p>c. Since the temperature is much cooler underground, the ice stayed cold long enough to survive until the summer.</p> <p>d. Eating leftover meat puts individuals at risk for all types of food-borne illnesses.</p> <p>5.1. 10. Larry wants to highlight information from the text that that would explain why ice was mostly made in the northern states. Which phrase from the text should he highlight?</p> <p><i>[Here follows an excerpt from "Getting Ice"]</i></p> <p>a. "the winter months..."</p>	<p>how the various media described the penguin rescue, using specific, supporting evidence from all three pieces.</p> <p>Cognitive Type: Mismatch</p> <p>The LEMON TREE Interim #1 assessment is made up of multiple choice questions which do not rise above the level of Understanding because the student is always selecting from a list of possibilities rather than searching through the given text to illustrate something.</p> <p>The PARCC Assessment, because it requires students to compare three related pieces of media – two articles and a video describing the same event – requires Applying and Analyzing; the act of writing is</p>
--	--	---	--

		<p>b. “hay or wood chips...”</p> <p>c. “throughout the year...”</p> <p>d. “cooler, northern states...”</p> <p><i>[Here follows an excerpt from “A Tale of Segregation: Fetching Water”]</i></p> <p>5.1. 11. William and his father had been waiting for a long time when two white men stopped them. What evidence from the passage supports this conclusion?</p> <p>a. “But the people ahead of us, they were all white.”</p> <p>b. “When all the white people finished getting their water, Dad got his water.”</p> <p>c. “When we had reached our turn, two white men grabbed my dad.”</p> <p>d. “We had waited there for about 30 minutes.”</p> <p>5.1. 12. Why did the two white men make William and his father wait?</p> <p>a. They thought that white people deserve to go first.</p> <p>b. They thought that William and his father did not need water.</p> <p>c. The white men were in a hurry and did not want to wait.</p> <p>d. They thought that William and his father had cut in line.</p> <p>5.1. 13. What is the passage mostly about?</p> <p>a. how to fetch water from a spring</p> <p>b. an account or memory of segregation</p> <p>c. the end of segregation in the US</p>	<p>inherently Creating, since the student is fusing information from all three pieces into a new, cohesive whole.</p>
--	--	--	--

		<p>d. a fictional story about segregation</p> <p>5.1. 14. Read the following sentence: "The memory of a traumatic childhood incident near his hometown of Spiro, Oklahoma still brings tears to the eyes of William Minner..." What was the author's purpose?</p> <ul style="list-style-type: none">a. to introduce William's personal story to help the reader understand segregationb. to tell the reader the story is fictionalc. to inform the audience as to who William Minner isd. to describe the aftermath of his story <p>5.1. 15. Choose the answer that best completes the sentence below.</p> <p>William's father told the two white men that he would come back later to get their water, _____ the white men made him stay and wait.</p> <ul style="list-style-type: none">a. sob. alsoc. afterd. but	
--	--	---	--