STAAR
Camp Adventures

Mission #1
Mission #2
Mission #3
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Mission #6
Welcome to STAAR Camp Adventures!

To introduce STAAR Camp Adventures, click on the picture of Mr. Thomas, Outdoor Education Coordinator, and listen as he asks students to remember how they planned for their trip to camp. Have students write their “Planning Tips” in the chart provided on the first page of the student handout. To help with the discussion, ask questions such as: How many remember going to camp? Did you have to prepare before you went? What did you take with you? Did you have to get organized? Did you have to plan ahead? etc. Then as a class, brainstorm ways to get ready to take the STAAR Test. Ask questions such as: What can you do as a student to get ready for the STAAR Test? Will you need to use your previous knowledge? Will you need tools? What strategies might you use to work problems? Have students write these suggestions in the “Preparing for STAAR” section of the chart.

Introduce the TEK that will be addressed.

The Warm Up section of the lessons includes two problems. Allow students to work the problem as a class. Students should enter their answer in the “warm up” section of the student sheet, then discuss the answers.

After students read the problem, advance the slide to see the first warm-up questions.
**Slide 5**

**Mission #1 - WARM UP**

Based on the information in the table, which comparison about the amount of yellow leaves is true? Write 2 more comparison statements using the amounts in the table and the symbols, >, <, or =.

<table>
<thead>
<tr>
<th>Student</th>
<th>Amounts of Yellow Leaves</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jared</td>
<td>0.228</td>
</tr>
<tr>
<td>Rosa</td>
<td>0.45</td>
</tr>
<tr>
<td>Jen</td>
<td>0.375</td>
</tr>
<tr>
<td>Chris</td>
<td>0.452</td>
</tr>
</tbody>
</table>

A. Rosa's leaves < Jared's leaves  
B. Jen's leaves > Rosa's leaves  
C. Chris's leaves = Rosa's leaves  
D. Jared's leaves < Jen's leaves

Jared's leaves < Jen's leaves is the correct answer. Ask students to share the additional comparison statements they have written.

**Slide 6**

**Mission #1 - WARM UP**

2. John and Bobby were walking on the Forest Adventure Trail. John wanted to see how long it took to walk the trail. At the first stop, he looked at his stopwatch and his time was 13.434 seconds. How would you write 13.434 seconds in expanded form?

The answer is $10 + 3 + 0.4 + 0.03 + 0.004$. Writing decimals in expanded form is a supporting standard in this strand.

**Slide 7**

**Mission #1 - WARM UP**

2. Bobby was also timing his walk. His stopwatch read 13.443 seconds. He wanted to compare his time to John's. Which symbol would he use (>, <, or =) to make this statement true?

$13.434 \underline{<} 13.443$

The answer is $13.434 < 13.443$.

**Slide 8**

**Mission #1 - EXPLORATION**

1. At the Challenge Course, cabins are competing against each other at The Wall. The goal is to get all 12 cabin mates over the wall in the shortest amount of time. The Verbena cabin thinks they have the fastest time.

Continue to the next slide

**Slide 9**

**Mission #1 - EXPLORATION**

Based on the table, which two cabins had a faster time?

<table>
<thead>
<tr>
<th>Cabin</th>
<th>Time (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dogtooth Violet</td>
<td>4.450</td>
</tr>
<tr>
<td>Basket Flower</td>
<td>4.405</td>
</tr>
<tr>
<td>Smartweed</td>
<td>4.455</td>
</tr>
<tr>
<td>Lemon Mint</td>
<td>4.454</td>
</tr>
<tr>
<td>Verbena</td>
<td>4.45</td>
</tr>
</tbody>
</table>

The correct answers are the Smartweed and Lemon Mint cabins.
2. Several buses were used to take students to camp in September. When bus #4 returned to Plano, it stopped at the gas station to buy gasoline. It took 48.264 gallons to fill the tank.

Find 3 decimal numbers that round to 48.26 when rounded to the nearest hundredth and also round to 48.3 when rounded to the nearest tenth. List the 3 numbers in order from least to greatest.

Possible answers include any number from 48.255 through 48.263. Discuss why the other choices would be incorrect. Answers will vary for the second part based on the numbers chosen for the first part of the activity.

3. The students collected water organisms as one of their activities at camp. Mrs. Jamison wrote the types of water organisms and their total mass in grams on the board.

<table>
<thead>
<tr>
<th>Water Organisms</th>
<th>Mass (grams)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mosquito Larvae</td>
<td>0.375</td>
</tr>
<tr>
<td>Dragonfly Nymph</td>
<td>0.188</td>
</tr>
<tr>
<td>Minnow</td>
<td>0.63</td>
</tr>
<tr>
<td>Water Boatman</td>
<td>0.25</td>
</tr>
</tbody>
</table>

Which correctly compares two of these decimals in the table?

- E. 0.375 > 0.188
- F. 0.63 < 0.188
- G. 0.188 > 0.63
- H. 0.25 < 0.188

E is the correct answer.

4. Teddy, Emily, and Sam each bought some candy at the camp store. They each bought 16 pieces of candy. Teddy ate 3.740 of his candy as soon as he opened the bag. Emily ate 3.704 of her candy. Sam ate 3.074 of his candy. Who ate the most candy?

Teddy is the correct answer.
Have students write about what they learned today. Encourage them to use the vocabulary listed.

**Mission #2**

**Slide 1**

**Mission #2 - STAAR Journal**

In the space in your journal, share what you learned today. Include these words:
- decimal
- thousandths
- greater than
- less than
- compare

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**Slide 2**

**STAAR Camp Adventures**

**Mission #2**

5.3E Solve for products of decimals to the hundredths, including situations involving money, using strategies based on place-value understandings, properties of operations, and the relationship to the multiplication of whole numbers.

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**Slide 3**

**Mission #2 - WARM UP**

1. The lake area at camp is very popular. Some people are out in the boats while others are fishing from the pier. Today 28 students are fishing from the pier. The students are using hot dogs as bait. The camp bought 15 packages of hot dogs for the week of camp. Each package of hot dogs costs $3.89.
   
   How much did the camp spend on bait?

The correct answer is $58.35.

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**Slide 4**

**Mission #2 - WARM UP**

Before anybody else could start working, Jane said that the hot dogs would cost less than $100. Is she correct? How did she answer so quickly?

By using estimation strategies – $3.89 is almost 4 dollars. 4 x 15 is 60.
2. At camp there are 26 cabins. Each cabin has 24 campers. The campers in 5 cabins decide to walk around their cabin circle one time. The distance around the circle is 0.28 of a mile. What is the total distance walked by the students who walked the circle?

24 x 5 x 0.28 = 33.6 miles is the correct answer.

D is the correct answer. Ask students to find the total rainfall (7.35 inches.).

$146.25 is the correct answer.

$1,537.90 is the correct answer.

The correct answer is 0.28 of a yard. (Click to show the completed grid.)
Mission #2 - EXPLORATION
The teachers realized they needed more rope. They found another piece of rope that measured 0.5 yard. They decided they needed to use 0.3 of the rope. The decimal model represents 1 yard of rope. Use the decimal model to find out how much rope they used.

Click to reveal the shaded grid. The answer is 0.15 of a yard.

Mission #2 - STAAR Journal
In the space in your journal, share what you learned today. Include these words:
product
decimals
hundredths
place value
multiplication
strategies
array

Have students write about what they learned today. Stress the importance of using the vocabulary addressed.

Mission #3

Slide 1

Introduce the TEK.

Slide 2

The correct answers are: 14 cartons; 13.5 cartons

1. The camp kitchen uses a lot of eggs. This year the eggs did not come in cartons of 12 as they usually do. If the staff at camp received 162 eggs and they put them in cartons of 12, how many cartons would they use?
2. One October, 323 campers went to camp. Each cabin can hold 12 students. How many cabins are needed to house the students? How many students would be in each cabin?

Ask students to work the problem, then advance to the next slide and ask them to select the correct answer.

C is the correct answer.

$5.02 is the correct answer. Allow students to explain how they solved the problem. Advance to the next slide to have students select the steps to solve the problem.

D is the correct answer. Allow students to explain how they solved the problem.

8 pretzel sticks for $7.28 is the best deal. The price per stick for this is $0.91.
3. A new shipment of rice arrived at camp. There were 57 equal-sized bags of rice. The kitchen staff put the bags on 3 shelves. The total weight of the rice was 54.72 pounds. How much did each bag of rice weigh?

0.96 lb. is the correct answer.

4. The teachers are purchasing pencils for the students who are going to camp. The prices are shown below.

• 24 pencils for $8.88
• 20 pencils for $7.00
• 30 pencils for $9.90
• 15 pencils for $6.00

Which option should the teachers choose for the lowest cost per pencil?

30 pencils for $9.90 is the lowest cost per pencil.

Have students write about what they learned today. Stress the importance of using the vocabulary addressed.

Mission #4

5.3K Add and subtract positive rational numbers fluently. Read and discuss the TEK.
They used 11 7/8 pounds of fruit this week. They used 3 3/8 more pounds of fruit last week. Discuss.

The camp will use 2 1/12 more acres for cabins. The camp will have 7 5/12 acres available for education activities.

4 5/12 hours is the correct answer.

8.08 miles is the difference traveled by the two buses. The total round trip distance is 198.64 miles.

$23.19 is the correct answer.
4. During an ice storm, a huge branch fell from a tree in the forest. The branch was 7.2 meters long. The workers had to cut the branch into 3 pieces in order to load it on the truck. The first piece of the branch was 2.2 meters long and the second piece was 1.9 meters long. How long was the third piece of the branch?

2.9 m is the correct answer. Ask students to explain their work.

Have students write about what they learned today. Stress the importance of using the vocabulary addressed.

Mission #5

Read and discuss the TEK. This mission also addresses TEK 5.3J – represent division of a unit fraction by a whole number and the division of a whole number by a unit fraction using objects and pictorial models.

1/8 is the correct answer.

Mission #5 - WARM UP

1. Pizza is on the menu for lunch today. There is \( \frac{1}{2} \) of a pepperoni pizza. Scott, Emily, Mark, and Joshua agree to share the pepperoni pizza for lunch. What fraction of a pizza will each person get to eat?
Slide 3

Mission #5 - WARM UP
2. The staff at camp is making cookies for dessert. Sugar comes in 5 pound bags. Each batch of cookies uses $\frac{1}{4}$ cup of sugar. How many batches of cookies will the staff be able to make with one bag of sugar?

The answer is 15 batches. Allow students to explain their reasoning.

Slide 4

Mission #5 - EXPLORATION
1. One of the best parts of camp is making s’mores at the campfire. The counselors had 24 chocolate bars. Each s’more uses $\frac{1}{2}$ of a bar. How many s’mores can they make using 15 candy bars?

The answer is 48 s’mores.

Slide 5

Mission #5 - EXPLORATION
1. Sara picks up some rocks on a hike. She decides to share $\frac{1}{4}$ of her rocks equally with her four friends. What fraction of her rocks will she give to each friend?

The answer is $\frac{1}{12}$ of her rock collection.

Slide 6

Mission #5 - EXPLORATION
2. The staff at camp needs to make some new pipes for the Pipeline activity. They buy a piece of pipe that is 15 feet long. If each piece of pipe for the activity is $\frac{1}{2}$ of a foot, how many pieces will they make?

45 pieces of pipe is the correct answer.

Slide 7

Mission #5 - EXPLORATION
3. Betsy’s birthday is one of the days she is at camp. The staff bakes cupcakes to help celebrate. The cook used $\frac{1}{2}$ cup of sugar in the batter and then divided the batter equally into 12 sections of a muffin pan. What fraction of a cup of sugar will each cupcake contain?

$\frac{1}{36}$ cup is the correct answer.
4. The water in the aquarium is too low so Brian offers to add more. The aquarium holds 30 gallons. He needs to add 15 gallons of fresh water. The pitcher he uses holds \(\frac{1}{2}\) of a gallon. How many times will Brian have to fill the pitcher in order to fill the aquarium?

C is the correct answer.

Have students write about what they learned today. Stress the importance of using the vocabulary addressed.

Mission #6

Introduce the TEK.

The answer is \(t \times 6 = l\) where \(t\) = tables and \(l\) = legs. The missing numbers for legs are 108 and 276. Missing number for tables 32.
2. The students were asked to collect tadpoles from the lake. Each student was given a container that can hold 9 tadpoles. Complete the table. Write and solve an equation that could be used to find \( t \), the total number of tadpoles collected by the group of 13 students.

<table>
<thead>
<tr>
<th>Containers</th>
<th>Tadpoles</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>36</td>
</tr>
<tr>
<td>5</td>
<td>45</td>
</tr>
<tr>
<td>6</td>
<td>54</td>
</tr>
<tr>
<td>81</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

\[ t = 13 \times 9; t = 117 \]

The answer is \( t = 13 \times 9; t = 117 \)

1. Students at camp love ice cream for dessert. On the first day of camp there were 16 boxes of 12 fudgsicles and 13 boxes of 24 ice cream sandwiches in the freezer. On the first day, 165 students had either a fudgsicle or an ice cream sandwich for dessert. Write and solve an equation to find \( n \), the number of ice cream treats in the freezer after day 1.

\[ n = (16 \times 12) + (13 \times 24) – 165 \]

\[ n = 339 \]

The answer is \( n = (16 \times 12) + (13 \times 24) – 165 \) \( n = 339 \)

2. The dining hall is a busy place. There are 308 children and adults in the dining hall. Each table holds 12 children. There are 44 adults in the dining hall. Write and solve an equation to find \( c \), the number of tables needed to seat the children in the dining hall.

\[ 308 = (t \times 12) + 44; t = 22 \]

The correct answer is \( 308 = (t \times 12) + 44; t = 22 \)

3. Mary went to the Camp Store to buy some souvenirs. She had $20 to spend. She picked out a T-shirt for $12.00 and two friendship bracelets for $2.50 each. Mary wanted to buy some Gatorade for $1.75. Does Mary have enough money? Write an equation that could Mary use to find \( m \), the amount of money she has spent so far?

\[ (2 \times 12) + 2 \times 2.50 = m \]
\[ 2 + 2.50 + 12 = m \]
\[ (2 \times 2.50) + 12 = m \]
\[ 2.50 + 12 = m \]

Continued →

Have students write and solve an equation and then move to the next slide to select the equation from a list of answer choices.

Which equation could Mary use to find \( m \), the amount of money she has spent so far?

a. \( (2 \times 12) + 2.50 = m \)
b. \( 2 + 2.50 + 12 = m \)
c. \( (2 \times 2.50) + 12 = m \)
d. \( 2.50 + 12 = m \)

The correct answer is C. As an extension, ask students to generate other problems and equations using the data from the camp store price list.
4. Archery is a favorite activity for many students. You can earn points to feed your family if your arrow lands on different regions of the target.

- Yellow: 10 points
- Red: 8 points
- Blue: 6 points
- Black: 4 points
- White: 2 points

Continued 

4. Mary, Belinda, and Jessica all had the same score after they shot three rounds. Their total score was 144 points. Debbie is in an archery club and she is very accurate. Her score after three rounds was twice as much as Mary’s. What was Debbie’s score? Write and solve an equation to find $s$, Debbie’s score after three rounds.

Debbie scored 98 points. $(144 \div 3) \times 2 = s$

In the space in your journal, share what you learned today. Include these words: expression, equation, unknown.

Have students write about what they learned today. Stress the importance of using the vocabulary addressed.