STAAR Adventures at Ripley's Believe It or Not!

Mission 7
Mission 8
Mission 9
Mission 10
Mission 11
Mission 12
Mission 13
Welcome to STAAR Ripley’s Believe it or not.

Each day discuss the TEK that will be addressed.

114 tickets is the correct answer. Allow students to explain their answers.

D is the correct answer. Allow students to explain their answers.
1. Jill and Tim are trying to save for a ticket to the museum. Jill has 2,796 pennies and Tim has twice as many as that. Which strip diagram represents how many pennies they have?

- **a.**
- **b.**
- **c.**
- **d.**

**B is the correct answer.** Allow students to explain their answers.

2. The 4 people working at the Ripley’s museum were asked to clean windows. If there are 2 rows of windows with 24 windows in each row, there are w windows total. Each person needs to clean the same number of windows. Which equations help solve for the number of windows each person will clean?

- **a.** $2 \times 24 = w$, then $w \div 4$
- **b.** $24 \div 2 = w$, then $w \times 4$
- **c.** $w \times 4 = 24$
- **d.** $2 \times w = 24$, then $w \div 4$

**A is the correct answer.** Allow students to explain their answers.

3. The Odditorium was having a rare coin exhibit. The students at the exhibit were asked to solve a problem using the table.

<table>
<thead>
<tr>
<th>Rare coins</th>
<th>0</th>
<th>2</th>
<th>5</th>
<th>8</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value in Cents</td>
<td>0</td>
<td>18</td>
<td>45</td>
<td>72</td>
<td>90</td>
</tr>
</tbody>
</table>

To get the value in cents they used the rule $n \times 5 + 3$. What is the value in cents for 8 rare coins?

43 cents is the correct answer. Allow students to explain their answers. (You could allow students to give the other values as well or have them write their own problem with the table.)

Continue on next slide.

4. The Ripley’s in San Francisco has a human kaleidoscope. It is made of many glass panels built within hexagonal walls. Seven walls make up the kaleidoscope. The kaleidoscope has a total of 420 glass panels.

A is the correct answer.

Which strip diagram and equation best represents the glass panels used to build it?

- **a.**
- **b.**
- **c.**
- **d.**
Students should write about what they learned today in the space provided at the end of the student handout. (If your class already has a math journal, they could write in it instead.)

**Mission 8**

**Slide 1**

Welcome to STAAR Ripley’s Believe it or not.

**Slide 2**

Each day discuss the TEK that will be addressed.

**Slide 3**

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

11 C is the correct answer.
2. Believe It or Not, Lee Redmond is the human with the longest fingernails. The table below shows the rate at which her fingernails grow.

At this rate, how long will her nails grow in 28 days?

<table>
<thead>
<tr>
<th>Number of Days</th>
<th>Expression</th>
<th>Amount of growth in mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1 x 3</td>
<td>3 mm</td>
</tr>
<tr>
<td>2</td>
<td>2 x 3</td>
<td>6 mm</td>
</tr>
<tr>
<td>3</td>
<td>3 x 3</td>
<td>9 mm</td>
</tr>
<tr>
<td>4</td>
<td>4 x 3</td>
<td>12 mm</td>
</tr>
<tr>
<td>5</td>
<td>5 x 3</td>
<td>15 mm</td>
</tr>
<tr>
<td>6</td>
<td>6 x 3</td>
<td>18 mm</td>
</tr>
</tbody>
</table>

At this rate, how long will her fingernails grow in 28 days?

84 mm is the correct answer.

There will be 4 “Explorations” problems. Students could work independently, in partners, groups, etc....whatever works best for your students. As a class, discuss the answers and strategies used. Allow students to explain their answer choices.

B is the correct answer.

A is the correct answer.

The correct answer is A

200 hrs. x 4 = 800 hrs. washing is the correct answer.
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Mission 9

Welcome to STAAR Ripley’s Believe it or not.

Each day discuss 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, then press “enter” to allow each of the answers slide in. Students should enter their answer in the “warm up” section of the student sheet, then discuss the answers.

25 x 20 feet so the perimeter would be 90 feet.
Slide 4

**Mission #9**

**WARM UP**

2. The London Ripley’s has a bottle cap portrait of Michelle Obama. The portrait measures 8 ft. by 10 ft. Which of the following is a true statement about the area of her face?

   a. It is equal to 80 sq. ft.
   b. It is less than 80 sq. ft.
   c. It is equal to 63 sq. ft.
   d. It is greater than 80 sq. ft.

   \[
   \text{Area} = \text{length} \times \text{width} = 8 \times 10 = 80 \text{ sq. ft.}
   \]

   B is the correct answer.

Slide 5

**Mission #9**

**EXPLORATION**

1. The most popular attraction is Ripley’s Laser Race. The dimensions of the room are 18 feet by 32 feet. There is a recharging station inside the room measures 3 feet by 4 feet. If we don’t count the recharging station, what is the total playing area of the room?

   a. 576 square feet
   b. 588 square feet
   c. 564 square feet
   d. 12 square feet

   \[
   \text{Total Playing Area} = (18 \times 32) - (3 \times 4) = 576 - 12 = 564 \text{ square feet}
   \]

   C is the correct answer.

Slide 6

**Mission #9**

**EXPLORATION**

2. The Ripley’s in London has a temporary m&m’s exhibit. The designer created a walkway for the famous m&m’s. He created a black border around each white rectangle shown below. He used 9 white rectangles for the walkway connecting each rectangle on the longest side.

   What is the total amount of border he will need for the walkway?

   \[
   \text{Total Border} = 9 \times (2 \times \text{width} + 2 \times \text{length}) = 9 \times (2 \times 14 + 2 \times 42) = 9 \times 100 = 900 \text{ inches}
   \]

   Since he connected 9 white rectangles, the width of each side is 126 inches (14 x 9).

   The length is 42 inches for ten sides because you would not count the shared sides twice (42 x 10).

   \[
   126 + (42 \times 10) + 126 = 672 \text{ inches}
   \]

   The perimeter for all nine squares connected is 672 inches of border.

   D is the correct answer.

Slide 7

**Mission #9**

**EXPLORATION**

3. Ripley’s has an invisible box in the children’s area. They are replacing the bottom frame on the box. The height of the cube is 4 feet. Which of the following expressions can be used to show the total length of frame needed to frame the base of the box?

   a. \(4 \times 16\)
   b. \((4 \times 4) + (2 \times 4)\)
   c. \(4 \times 4 \times 4\)
   d. \(4 \times (16 + 4)\)

   \[
   \text{Total Length} = 4 \times (16 + 4) = 4 \times 20 = 80 \text{ inches}
   \]

   Allowing students to explain their answers.

   B is the correct answer.

Slide 8

**Mission #9**

**EXPLORATION**

2. The Cat Man is a real person who has changed his appearance to look like a cat. The museum is adding a new rug to compliment the Cat Man’s room. The rug has a length of 16 ft. and a width of 8 ft., but it’s too big for the room.

   a. 28 feet
   b. 21 feet
   c. 22 feet
   d. 24 feet

   If we cut the dimensions of the rug in half, what will the new perimeter be?

   \[
   \text{New Perimeter} = \frac{16}{2} + \frac{8}{2} = 8 + 4 = 12 \text{ feet}
   \]

   D is the correct answer.
Students should write about what they learned today in the space provided at the end of the student handout. (If your class already has a math journal, they could write in it instead.)

**Mission 10**

**Slide 1**

Welcome to STAAR Ripley’s Believe it or not.

**Slide 2**

Each day discuss the TEK that will be addressed.

**Slide 3**

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

D is the correct answer.

There will be 4 “Explorations” problems. Students could work independently, in partners, groups, etc....whatever works best for your students. As a class, discuss the answers and strategies used. Allow students to explain their answer choices.

B is the correct answer.

C is the correct answer.

A is the correct answer.

Allow students to explain their answers. C is the correct answer.
4. At the end of their trip, students were asked to identify the characteristics of the map around the museum. Which street appears to be perpendicular to Haymarket Street?
   a. Regent St.
   b. Great Windmill St.
   c. Jermyn St.
   d. Carlton St.

C is the correct answer.

In the space in your journal, share what you learned today. Include these words: characteristic, parallel, perpendicular, angles.

C is the correct answer.

Students should write about what they learned today in the space provided at the end of the student handout. (If your class already has a math journal, they could write in it instead.)

Mission 11

Each day discuss 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, then press “enter” to allow each of the answers slide in. Students should enter their answer in the “warm up” section of the student sheet, then discuss the answers.

120 degrees
Slide 3

This is TEK 4.7(E) to determine the measure of an unknown angle measure given known angle measures.

72 degrees is the answer.

Slide 4

There will be 4 “Explorations” problems. Students could work independently, in partners, groups, etc....whatever works best for your students. As a class, discuss the answers and strategies used. Allow students to explain their answer choices. **30 degrees**

Slide 5

**B** is the correct answer.

Slide 6

Allow students to explain their answers. **The two angles are < bed and < dec**.

Slide 7

The total measure is 42 degrees.
In the space in your journal, share what you learned today. Include these words:
- degree (°)
- angle measure
- vertex
- protractor

Students should write about what they learned today in the space provided at the end of the student handout. (If your class already has a math journal, they could write in it instead.)

**Mission 12**

**Slide 1**

4.8C Solve problems that deal with measurements of length, intervals of time, liquid volumes, mass, and money using addition, subtraction, multiplication, or division as appropriate.

**Slide 2**

1. The museum wants to place a walkway from the T-Rex sculpture to the ticket counter at the Ripley’s in Grand Prairie. The distance from the T-Rex to the museum front door is 12 yards. The distance from the museum front door to the ticket counter is 15 yards.

   **WARM UP**

   Mission #12

   How long will the walkway be in feet?
   - a. 28 ft
   - b. 42 ft
   - c. 84 ft
   - d. 336 ft

   C is the correct answer.

**Slide 3**

2. The Ripley’s in San Antonio has an exhibit where visitors can make a wax hand to take home. They have staff divide an equal amount of wax into molds. The total mass of the wax is 24 kilograms.

   **WARM UP**

   Mission #12

   How many grams of wax would be in 6 molds?
   - a. 4,000 grams
   - b. 1,440 grams
   - c. 144 grams
   - d. 400 grams

   A is the correct answer.

Each day discuss the TEK that will be addressed.
There will be 4 “Explorations” problems. Students could work independently, in partners, groups, etc....whatever works best for your students. As a class, discuss the answers and strategies used. Allow students to explain their answer choices. **C is the correct answer.**

**Slide 5**

**Mission #12 EXPLORATION**

2. The Ripley’s wax museum has a live Hogwarts simulation that lasts 25 minutes. The actors also have a rehearsal that lasts 1 hour and 10 minutes. They also perform 3 live shows every day. How many total minutes do the actors practice and perform every day?
   a. 145 minutes
   b. 105 minutes
   c. 75 minutes
   d. 1 hour.

**A is the correct answer.**

**Allow students to explain their answers. C is the correct answer.**

**Slide 6**

**Mission #12 EXPLORATION**

3. Believe It or Not, Linda Lee Curtis is an artist who paints masterpieces on potato chips. The gift shop sells 2 sizes of copies of these chips to visitors. The school buys 23 large chips and 19 small chips. The large chips cost $7 each and small chips cost $4 each. What is the amount of money the school spent on chips?
   a. $42
   b. $76
   c. $237
   d. $161

**C is the correct answer.**

**Slide 7**

**Mission #12 EXPLORATION**

4. The Ripley’s Aquarium in Canada was looking to create a fish exhibit with clown fish and sharks. The clown fish tank holds 175,000 milliliters of water and the shark tank holds 500 liters. How much water will be needed for the new tanks?
   a. 775,000 ml
   b. 560 L
   c. 175,500 ml
   d. 675 L

**D is the correct answer.**

**Slide 8**

**Mission #12 STAAR Journal**

In the space in your journal, share what you learned today. Include these words:
- customary units
- metric units
- gram
- kilogram
- time intervals

Students should write about what they learned today in the space provided at the end of the student handout. (If your class already has a math journal, they could write in it instead.)
Mission 13

Slide 1

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

Slide 2

Mission #13

Each day discuss the TEK that will be addressed.

Slide 3

Place a dot on the dot plot to represent each famous person’s height. Write 2 statements that are true about the heights of the wax figures.

Slide 4

Allow students to plot in their journal and encourage a variety of different true statements.

Answers will vary. Encourage a variety of different answers and class discussion.
1. The stem-and-leaf plot below shows the number of sculptures in different Wax Museum in the United States. Based on the given information, which statement is correct?
   a. There are 13 wax museums, and most of them have about 30 wax figures.
   b. There are 16 wax museums, and they all have the same number of wax figures.
   c. There are 13 wax museums, and three of them have 45 wax figures.
   d. There are 30 wax museums, and they have 38 figures.

   C is the correct answer.

2. The frequency table shows how many students visited Ripley’s in Grand Prairie during March. Create a dot plot to represent the information.

   Group size
   28 23 16 31 25 32 18
   Frequency
   1 3 2 4 5 4 6

   How many groups had more than 24 students during the month of March?

   Allow students to explain their answers. The sample is shown below. On 7 days they will not add chlorine.

   Stem  Leaf
   1 7 9
   2 1 1 1 2 2
   3 4 5 5 5 6
   4 0 1 2

   B is the correct answer.

3. The resort at the Ripley’s in Niagara Falls counts the number of people that go swimming for 15 days. For every day with more than 25 swimmers, the staff will have to add chlorine to the pool. The staff is going to make a stem-and-leaf plot with the data. Show what the stem-and-leaf plot will look like. On how many days will they NOT add chlorine?

   Students should write about what they learned today in the space provided at the end of the student handout. (If your class already has a math journal, they could write in it instead.)