Short-Answer Question Rubric for Internet Field Trip/Journal

(This rubric can be used for assessing the Journal Response Questions and the Pizza Questions as they are like FCAT Response type Questions)

	2 points	**1 point**	**0 points**
Answering the Problem	You arrive at a correct answer.	You arrive at a partially correct answer.	Your answer was incorrect or not given at all.
Showing your Work	You follow the given directions in order to show how you solved the problem. All of the steps show correct math procedures.	You follow the given directions in an attempt to show how the problem was solved. Some of the steps show correct math procedures.	You make no attempt to show how you solved the problem, or all of the steps shown are incorrect.
Explaining & Interpreting your Answer	You explain how you solved the problem so correctly and completely that someone else can find the answer. When asked, you make true statements about the given answer.	You explain how you solved the problem, but leave out steps that are needed to guide the reader to the correct answer. When asked, you attempt to make true statements about the given answer.	Your explanations and interpretations are not correct, understood, or given.
Remember:	*A score of **two** means your work shows a complete understanding of the math concepts and procedures used in the problems.*	*A score of **one** means your work shows a partial understanding of the math concepts and procedures used in the task.*	*A score of **zero** means your work was completely incorrect, not understood, or that you gave no response at all.*

FCAT format adapted from Harcourt Brace & Company: The Math Advantage. Exploring Fractions Internet Field Trip Lesson Plan by Joseph M. Furner and Andrea Jacobsen, Florida Atlantic University, Beacon Lesson Plan #8238

Understanding Fractions Checklist
Lesson: Exploring Fractions Internet Field Trip

☐ Students are able to distinguish between whole and fractional parts

☐ Students can draw each fractional part: half, third, fourth, fifth, sixth, seventh, eighth,

☐ Students can label the geometric name for the pattern blocks and tell which fractional part each is to the whole hexagon

☐ Students can read and write fractions with denominators 2, 3, 4, 5, 6, 7, 8

☐ Students can compare fractional parts like wholes, halves, thirds, fourths, fifths, sixths, sevenths, and eighths using concrete objects (Pattern Blocks)

☐ Students can model fractional parts using the Pattern Blocks

☐ Students use appropriate geometric vocabulary to describe the pattern block shapes as fractions.

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Answer Key for the Assessment
Exploring Fraction Internet Field Trip

Part A

- **Students should answer all five problems correctly. Question 4 may be confusing due to the use of just using blue for 0/3.**

1. **d, 1/3**
2. **c, 1/2**
3. **b, 2/3**
4. **e, 0/3**
5. **a, 3/3**

Part B

- **Correct completion should include a picture drawn of a pizza divided into 7 equal parts and each child should receive 1/7 of the whole pizza.**

Part C

- **Students should write 1/7 and say something like because there are seven children who all must share one whole pizza equally and therefore each child should get 1/7 of the pizza (Statements may vary but should be supported by their pictures from Part B).**

Part D

- **While students are at: http://math.rice.edu/~lanius/Patterns/ they should arrow down to the heading "Determining the Relations." They should use their pattern blocks to answer questions 1-10 and write their answers on the lines provided using the correct geometric vocabulary to label each pattern block fraction piece. Answers to questions 7-10 can be written in the form of a fraction. They may click "check your answers" when they are done to get feedback on correctness of answers. Encourage them to draw the pictures and color each fraction problem.**

1. **There are 2 equilateral triangles in a Rhombus. (For example)**
2. **3**
3. **2**
4. **6**
5. **3**
6. **1 1/2**
7. **If a hexagon equals 1, then an equilateral triangle = 1/6**
8. **1/3**
9. **1/2**
10. **2/3**

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Part E

Journal Response Writing Activity:

1. How many ways can you divide an apple? (2 for 1/2's or in many other fractional parts) Use the hexagon from the Pattern Blocks to draw a hexagon representing the apple to help you answer this.

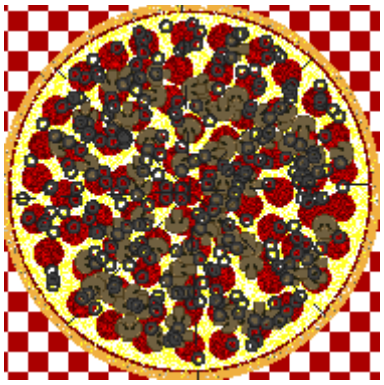
2. **What else can you divide in half? (Pizza, orange, toast) Draw pictures of other pattern blocks that can be divided in half.**
3. **Is it hard or easy to divide things equally? (It may be hard to get exact equal parts)**

Also add one more question for the students to think and write about:

4. **How does this book relate to what we learned about fractions on the Internet? (The examples in the book were dividing things into fractional parts like on the Internet with using the Pattern Blocks and Pizza example)**

Allow students to draw the pattern blocks and show each as a fractional part to the whole hexagon shape in their journals. (Students should be encouraged to draw each fractional part with the pattern blocks and label the fraction and correct geometric term associated with the block)

Assessment
Exploring Fractions Internet Field Trip



Part A

Web Site #1: Who Wants Pizza?

http://math.rice.edu/~lanius/fractions/frac.html

Directions: **Read the introduction to fractions at the top of the page and then follow the directions under the "something for you to do" heading. Click "Get Score" and write your score below, then answer the question.**

My "Who Wants Pizza?" score was _____

Part B
Question:

If 7 children shared the pizza equally, what fraction of the pizza did each child get?

Draw a picture of the pizza in the box to show how it would be divided, then write the fraction that each child received in the space provided. Check your answer in the box on the web site.

Part C

My Answer is _____
because _____

_____

_____

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Part D

Web Site #2: No Matter What Shape Your Fractions are In

http://math.rice.edu/~lanius/Patterns/

Directions: Arrow down to the heading "Determining the Relations." Use your pattern blocks to answer questions 1-10 and write your answers below. Write the answers to questions 7-10 in the form of a fraction. Click "check your answers" when you are done. Draw the pattern block shape and label its name and fraction.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Part E

Journal Response Writing Activity-In your Math Response Journal Answer the following Questions:

1. How many ways can you divide an apple? Use the hexagon from the Pattern Blocks to draw a hexagon representing the apple to help you answer this.

2. What else can you divide in half? Draw pictures of other pattern blocks that can be divided in half.

3. Is it hard or easy to divide things equally?

Also add one more question for the students to think and write about:

4. How does this book relate to what we learned about fractions on the Internet?

Allow students to draw the pattern blocks and show each as a fractional part to the whole hexagon shape in their journals.