

Materials List

Materials: (S) Blank paper Personal white board Math journal or fraction strips made in Lesson 21, new 4 14 -inch × 1-inch fraction strips (3 per student), crayons, personal white board, glue

Eureka Math

3rd Grade Module 5 Lesson 22

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Reflecting your Teaching Style and Learning Needs of Your Students

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Icons





Read, Draw, Write











Manipulatives Needed







Lesson 22

Objective: Generate simple equivalent fractions by using visual fraction models and the number line.

Suggested Lesson Structure

- Fluency Practice
 Application Problem
 Concept Development
 Student Debrief
 Total Time
- (12 minutes)
 (8 minutes)
 (30 minutes)
 (10 minutes)
 (60 minutes)





Objective: Generate simple equivalent fractions by using visual fraction models and the number line.



1. Students self-select a number and write a set of multiples up to that number's multiple of 10 vertically down the left-hand side of the page.

2. Select a multiple, and divide it by the original number.

3. Change papers and test a partner by selecting multiples out of order.

4. Redo Steps 1 and 2 to see improvement.





Counting by Fractions Equal to Whole Numbers on the Number Line (4 minutes)



Count by thirds

RDW Application Problem



Mr. Ramos wants to put a wire on the wall. He puts 9 nails equally spaced along the wire. Draw a number line representing the wire. Label it from 0 at the start of the wire to 1 at the end. Mark each fraction where Mr. Ramos puts each nail.

a. Build a number bond with unit fractions to 1 whole.b. Write the fraction of the nail that is equivalent to

1 of the wire.



Application Problem

Mr. Ramos wants to put a wire on the wall. He puts 9 nails equally spaced along the wire. Draw a number line representing the wire. Label it from 0 at the start of the wire to 1 at the end. Mark each fraction where Mr. Ramos puts each nail.

- a. Build a number bond with unit fractions to 1 whole.
- b. Write the fraction of the nail that is equivalent to
 - 1 of the wire.

Concept Development

Take out your math journal, and turn to the page where you glued your fraction strips yesterday. Name the fraction that is equivalent to 1 third.

Now, name the fractions that are equivalent to 1 half.

During our Debrief yesterday, I challenged you to find another fraction equivalent to 1 half, even though it wasn't shaded. You came up with $\frac{3}{6}$.



- Fold your strips into thirds, sixths, and twelfths.
- Label the unit fractions.

Then, shade
$$\begin{array}{cccc} 2 \\ 3 \\ 6 \\ \end{array}$$
 and $\begin{array}{cccc} 8 \\ 12 \\ 12 \end{array}$ to compare.
Is $\begin{array}{cccc} 8 \\ 12 \\ 12 \end{array}$ equivalent to $\begin{array}{cccc} 2 \\ 3 \\ 12 \end{array}$ and $\begin{array}{cccc} 4 \\ 6 \end{array}$?



Glue the equivalent fractions into their math journals and label them.

Let's look at a different model. These 3 wholes are the same. Name the shaded fraction as I point to the model.





Problem Set



A STORY OF UNITS

Lesson 22 Problem Set 3-5

N	3	m	0
1.4	a		C

Date

 Write the shaded fraction of each figure on the blank. Then, draw a line to match the equivalent fractions.





Debrief

What did you notice about the models in Problem 1? In Problem 1, which shapes were most difficult to match? Why?

What might be another way to draw a fraction equivalent to 4?

Look at Problem 2. What pattern do you notice between the 3 sets of models?

How does the pattern you noticed in Problem 2 relate to other parts of today's lesson?

Exit Ticket (3 minutes)



A STORY OF UNITS

Lesson 22 Exit Ticket 3.5

Name

1. Draw and label two models that show equivalent fractions.

2. Draw a number line that proves your thinking about Problem 1.

Date