

#### **Materials:**

(S) 4 14-inch × 1-inch fraction strips (5 per student), math journal, crayons, glue, personal white board, Blank paper

### Eureka Math

3rd Grade Module 5 Lesson 21

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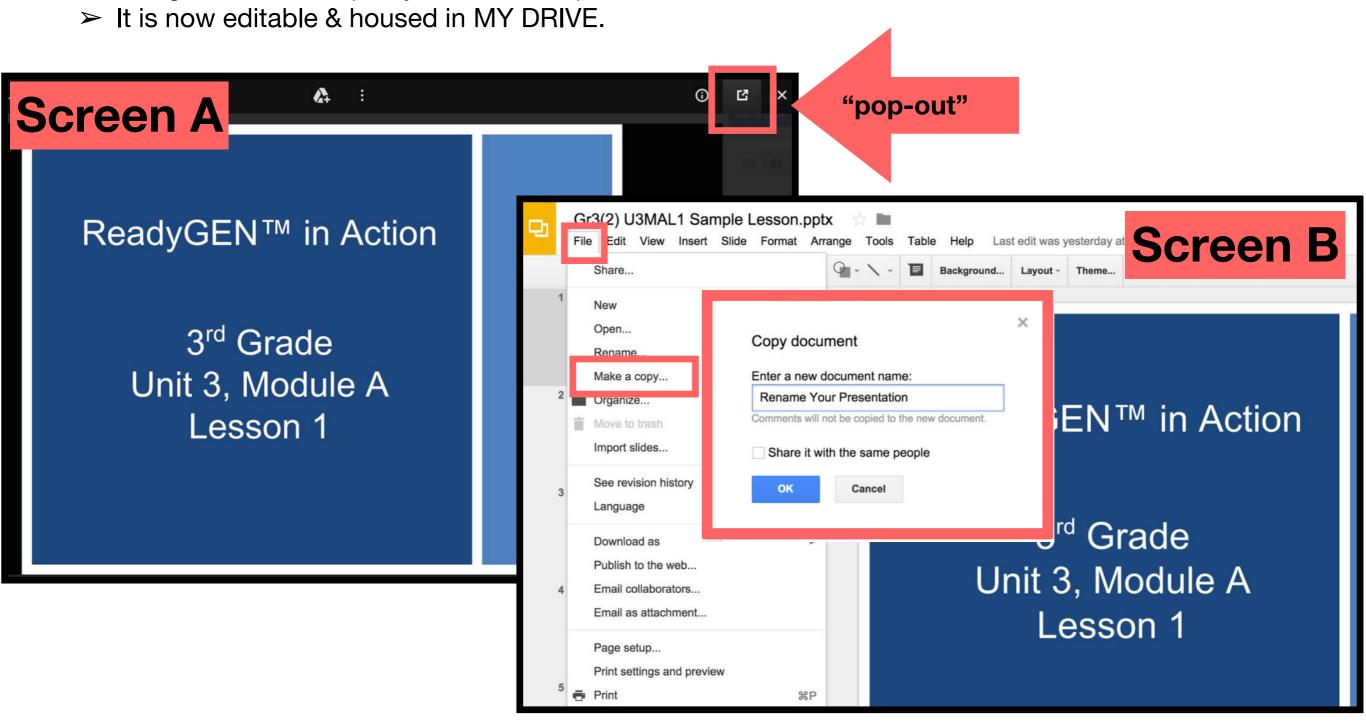


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#### Reflecting your Teaching Style and Learning Needs of Your Students

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- Google Slides will open your renamed presentation.



#### Icons



Read, Draw, Write



**Learning Target** 



Personal White Board



**Problem Set** 



Manipulatives Needed



Fluency



Think Pair Share



Whole Class



Individual



Partner



**Small Group** 



**Small Group Time** 

#### Lesson 21

Objective: Recognize and show that equivalent fractions refer to the same point on the number line.

#### **Suggested Lesson Structure**

Fluency Practice (12 minutes)

Application Problem (8 minutes)

Concept Development (30 minutes)

Student Debrief (10 minutes)

Total Time (60 minutes)





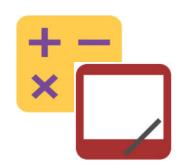
# Objective: Recognize and show that equivalent fractions refer to the same point on the number line.



### Fluency Practice

#### Whole Number Division (8 minutes)

- 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.

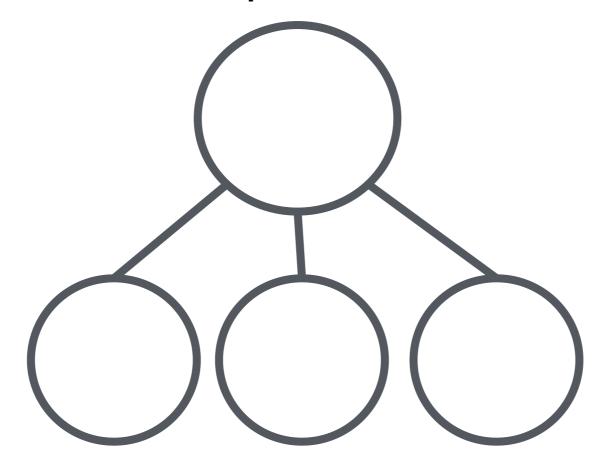


### Fluency Practice



1 Whole Expressed as Unit Fractions (4 minutes)

Draw a number bond that partitions a whole into 3 equal parts.



What is the unit fraction?



### Application Problem



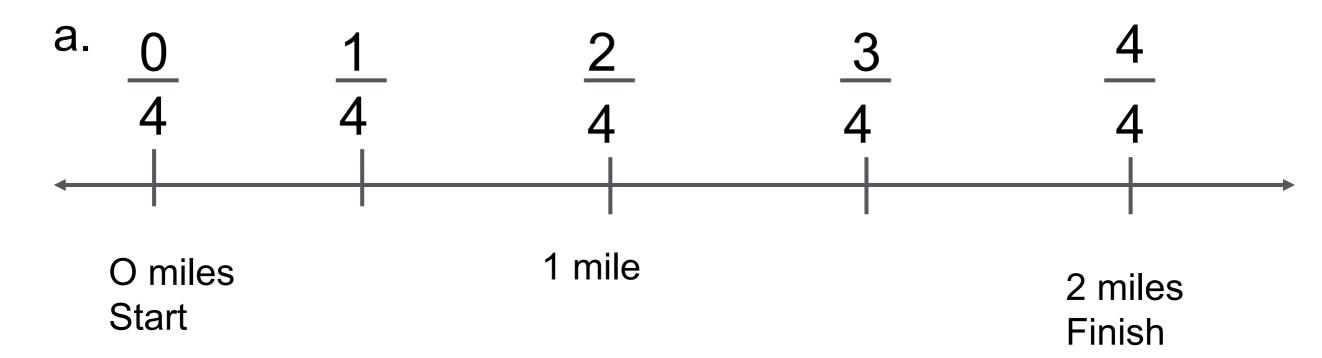
Dorothea is training to run a 2-mile race. She marks off her starting point and the finish line. To track her progress, she places a mark at 1 mile. She then places a mark halfway between her starting position and 1 mile, and another mark halfway between 1 mile and the finish line.

- a. Draw and label a number line to show the points Dorothea marks along her run.
- b. What fractional unit does Dorothea make as she marks the points on her run?
- c. What fraction of her run has she completed when she reaches the third marker?



### Application Problem

Dorothea is training to run a 2-mile race. She marks off her starting point and the finish line. To track her progress, she places a mark at 1 mile. She then places a mark halfway between her starting position and 1 mile, and another mark halfway between 1 mile and the finish line.



- b. Dorothea marks fourths.
- c. She has finished three fourths of her run when she gets to the third marker.



# Concept Development

We're going to make different fractional units with our fraction strips. Fold your first strip into halves.

Label each part with a unit fraction. Then, use a crayon to shade in 1 half.

Glue your fraction strip at the top of a new page in your math journal.

Fold another fraction strip to make fourths. Label each part with a unit fraction. Then, glue your fraction strip directly below the first one in your math journal. Make sure that the ends are lined up.



# Concept Development

Instruct students to follow the same process to label eighths independently.

Fold your last 2 fraction strips. One should be thirds, and the other should be sixths. Label the parts with unit fractions, and glue these strips below the others in your math journal in order from greatest to least. Shade 1 third. Then, shade the number of sixths equal to 1 third.

Now, work with your partner to measure and draw a new number line using your thirds and sixths. Then, using your other strips, find and label all of the fractions that are equivalent to thirds and sixths.

### Problem Set

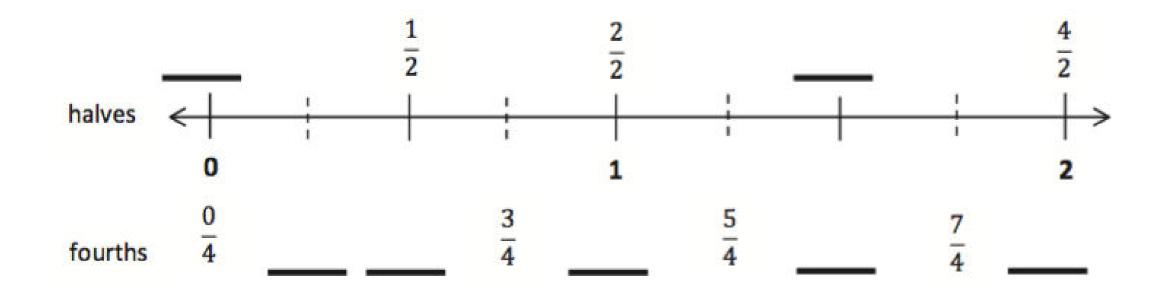
A STORY OF UNITS

Lesson 21 Problem Set 3.5

Name \_\_\_\_\_

Date

1. Use the fractional units on the left to count up on the number line. Label the missing fractions on the blanks.



### Debrief

Problems 4 and 5 use the fraction strips in their math journals to see if they can name another equivalent fraction.

Ask students to talk about how they know the fractions are equivalent and possibly plot them on the same number line to emphasize the lesson objective.

Problem 4: Study the fractions equivalent to 1 whole.

# Exit Ticket (3 minutes)



A STORY OF UNITS

Lesson 21 Exit Ticket 3.5

Name	Date	
Trailie .		_

Claire went home after school and told her mother that 1 whole is the same as  $\frac{2}{2}$  and  $\frac{6}{6}$ . Her mother asked why, but Claire couldn't explain. Use a number line and words to help Claire show and explain why

$$1=\frac{2}{2}=\frac{6}{6}$$
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