Materials List

(S) Multiply and Divide by Nine Sprint, personal white board

Eureka Math

3rd Grade
Module 5
Lesson 16

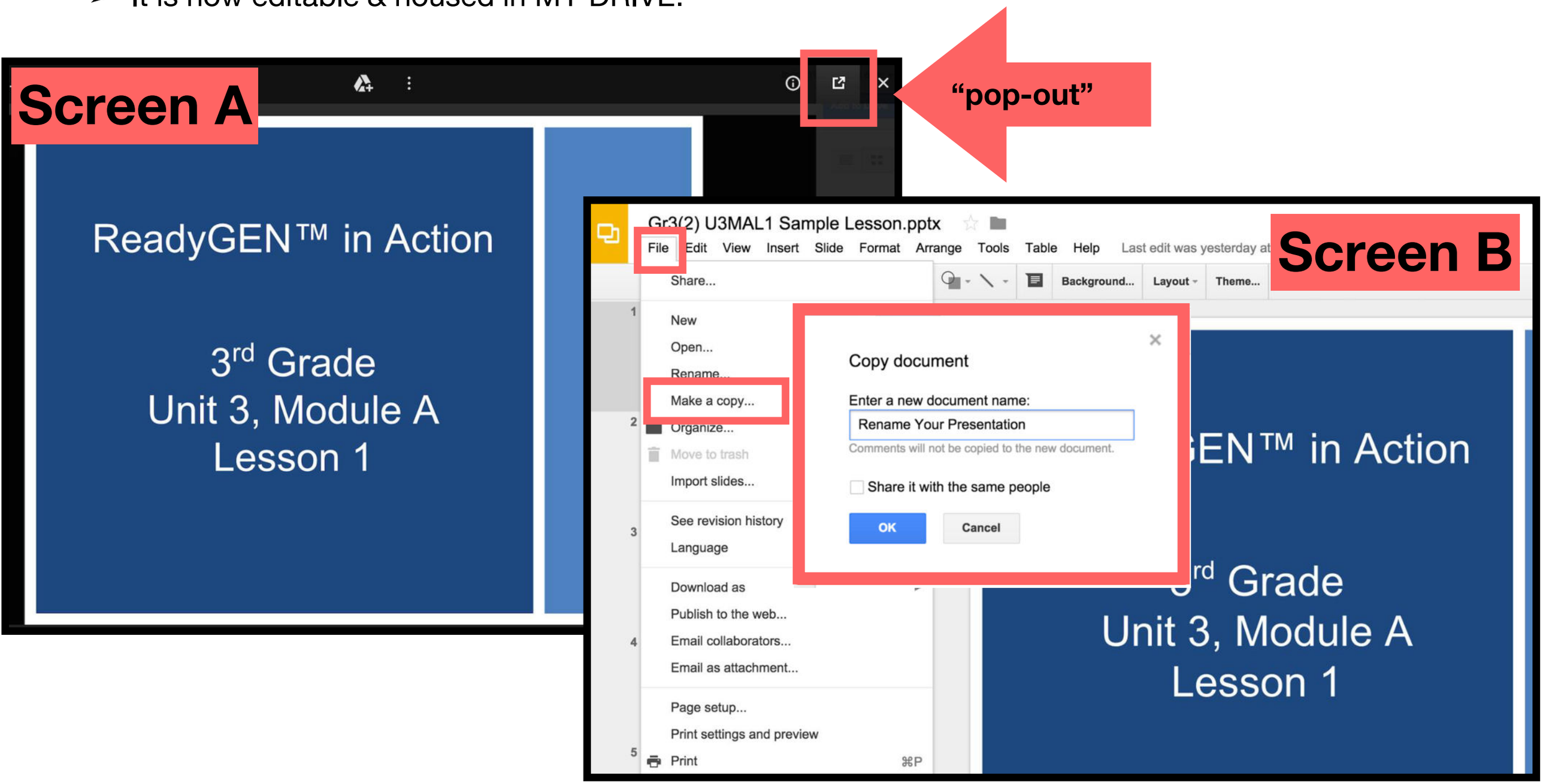
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this project!

Directions for customizing presentations are available on the next slide.

Customize this Slideshow

Reflecting your Teaching Style and Learning Needs of Your Students

- ➢ When the Google Slides presentation is opened, it will look like Screen A.
- ➢ Click on the “pop-out” button in the upper right hand corner to change the view.
- ➢ The view now looks like Screen B.
- ➢ Within Google Slides (not Chrome), choose FILE.
- ➢ Choose MAKE A COPY and rename your presentation.
- ➢ Google Slides will open your renamed presentation.
- ➢ It is now editable & housed in MY DRIVE.



Icons

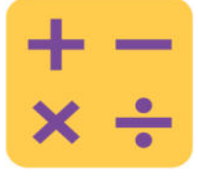
Read, Draw, Write

Learning Target

Personal White Board

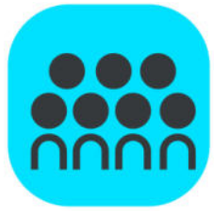
Problem Set

Manipulatives Needed



Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

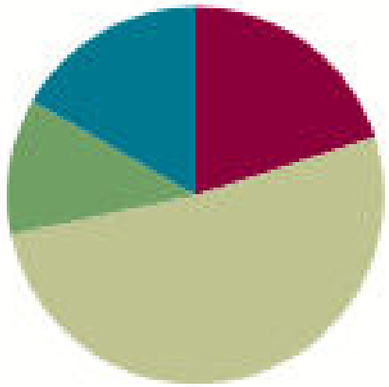
Small Group Time

Lesson 16

Objective: Place whole number fractions and fractions between whole numbers on the number line.

Suggested Lesson Structure

Fluency Practice	(12 minutes)
Application Problem	(7 minutes)
Concept Development	(31 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**



Objective: Place whole number fractions and fractions between whole numbers on the number line.

Fluency Practice

Sprint: Multiply and Divide by Nine (7 minutes)

A

Number Correct: _____

Multiply and Divide by Nine

1.	2 × 9 =	
2.	3 × 9 =	
3.	4 × 9 =	
4.	5 × 9 =	
5.	1 × 9 =	
6.	18 ÷ 9 =	
7.	27 ÷ 9 =	

23.	___ × 9 = 90	
24.	___ × 9 = 18	
25.	___ × 9 = 27	
26.	90 ÷ 9 =	
27.	45 ÷ 9 =	
28.	9 ÷ 9 =	
29.	18 ÷ 9 =	

Fluency Practice

Counting by Fractional Units (2 minutes)

Count by halves from 1 half to 6 halves and back to 0.

Fluency Practice

Place Fractions on a Number Line Between 0 and 1 (3 minutes)

Draw my number line on your personal white board.

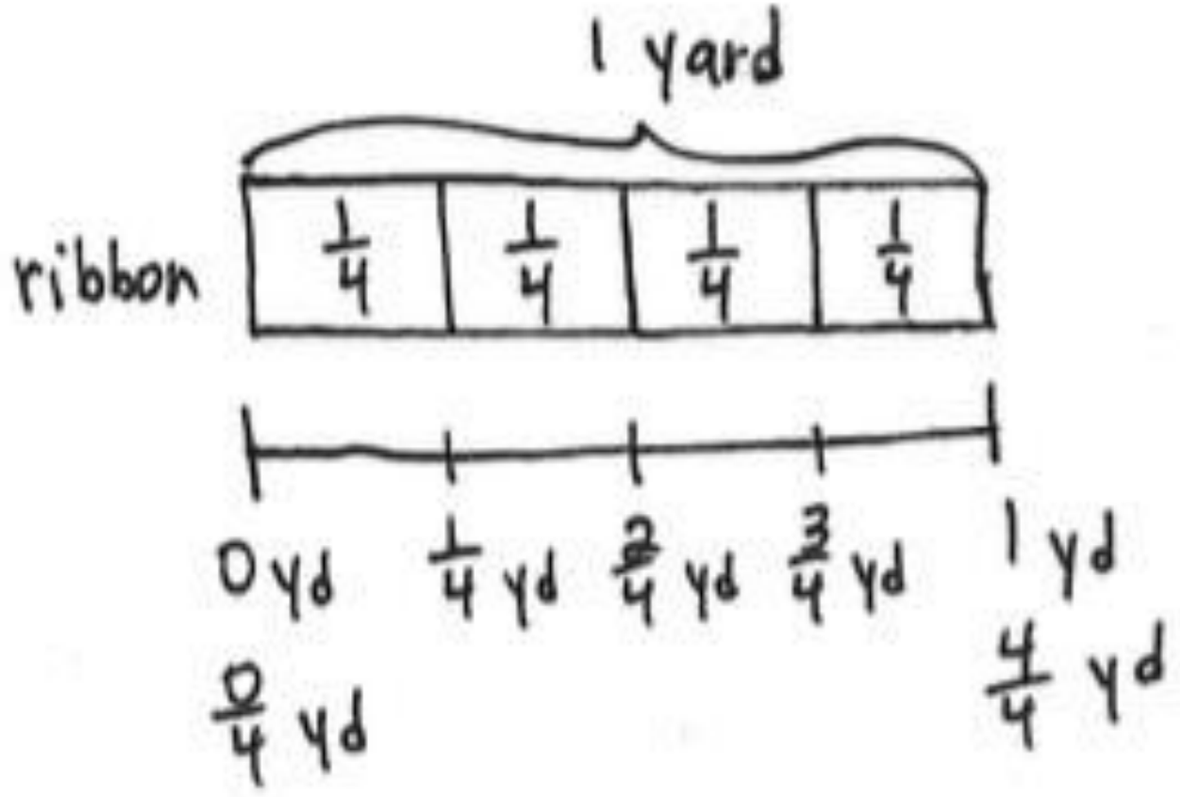
Estimate to mark and label to 1 fifth.

Application Problem

Hannah bought 1 yard of ribbon to wrap 4 small presents. She wants to cut the ribbon into equal parts. Draw and label a number line from 0 yards to 1 yard to show where Hannah will cut the ribbon. Label all the fractions, including 0 fourths and 4 fourths. Also, label 0 yards and 1 yard.

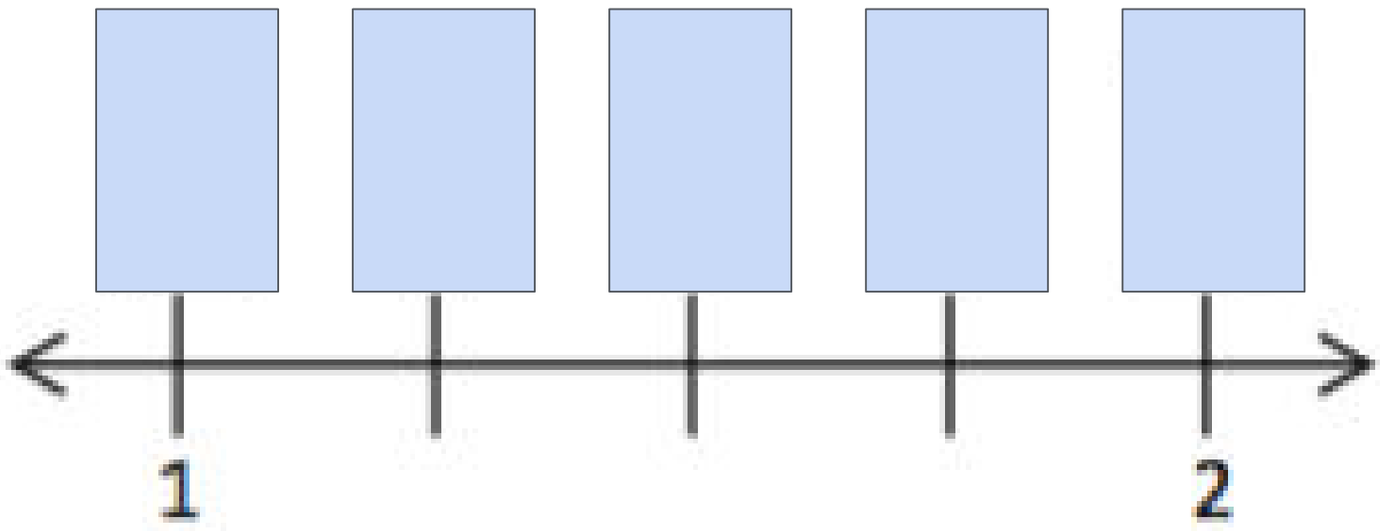
Application Problem

Hannah bought 1 yard of ribbon to wrap 4 small presents. She wants to cut the ribbon into equal parts. Draw and label a number line from 0 yards to 1 yard to show where Hannah will cut the ribbon. Label all the fractions, including 0 fourths and 4 fourths. Also, label 0 yards and 1 yard.



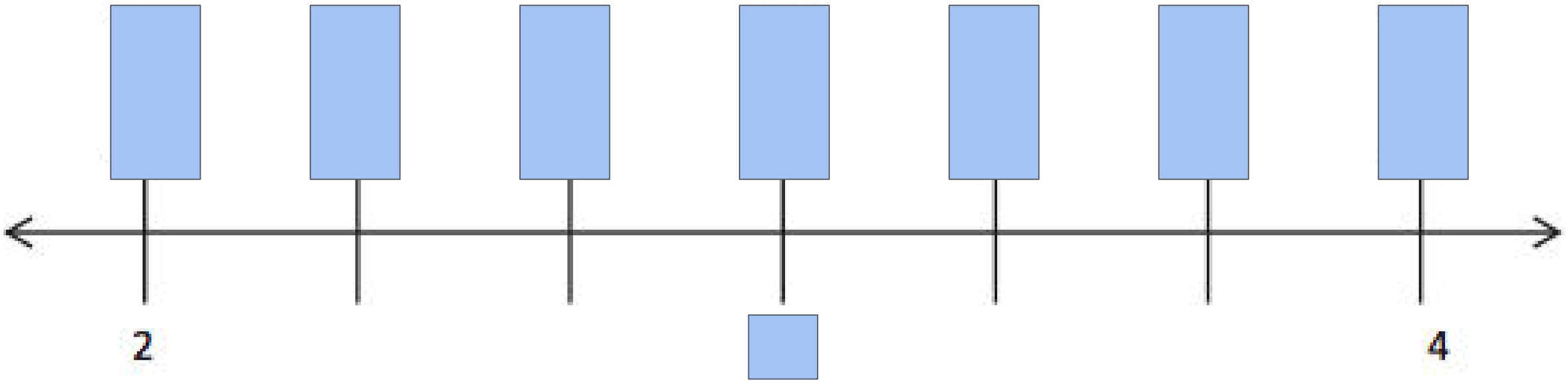
Concept Development

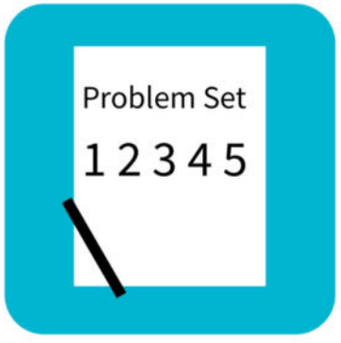
Draw a number line on your board with the endpoints 1 and 2. The last few days, our left endpoint was 0. Talk to a partner: Where has 0 gone?



Concept Development

Draw a number line with the endpoints 2 and 4. What whole number is missing from this number line?





Problem Set

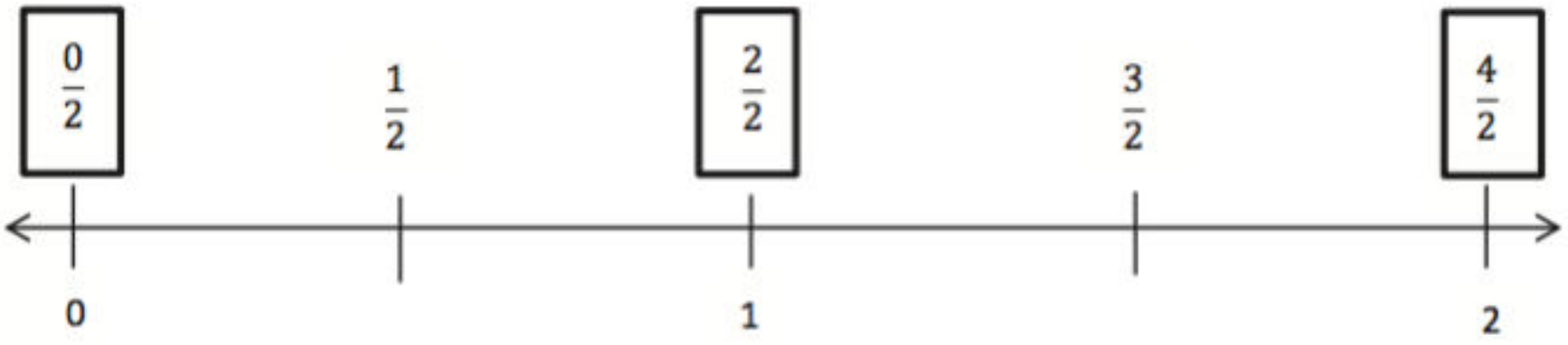
Lesson Objective:

Place whole number fractions and fractions between whole numbers on the number line.

Name _____ Date _____

1. Estimate to equally partition and label the fractions on the number line. Label the wholes as fractions, and box them. The first one is done for you.

a. halves



Debrief

-In Problem 1, what fractions are equivalent to, or at the exact same point as, 3 on the number line?

-What number is equivalent to,or at the exact same point as, 12 fourths in Problem 1?

-Point out Problem 3,which counts 3 thirds, 6 thirds, 9 thirds, and 12 thirds:

-Look at the fractions you boxed in Problem 3. What pattern do you notice?

-What is the connection between multiplication and fractions equal to whole numbers?

-How do you think that strategy might help you find other whole number fractions?

Exit Ticket (3 minutes)

Name _____ Date _____

1. Estimate to equally partition and label the fractions on the number line. Label the wholes as fractions, and box them.

2. Draw a number line with endpoints 0 and 2. Label the wholes. Estimate to partition each whole into sixths, and label them. Box the fractions that are located at the same points as whole numbers.