Materials:

Fraction Templates
Sentence Strip
**for each student

Eureka Math

3rd Grade
Module 5
Lesson 24

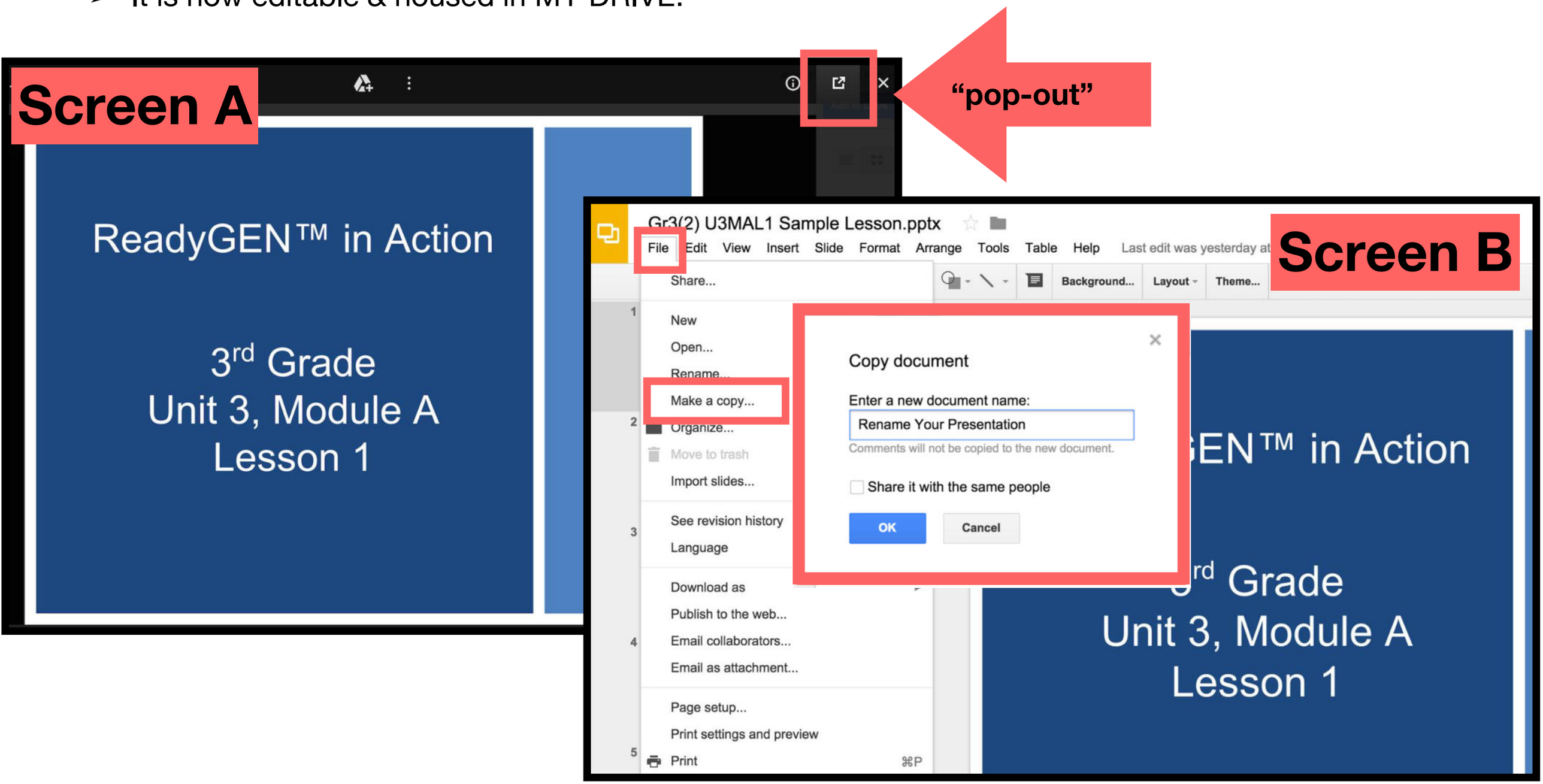
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

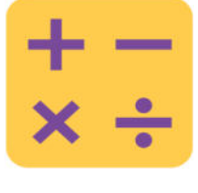
Read, Draw, Write

Learning Target

Personal White Board

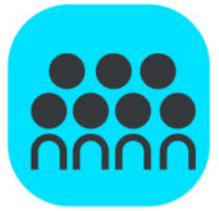
Problem Set

Manipulatives Needed



Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

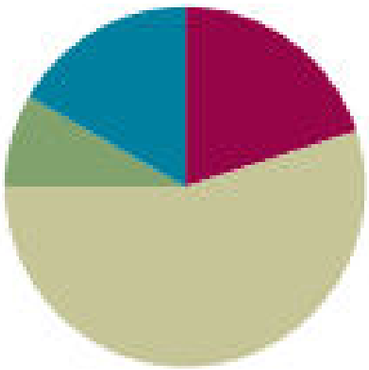
Small Group Time

Lesson 24

Objective: Express whole numbers as fractions and recognize equivalence with different units.

Suggested Lesson Structure

Fluency Practice	(12 minutes)
Application Problem	(5 minutes)
Concept Development	(33 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**



I can express whole numbers as fractions and recognize equivalence with different units.

Fluency Practice

Sprint: Add by 7

A

Number Correct: _____

Add by Seven

1.	0 + 7 =	
2.	1 + 7 =	
3.	2 + 7 =	
4.	3 + 7 =	
5.	7 + 3 =	
6.	7 + 2 =	
7.	7 + 1 =	
8.	7 + 0 =	
9.	4 + 7 =	
10.	14 + 7 =	
11.	24 + 7 =	
12.	34 + 7 =	
13.	44 + 7 =	

23.	6 + 7 =	
24.	16 + 7 =	
25.	26 + 7 =	
26.	36 + 7 =	
27.	46 + 7 =	
28.	66 + 7 =	
29.	7 + 7 =	
30.	17 + 7 =	
31.	27 + 7 =	
32.	37 + 7 =	
33.	87 + 7 =	
34.	8 + 7 =	
35.	18 + 7 =	

Fluency Practice

Write Equal Fractions

- Say the fraction represented by the dotted line.
- Write the fraction below the dotted line.
- Write the fraction $\frac{1}{2} = \frac{\square}{4}$
- Fill in the blank

Application Problem

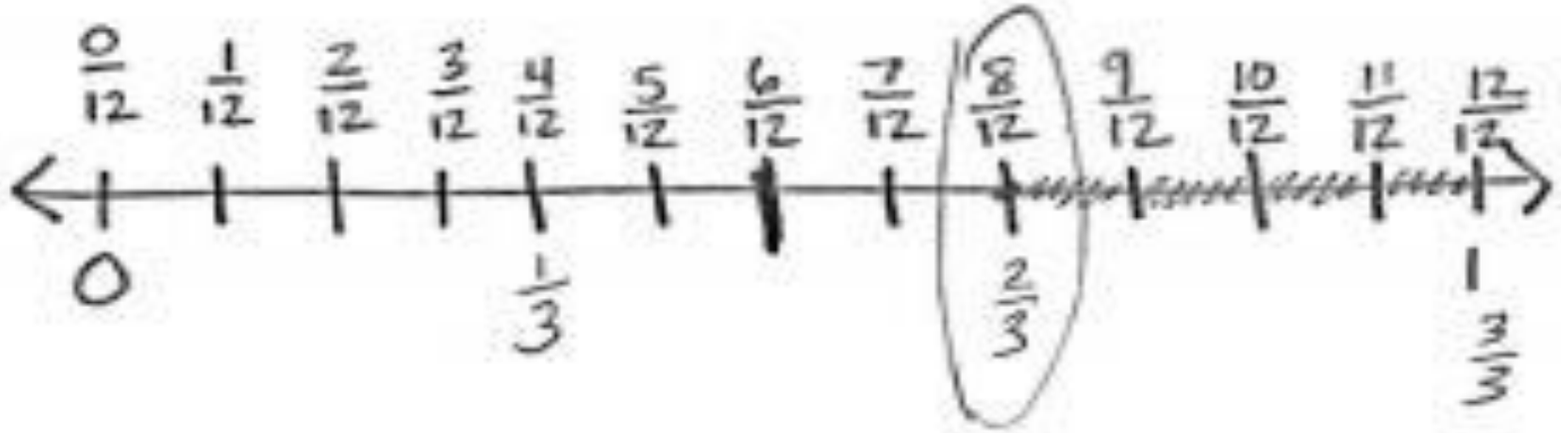
The zipper on Robert's jacket is 1 foot long. It breaks on the first day of winder. He can only zip it $\frac{8}{12}$ of the way before it gets stuck. Draw and label a number line to show how far Robert can zip his jacket.

a. Divide and label the number line in thirds. What fraction of the way can he zip his jacket in thirds?

b. What fraction of Robert's jacket is not zipped? Write your answer in twelfths and thirds.

Application Problem

The zipper on Robert's jacket is 1 foot long. It breaks on the first day of winder. He can only zip it $\frac{8}{12}$ of the way before it gets stuck. Draw and label a number line to show how far Robert can zip his jacket.



a) Robert can zip his jacket $\frac{2}{3}$ of the way.

b) $\frac{4}{12}$ or $\frac{1}{3}$ of his jacket is not zipped.

Concept Development

Materials: Fraction pieces Template (S), scissors, envelopes, personal white boards, sentence strip, crayons.

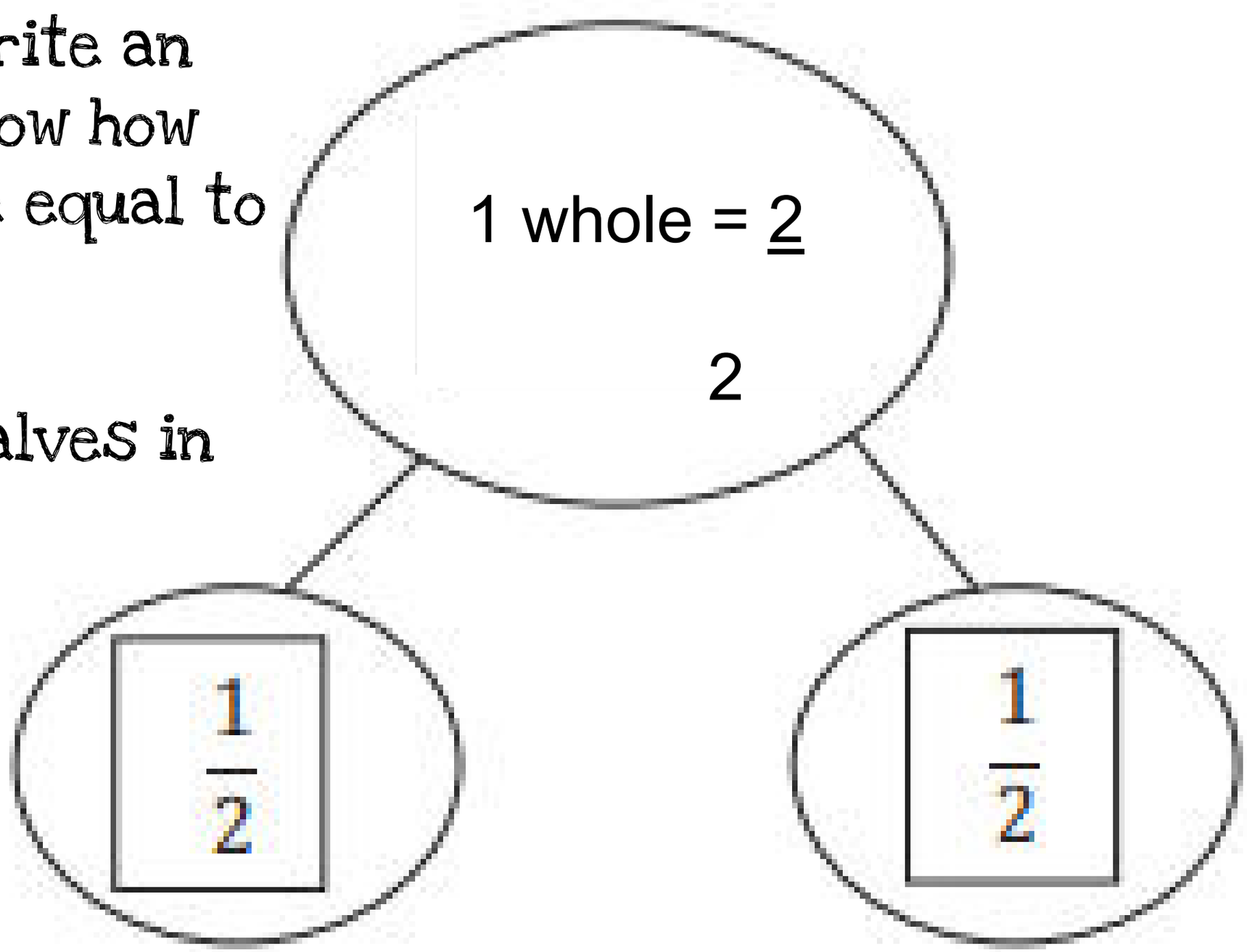
Cut out all of the rectangles on the fraction pieces, and initial each rectangle so you know which ones are yours.

1. Place the rectangle that says *1 whole* on your whiteboard. How many halves make a whole?
2. Take a second rectangle, **fold and label to show halves.**
3. Now, cut on the fold. Draw circles around your whole and your parts to make a number bond.

Concept Development

In your whole, write an equality that show how many halves are equal to 1 whole.

Then put your halves in your envelope.



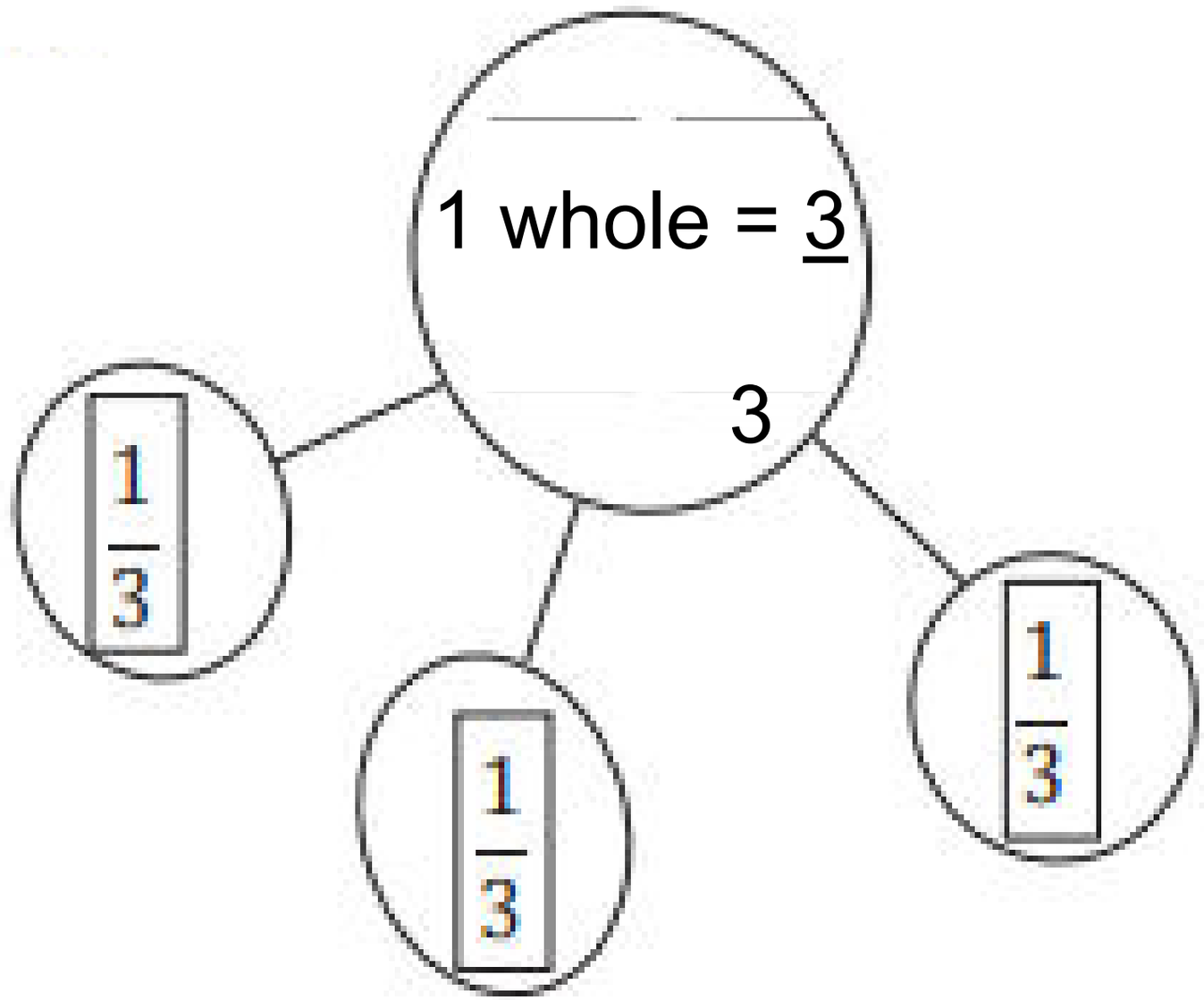
Concept Development

1. Keep the rectangle that says *1 whole* on your whiteboard. How many **thirds** make a whole?
2. Take a second rectangle, **fold and label to show thirds.**
3. Now, cut on the folds. Draw circles around your whole and your parts to make a number bond.

Concept Development

In you whole, write an equality that show how many **thirds** are equal to 1 whole.

Then put your thirds in your envelope.



Concept Development

1. Keep the rectangle that says *1 whole* on your whiteboard. How many **fourths** make a whole?
2. Take a second rectangle, **fold and label to show fourths.**
3. Now, cut on the folds. Draw circles around your whole and your parts to make a number bond.

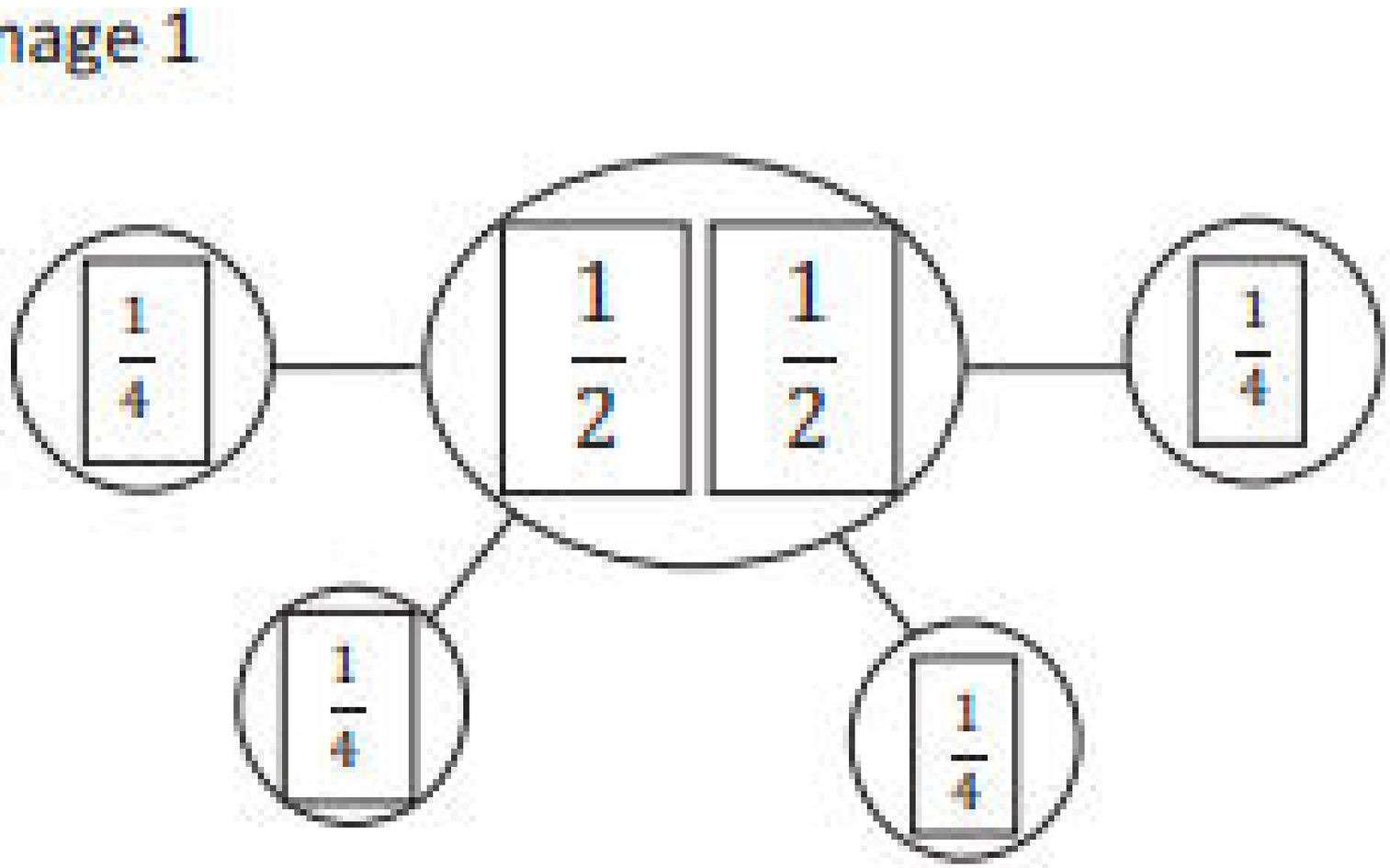
Concept Development

1. Keep the rectangle that says *1 whole* on your whiteboard. How many **sixths** make a whole?
2. Take a second rectangle, **fold and label to show sixths.**
3. Now, cut on the folds. Draw circles around your whole and your parts to make a number bond.

Concept Development

Use your pieces to make this number bond.

Discuss with your partner: Is this number bond true? Why or why not?



Concept Development

Use your pieces to make this number bond.

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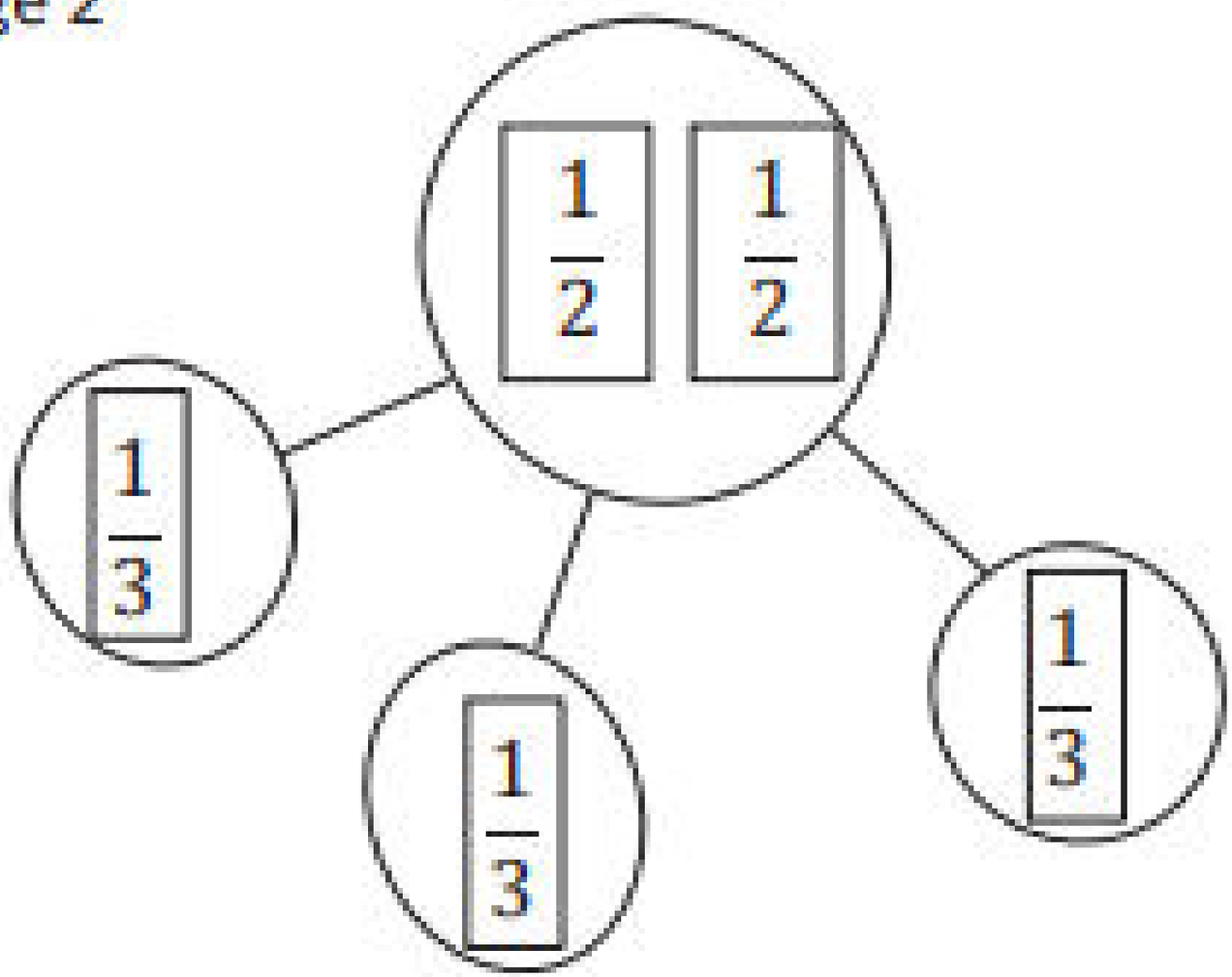


Concept Development

Now, let's place our different units on the same number line. Use your sentence strip to represent the interval from 0 to 1 on a number line. Mark the endpoints with your pencil now.

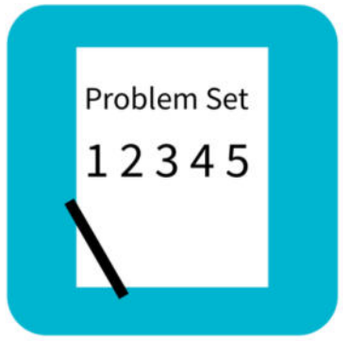
Go ahead and fold your sentence strip to partition one unit at a time into halves, fourths, thirds, and then sixths. Label each fraction above the number line. As you count, be sure to rename 0 and the whole. Use a different color crayon to mark and label the fraction for each unit.

Concept Development

1. Get a sentence strip
2. Mark the endpoints "0" and "1"
3. Fold in half, and label the halves and endpoints.

Repeat this process for fourths, thirds, and sixths.

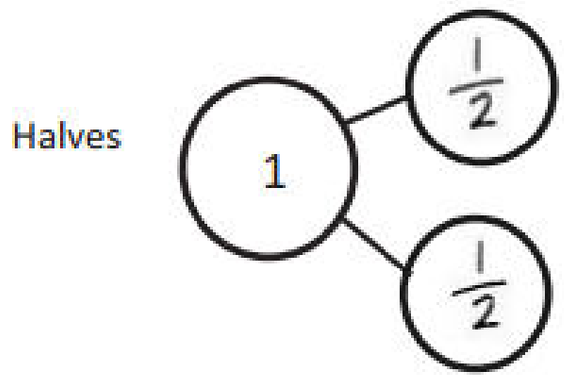
Compare the fractions you wrote at 0 and 1. What pattern do you notice.

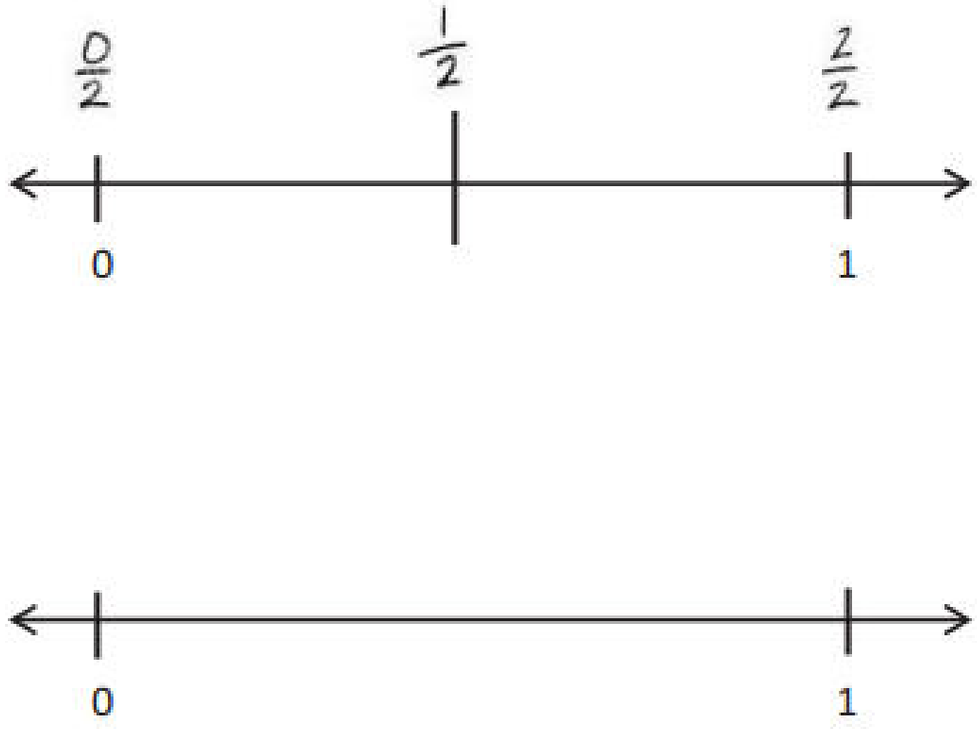


Problem Set

Name _____ Date _____

1. Complete the number bond as indicated by the fractional unit. Partition the number line into the given fractional unit, and label the fractions. Rename 0 and 1 as fractions of the given unit. The first one is done for you.





Debrief

Any combination of the questions below may be used to lead the discussion.

- Invite students to share their thinking about Problem 3.
- Invite students to share their work on Problem 4.
- Have students use their fraction shapes from the lesson to model the number bonds in Problem 1.
- Ask students to generate other fractions equivalent to 1 whole. Provide the unit, and ask them to generate the fraction. The following is an example:

  T: The unit is millionths. What fraction is equivalent to 1 whole?

  S: Wow! 1,000,000 millionths!

Exit Ticket

Name _____ Date _____

1. Complete the number bond as indicated by the fractional unit. Partition the number line into the given fractional unit, and label the fractions. Rename 0 and 1 as fractions of the given unit.

Fourths

2. How many copies of $\frac{1}{4}$ does it take to make 1 whole? What's the fraction for 1 whole in this case? Use the number line or the number bond in Problem 1 to help you explain.