Materials List

Personal white boards

(T) 1 - clear plastic cup full of colored water, 2 - other identical clear plastic cups (empty), 2 - 12” x 1” strips of construction paper, 12 -inch ruler

Eureka Math

3rd Grade
Module 5
Lesson 1

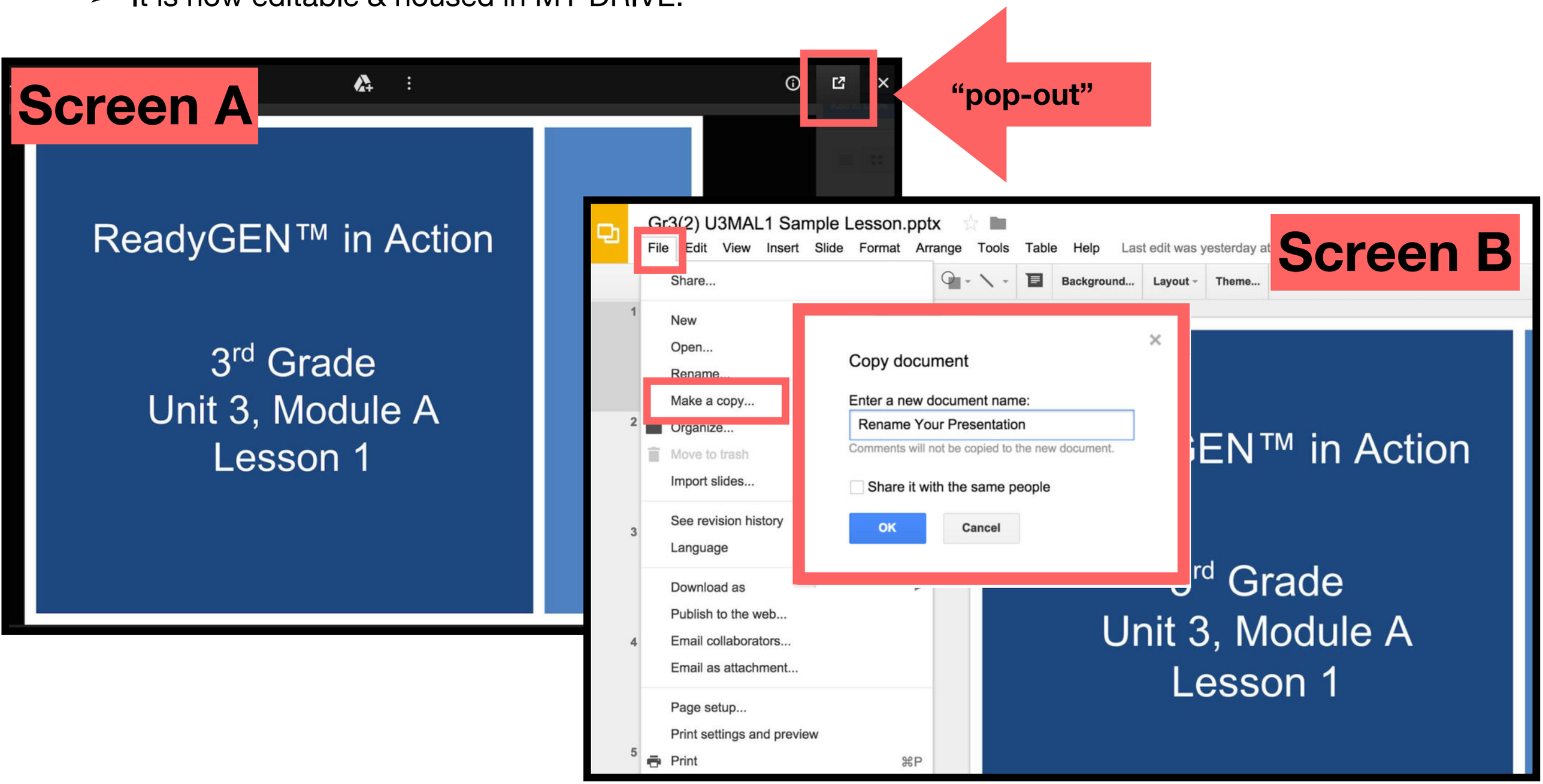
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

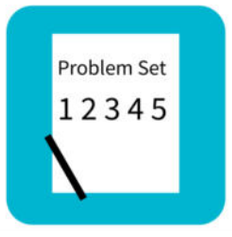


Icons

Read, Draw, Write

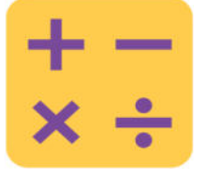
Learning Target

Personal White Board



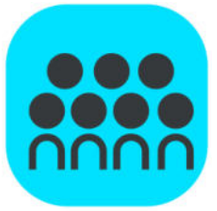
Problem Set

Manipulatives Needed



Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

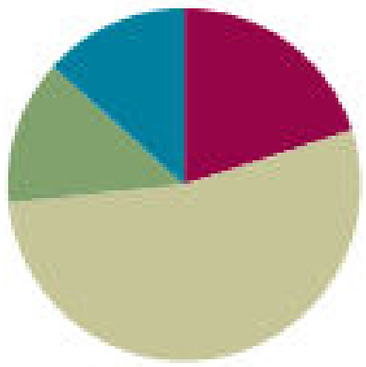
Small Group Time

Lesson 1

Objective: Specify and partition a whole into equal parts, identifying and counting unit fractions using concrete models.

Suggested Lesson Structure

Fluency Practice	(12 minutes)
Application Problem	(8 minutes)
Concept Development	(32 minutes)
Student Debrief	(8 minutes)
Total Time	**(60 minutes)**



Fluency Practice (12 minutes)

- Group Counting **3.OA.1** (6 minutes)
- Multiplication by Four and Eight **3.OA.4** (6 minutes)

I can break apart a whole into fractional units.

Fluency Practice

Group Counting

Count forward and backward as I indicate with pointing my finger, by…

Fours to 40

Fluency Practice

Group Counting

Count forward and backward as I indicate with pointing my finger, by…

Eights to 80

Fluency Practice

Group Counting

2 X 4 =	2 X 8 =
3 X 4 =	3 X 8 =
4 X 4 =	4 X 8 =

Application Problem

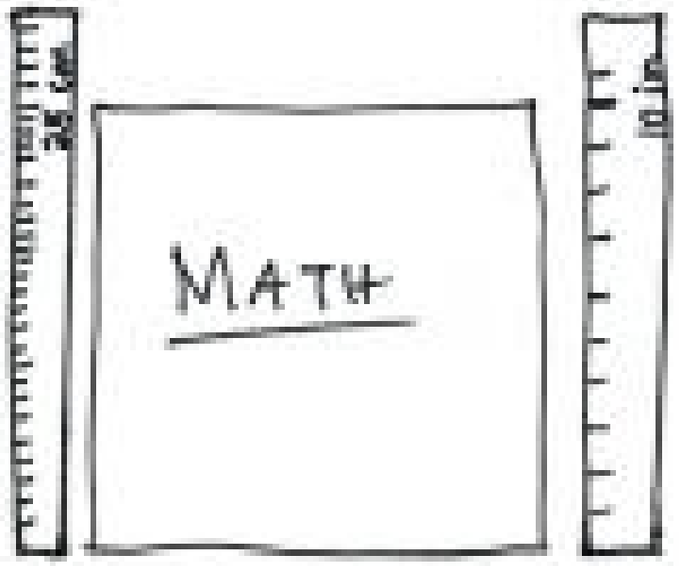
Measure the length of your paper or math book using a ruler. Your teacher will tell you whether to measure in inches or centimeters.

Application Problem

a. **Which is a larger unit - an inch or a centimeter?**

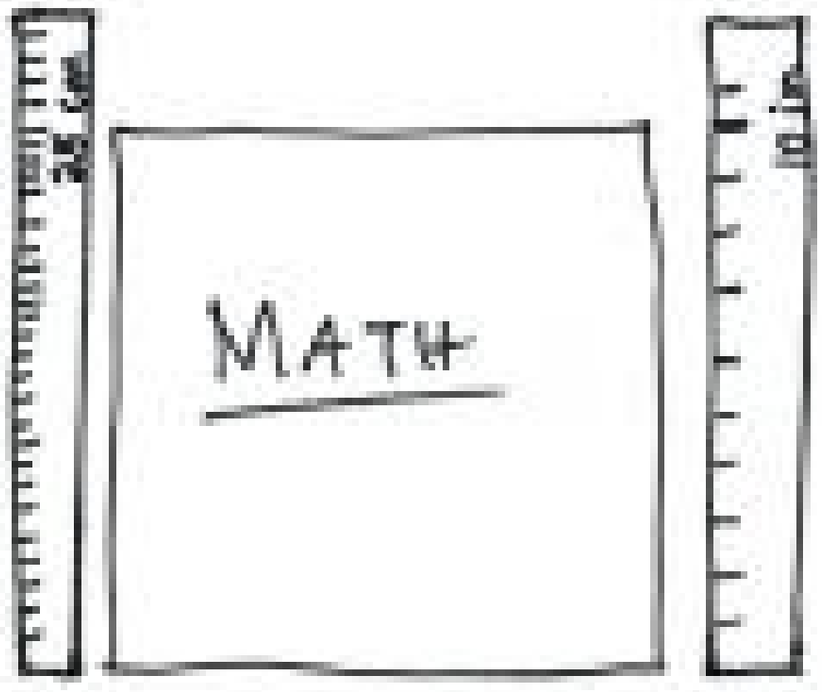
a. **Which would yield (give) a greater number when measuring the book - inches or centimeters?**

a. **Measure at least 2 different items with your partner, again using different units. What do you notice?**



Application Problem

Change units with your partner. Measure different items again.



Concept Development

Measure your paper strips using inches.

How long is it?

Concept Development

Make a small mark at 6 inches at both the top and the bottom of the strip. Connect the two points with a straight line.

How many equal parts have I split the paper into now?

Concept Development

The fractional unit for 2 equal parts is halves.

What fraction of the whole strip is one of the parts?

Concept Development

Point to the halves and count them with me.

Discuss with your partner - How do we know these parts are equal?

Concept Development

Make a small mark at 3 inches and 9 inches at both the top and the bottom of the strip.

Connect the two points with a straight line.

How many equal parts do you have now?

Concept Development

The fractional unit for 4 equal parts is fourths.

Count the fourths.

Discuss with your partner how you know that these parts are equal.

Concept Development

Make a small mark at 4 inches and 8 inches at both the top and the bottom of the strip.

Connect the two points with a straight line.

What is the fractional unit?

Count the equal parts.

Concept Development

Make a small mark at 2 inches, 6 inches and 10 inches at both the top and the bottom of the strip. Connect the two points with a straight line.

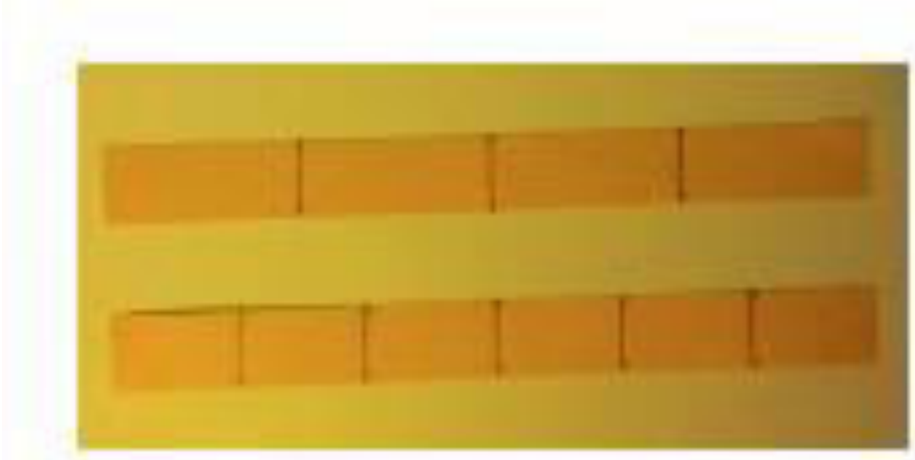
What is the fractional unit?

Count the equal parts.

Concept Development

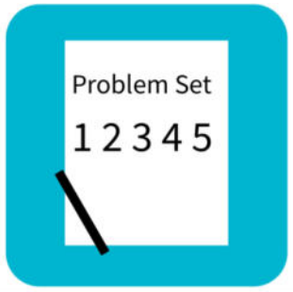
Talk to your partner:

What is the relationship between thirds and sixths?



Concept Development

Part 2: Partitioning a whole amount of liquid into equal parts.



Problem Set

Name _____ Date _____

1. A beaker is considered full when the liquid reaches the fill line shown near the top. Estimate the amount of water in the beaker by shading the drawing as indicated. The first one is done for you.

2. Juanita cut her string cheese into equal pieces as shown in the rectangles below. In the blanks below, name the fraction of the string cheese represented by the shaded part.

Debrief

The whole in Problem 2 never changes. What happened to the size of an equal part when the string cheese was divided into more parts?

In Problem 1, which was the harder fraction for you to draw well?

Using our method with the cups, how could we make a cup that showed thirds?

In Problem 2, what do you notice about the thirds and sixths? When we marked our measurements on the strips, what did you remember about the measurement of 1 third of the strip and 1 sixth of the strip?

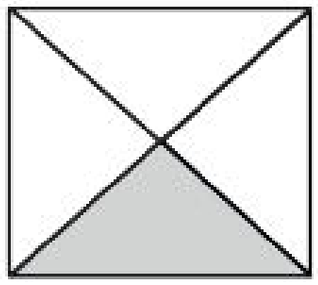
In Problem 3, did you start drawing fourths by making a half? Can you do the same to draw eighths?

In Problem 5, let's look at two different solution strategies and compare them.

Exit Ticket

Name _____ Date _____

1. Name the fraction that is shaded.



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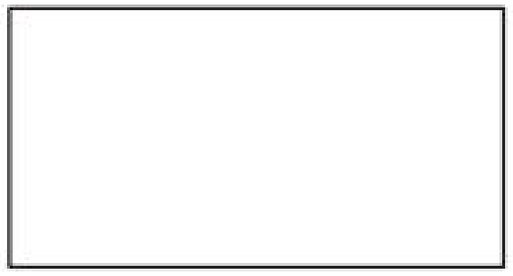
2. Estimate to partition the rectangle into thirds.



3. A plumber has 12 feet of pipe. He cuts it into pieces that are each 3 feet in length. What fraction of the pipe would one piece represent? (Use your strip from the lesson to help you.)