Eureka Math

4th Grade
Module 6
Lesson 3

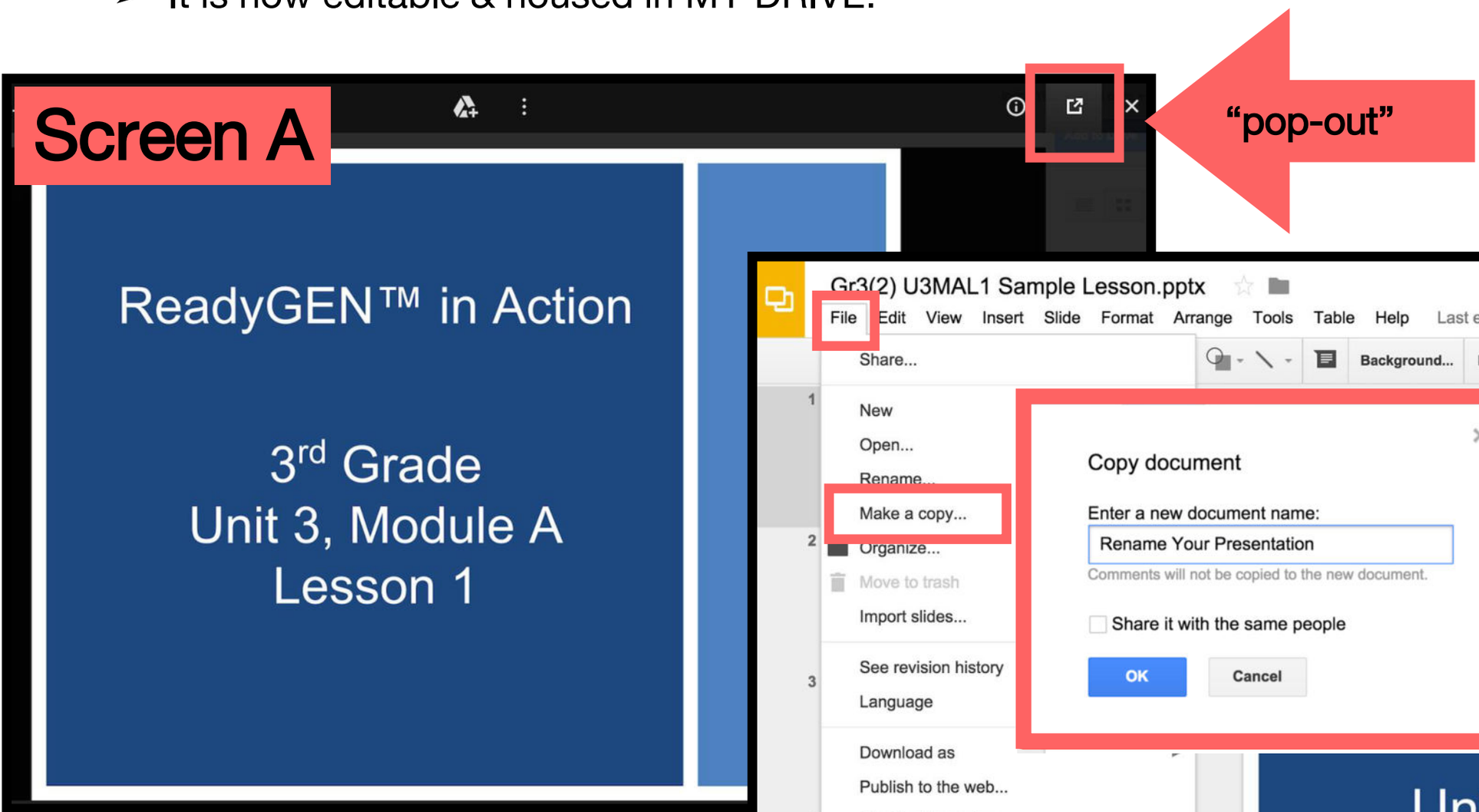
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

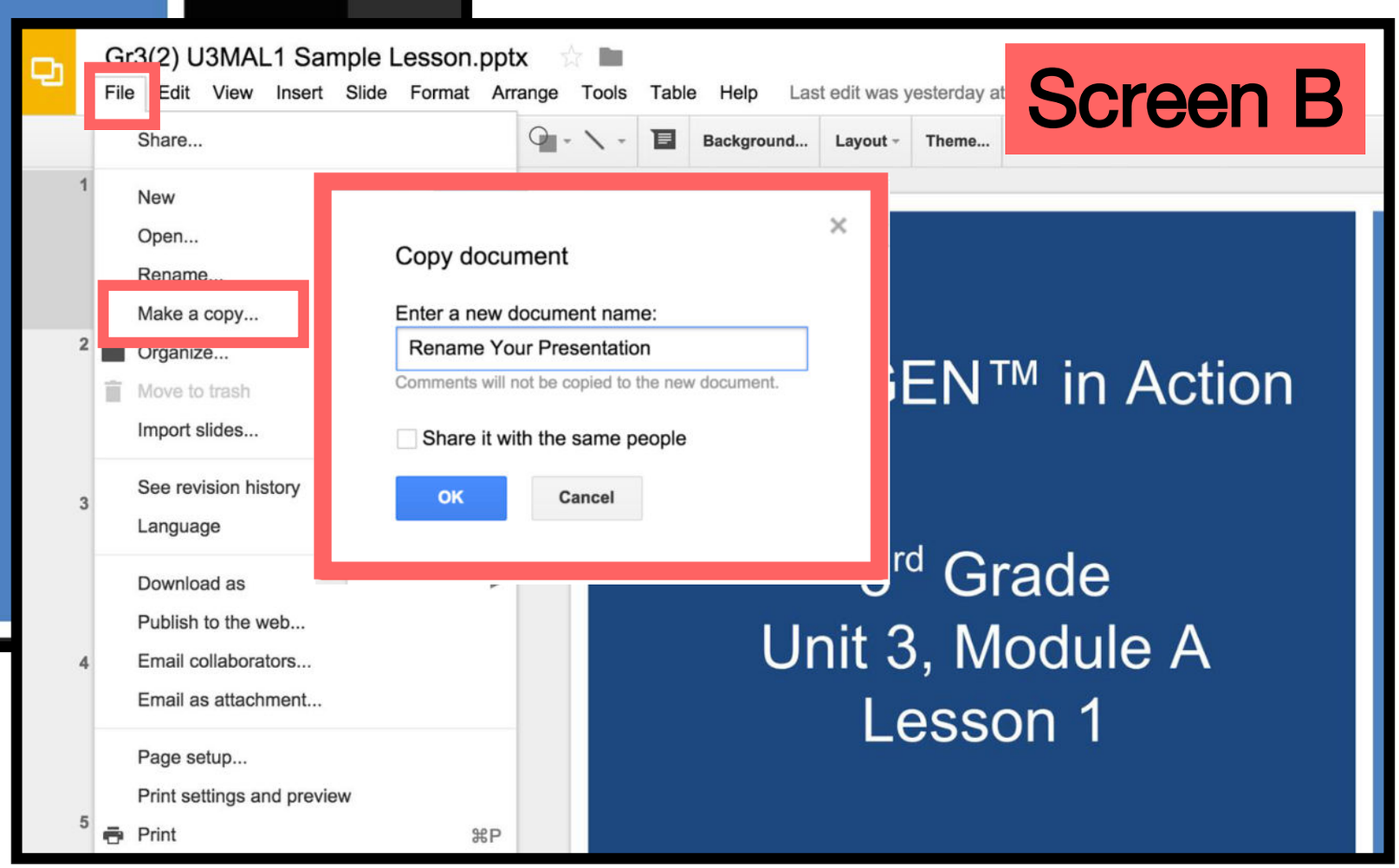
Directions for customizing presentations are available on the next slide.

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.



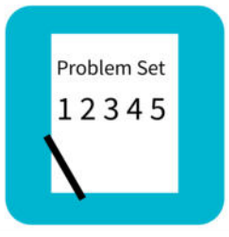


Icons

Read, Draw, Write

Learning Target

Personal White Board

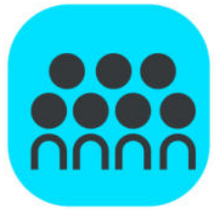


Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

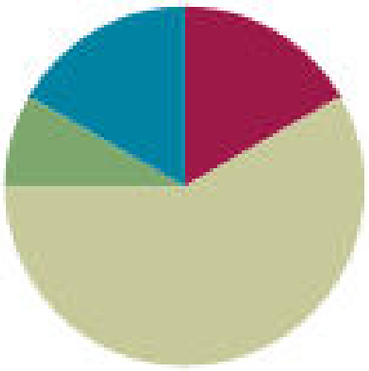
Small Group Time

Lesson 3

Objective: Represent mixed numbers with units of tens, ones, and tenths with place value disks, on the number line, and in expanded form.

Suggested Lesson Structure

Fluency Practice	(10 minutes)
Application Problem	(5 minutes)
Concept Development	(35 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**



Represent mixed numbers with units of tens, ones, and tenths with place value disks, on the number line, and in expanded form.

Write the Decimal or Fraction

1/10

Say the fraction.

1/10 = __.__

Write 1 tenth as a decimal to complete the number sentence.

Write the Decimal or Fraction

0.3 = __

Write zero point three as a fraction to complete the number sentence.

Write the Decimal or Fraction

10/10 = __

10 tenths equals what whole number?

30/10

How many ones is 30 tenths?

50/10

How many ones in 50 tenths?

Write the Decimal or Fraction

13/10

Write 13 tenths as a mixed number.

13/10= 1 3/10 = __.__

Write 1 3/10 in decimal form.

Write the Decimal or Fraction

2.1

Write 2 point one as a mixed number.

Count by Tenths

Count by fives to 50, starting at zero.

Count by 5 tenths to 50 tenths, starting at zero tenths.

1 one is the same as how many tenths?

Count by Tenths

Let’s count by 5 tenths again. This time, when you come to a whole number, say the whole number.

Count backward by 5 tenths, starting at 5.

Count by 5 tenths again. This time, stop when I raise my hand.

Say 15 tenths using digits.

Read Draw Write

Read the problem.

Draw and Label.

Write a number sentence.

Write a word sentence.

Application Problem

Ed bought 4 pieces of salmon weighing a total of 2 kilograms. One piece weighed 4/10 kg, and two of the pieces weighed 5/10 kg each. What was the weight of the fourth piece of salmon?

Renaming 10 Tenths as Ones

With a partner, use place value disks to show 21 units of 1 tenth in five-group formation.

Talk with your partner. Is there any way we can use *fewer* disks to show this same value?

Let’s group 10 tenths together and trade them for…?

Renaming 10 Tenths as Ones

How many times can we do this?

What disks so we have now?

Express this number in decimal form.

How many more tenths would we have needed to have 3 ones?

Expanded Form

Hold up a place value disk with a value of 1 ten. We say the value of this disk is…?

The total value of 4 of these is…?

4 x 10 is …?

Expanded Form

The total value of these 2 disks is…?

2 ones written as a multiplication expression is…?

(4x10) + (2x1) is …?

Expanded Form

This place value disk says zero point one on it. We say the value of this disk is…?

The total value of 6 of these disks is…?

6 tenths written as a multiplication expression is…?

(4 x 10) + (2 x 1) + (6 x 1/10)

Discuss the total value of the number represented by the disks with your partner.

Expanded Form

We have written 42 6/10 in expanded form, writing each term as a multiplication expression. Just like with whole numbers, the expanded form allows us to see the place value unit for each digit.

Talk with your partner. How could you write this using **decimal expanded form** instead of **fraction expanded form**? Explain how you know.

Number Line

Label the larger intervals from 0 to 5.

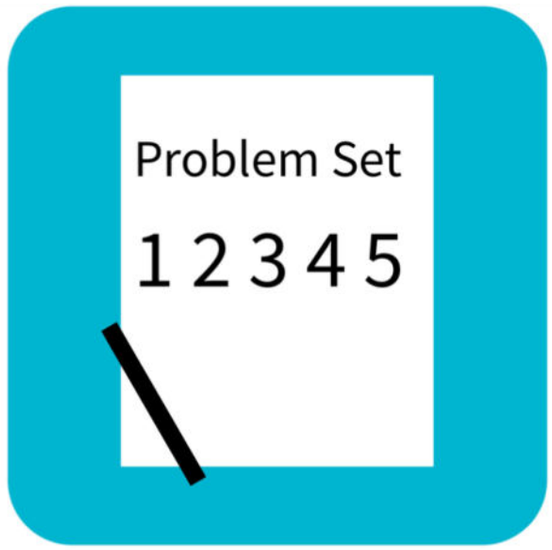
The segment between each whole number is divided up into how many equal parts?

Plot a point on the number line to represent 4 and 1 tenth.

Number Line

In the chart below your number line, let's plot the same number on a shorter number line partitioned into tenths. What will the endpoints of this shorter line be?

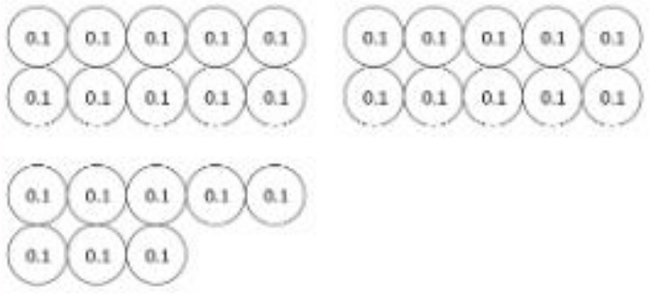
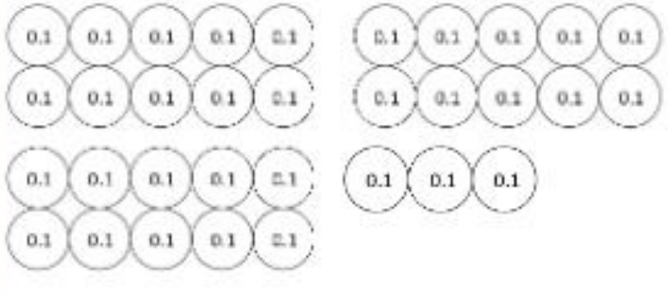
How many more tenths are needed to get to 5? Explain to your partner how you know, and complete the final column of the chart.



Problem Set

Name _____ Date _____

1. Circle groups of tenths to make as many ones as possible.

a. How many tenths in all?  There are _____ tenths.	Write and draw the same number using ones and tenths. Decimal Form: _____ How much more is needed to get to 3? _____
b. How many tenths in all?  There are _____ tenths.	Write and draw the same number using ones and tenths. Decimal Form: _____ How much more is needed to get to 4? _____

Debrief

Participate in the discussion by...

- Thinking about the question.
- Sharing your work.
- Explaining your strategy.
- Listening to others.

Debrief

Look at Problem 3(b). Today, we showed mixed number in **decimal expanded form** and **fraction expanded form**.

How could you represent this number with place value disks?

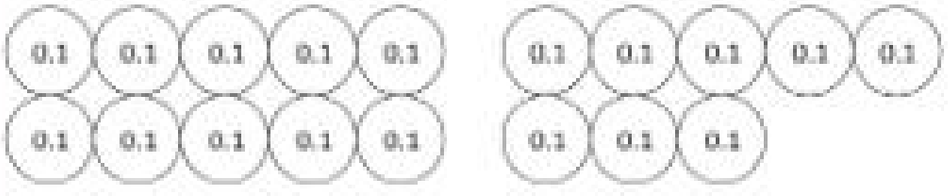
With an area model?

Look at Problems 2(d) and 3(c). How are these two problems alike?

Exit Ticket

Name _____ Date _____

1. Circle groups of tenths to make as many ones as possible.

How many tenths in all?	Write and draw the same number using ones and tenths.
 There are _____ tenths.	Decimal Form: _____ How much more is needed to get to 2? _____