# Eureka Math

## 4th Grade
## Module 6
## Lesson 4

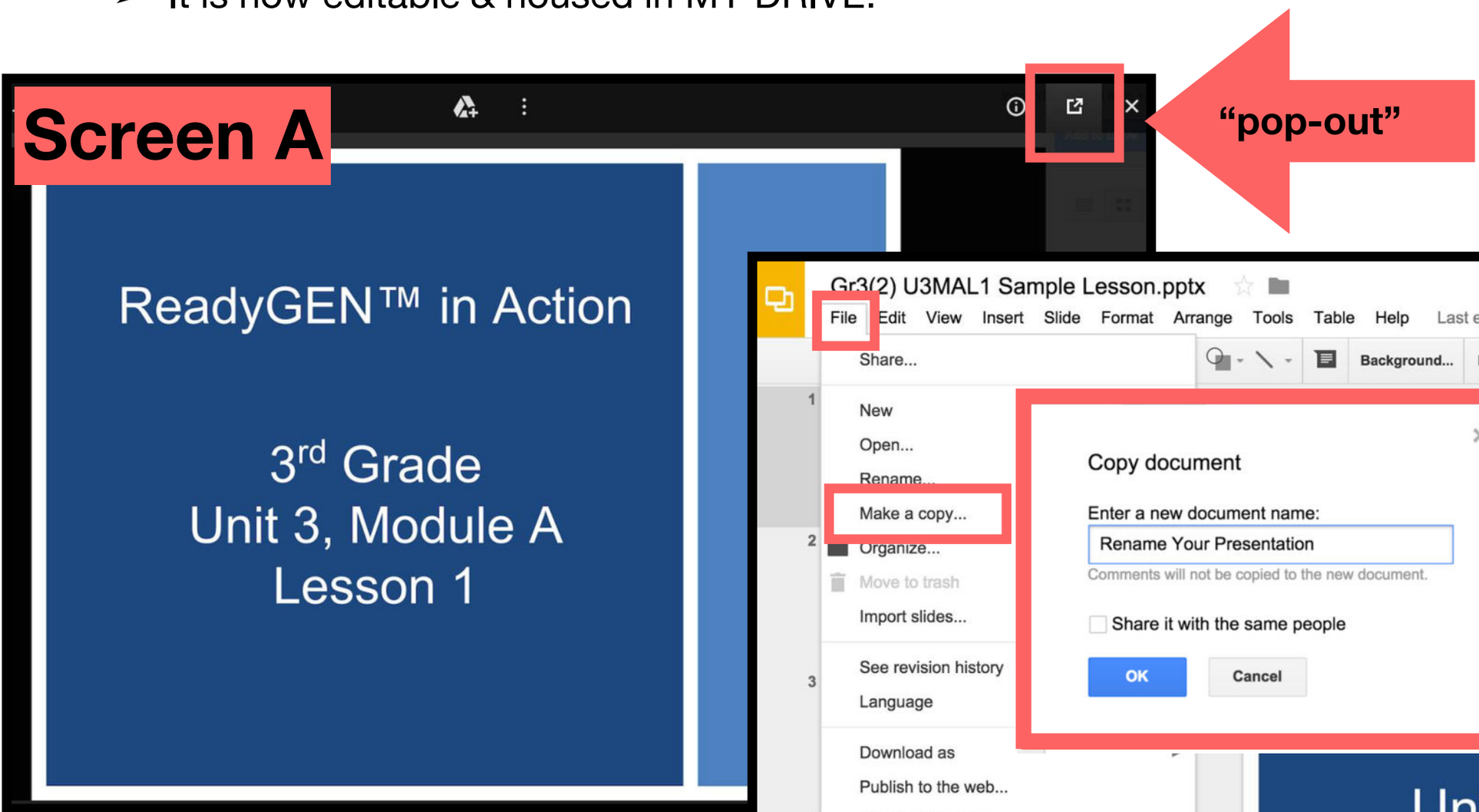
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

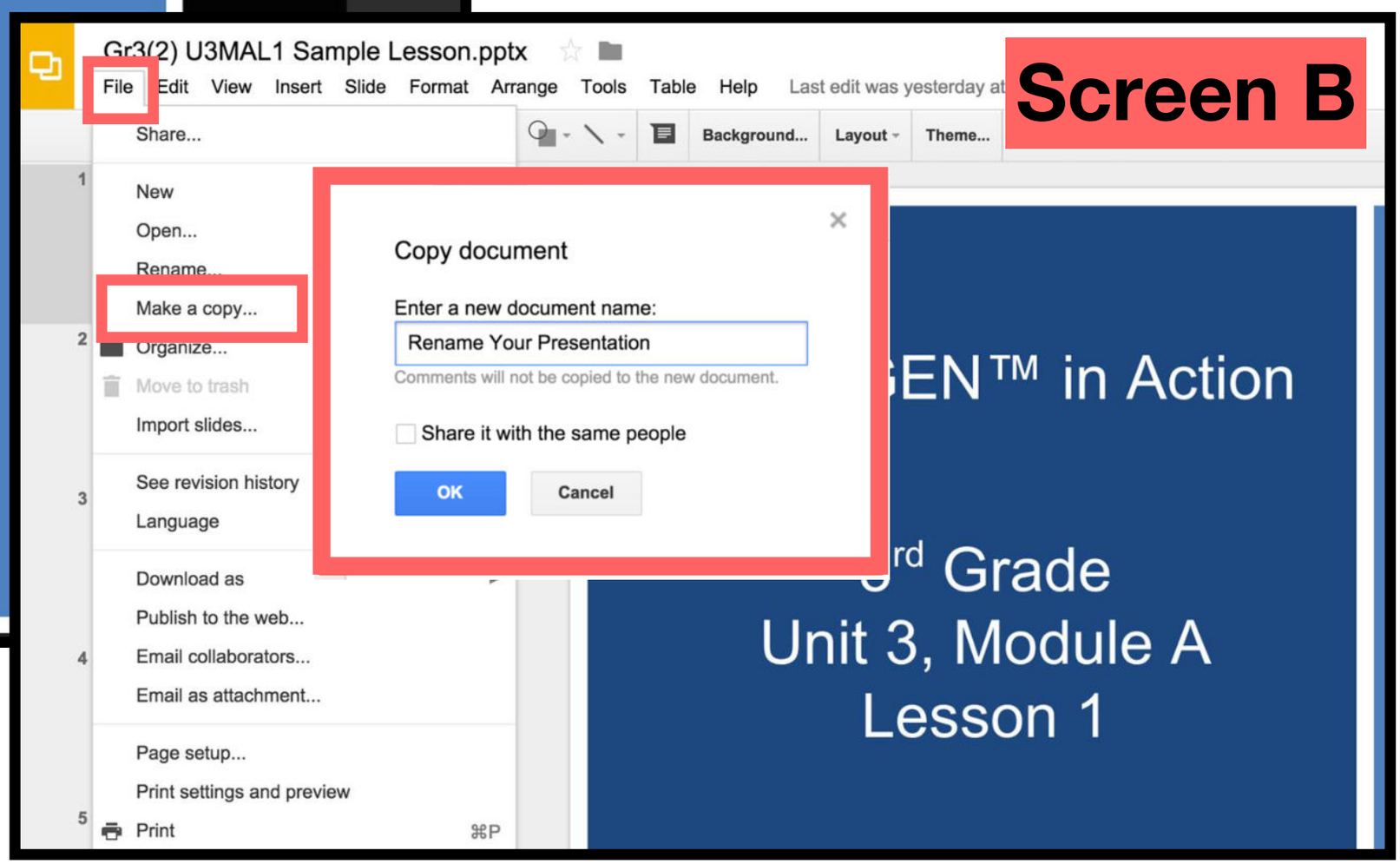
Directions for customizing presentations are available on the next slide.

# 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.



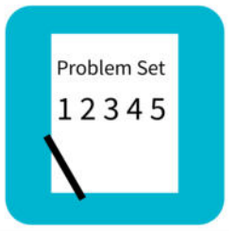



# Icons


Read, Draw, Write

Learning Target

Personal White Board

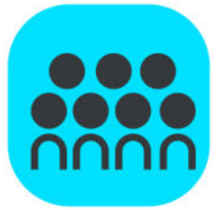



Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

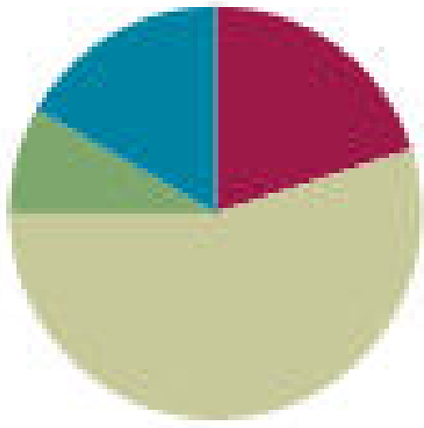
Small Group Time

## Lesson 4

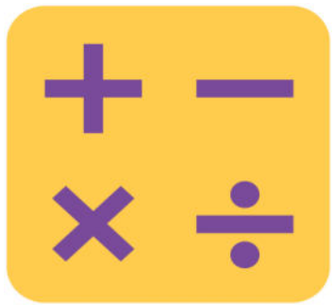
Objective: Use meters to model the decomposition of one whole into hundredths. Represent and count hundredths.

### 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 use meters to model the decomposition of one whole into hundredths.  I can represent and count hundredths.



# Write Fractions and Decimals Sprint

# Count by Tenths

Count by twos to 20, starting at zero.

Count by 2 tenths to 20 tenths, starting at 0 tenths.

1 is the same as how many tenths?

2 is the same as how many tenths?

# Count by Tenths

Let’s count by 2 tenths again.  This time, when you come to a whole number, say the whole number. Try not to look at the board.

Count backward by 2 tenths, starting at 2.

# Read Draw Write

Read the problem.

Draw and Label.

Write a number sentence.

Write a word sentence.

# Application Problem

Ali is knitting a scarf that will be 2 meters long.  So far, she has knitted 1 2/10 meters.

a. How many more meters does Ali need to knit to complete the scarf?  Write teh answer as a fraction and as a decimal.
b. How many more centimeters does Ali need to knit to complete the scarf?

RDW

# Recognize 1 Centimeter as 1/100 of a Meter

This is a meter stick.  What is its length?

How many centimeters are in a meter?

A meter is made of 100 centimeters.  What fraction of a meter is 1 centimeter?

In decimal form, 1/100 meter can be written as zero point zero one meter.

# Recognize 1 Centimeter as 1/100 of a Meter

1 **hundredth** is written as zero point zero one.

How do you think we represent 3/100 meter in decimal form?

Talk with your partner, and write your thoughts on your personal white board.

Yes.  3/100 meter can be shown as a fraction or in decimal form.

# Recognize 1 Centimeter as 1/100 of a Meter

This 1-meter paper strip is partitioned into 10 equal parts.

Let’s shade 1/10 meter.  How many centimeters equal 1/10 meter?

How many hundredths of a meter equal 1/10 meter?

# Recognize 1 Centimeter as 1/100 of a Meter

1/10 m = 10/100 m

We can write this number as a fraction.  We can also write it in decimal form.

This is how you express 10/100 meters as a decimal.

# Recognize 1 Centimeter as 1/100 of a Meter

Let’s decompose 1/10 meter into 10 smaller units to prove that this number sentence, 0/1 m = 0.10 m, is true.

Is each of these new smaller units 1/100 meter and 1 centimeter in length?

Explain to your partner why.

# Name hundredths as tenths and some hundredths

How many tenths of this meter strip of paper are shaded?

Use the tape diagram in tenths template to represent this amount.  Lightly shade 2 tenths using a pencil.

# Name hundredths as tenths and some hundredths

2/10 m + 5/100 m

Let’s shade in 5/100 meter more.  What will you have to do first in order to shade 5/100 meter?

How many hundredths of a meter are shaded here?

How many hundredths of a meter are shaded here?

How many hundredths of a meter are shaded altogether?

Explain your thinking.

# Name hundredths as tenths and some hundredths

0.25

25 hundredths can be written as a decimal in this way.

So, 25 hundredths is made of 2 tenths and…?

2/10 + 5/100 = 25/100

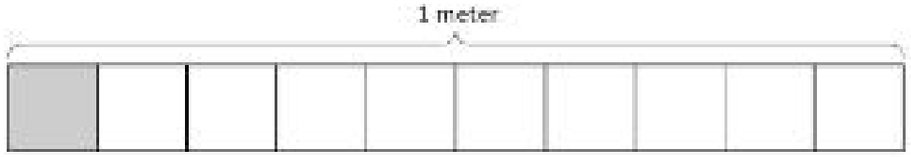
Explain to your partner why this is true.

# Problem Set



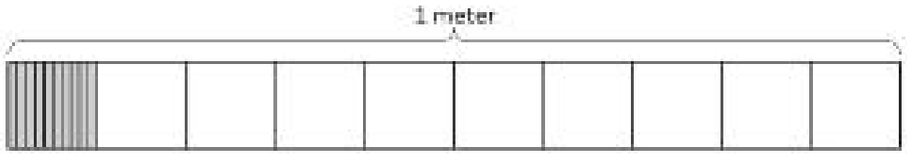
Name _____ Date _____

1. a. What is the length of the shaded part of the meter stick in centimeters?




b. What fraction of a meter is 1 centimeter?

c. In fraction form, express the length of the shaded portion of the meter stick.




d. In decimal form, express the length of the shaded portion of the meter stick.

# Debrief

Participate in the discussion by...

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

# Debrief

In Problem 2(b), you showed that 1/10 m = 10/100 m. Write each number in decimal form.  What do you notice?

In Problem 5, how did you know how many tenths you could take out of the hundredths to make each number bond?  Use a specific example to explain your reasoning.

Explain how hundredths are different from tenths.

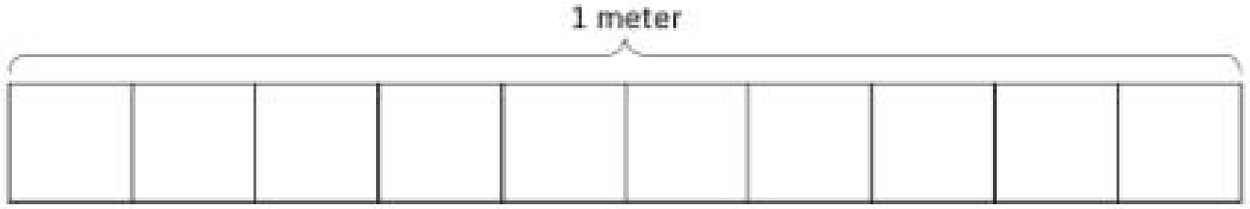
# Exit Ticket



Name _____ Date _____

1. Shade in the amount shown. Then, write the equivalent decimal.

$\frac{6}{10}$ m




2. Draw a number bond, pulling out the tenths from the hundredths. Write the total as the equivalent decimal.

a. $\frac{62}{100}$ m

b. $\frac{27}{100}$