Eureka Math

4th Grade
Module 3
Lesson 26

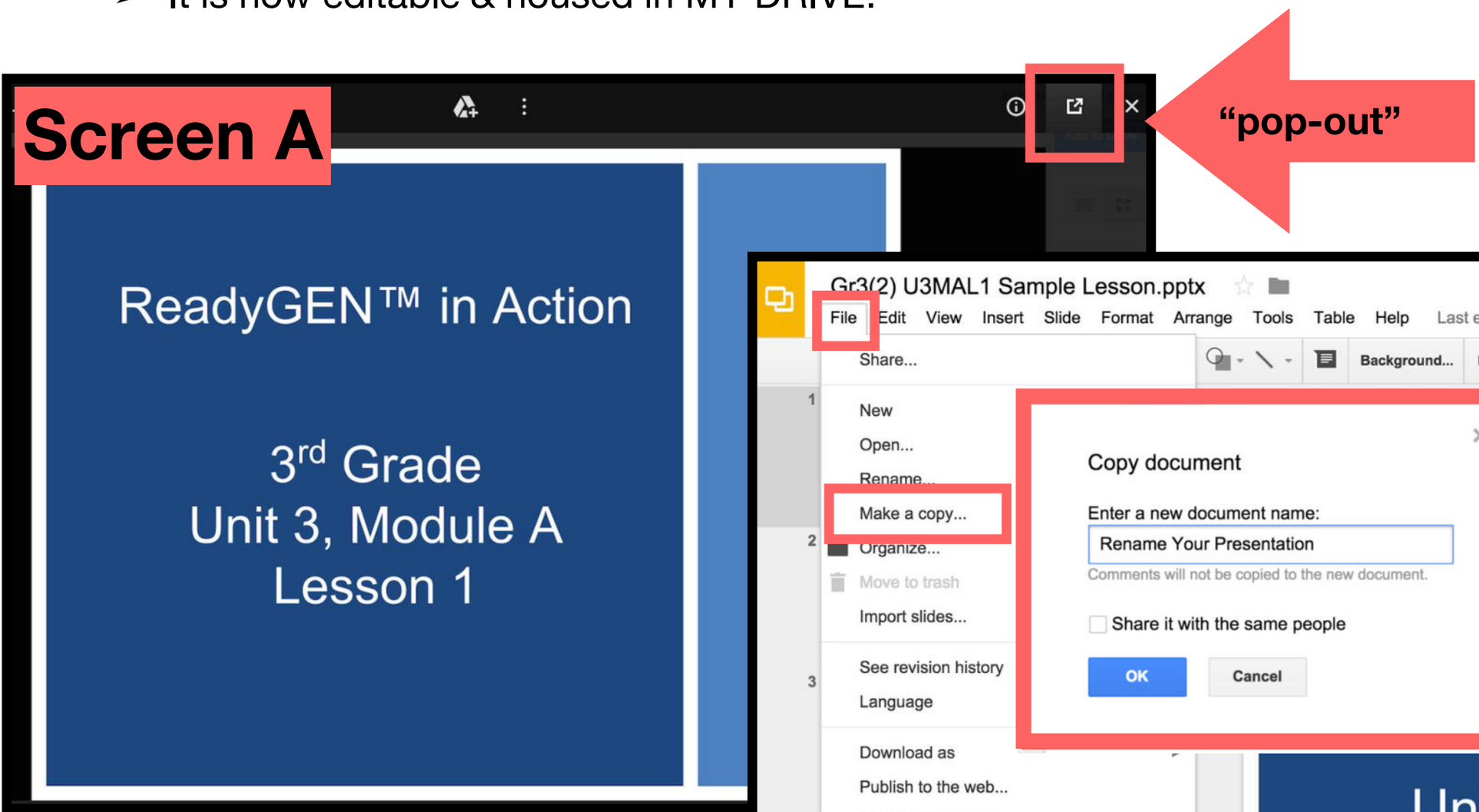
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

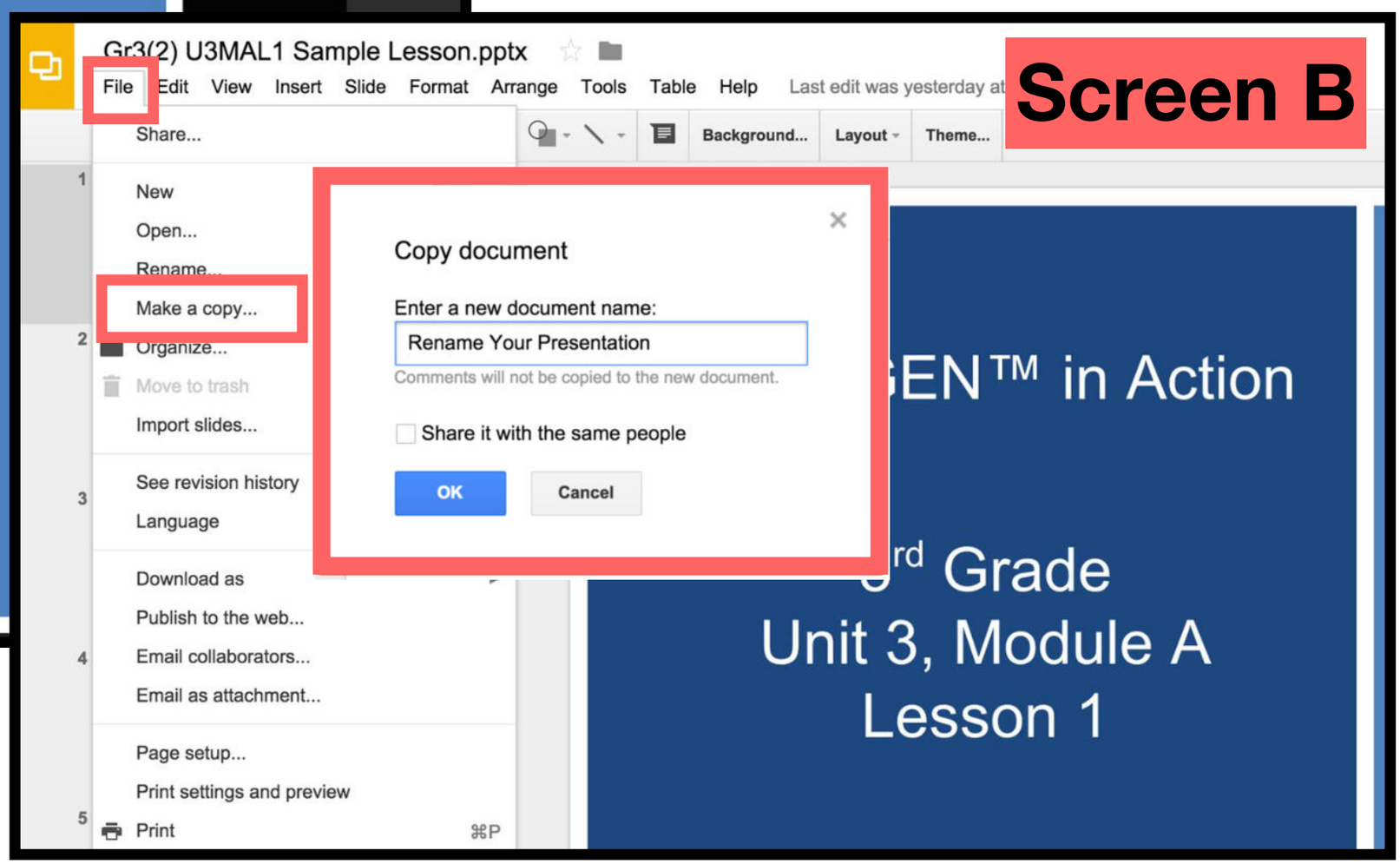
Directions for customizing presentations are available on the next slide.

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.



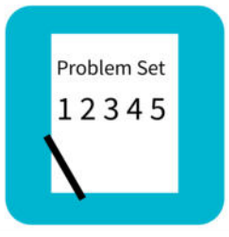


Icons

Read, Draw, Write

Learning Target

Personal White Board

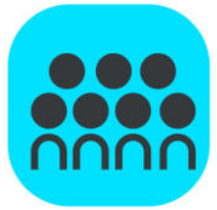


Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

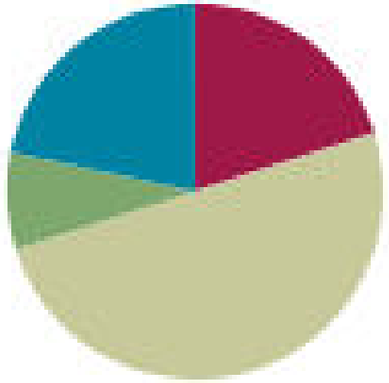
Small Group Time

Lesson 26

Objective: Divide multiples of 10, 100, and 1,000 by single-digit numbers.

Suggested Lesson Structure

Fluency Practice	(12 minutes)
Application Problem	(5 minutes)
Concept Development	(30 minutes)
Student Debrief	(13 minutes)
Total Time	**(60 minutes)**



I can divide multiples of 10, 100, and 1,000 by single-digit numbers.

Show Values with Place Value Disks

Repeat the process from Lesson 15 with the following possible sequence (projected or drawn).

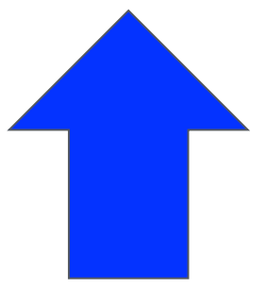
- **I hundreds disk, 2 tens disks, and 3 ones disks**
- **4 hundreds disks, 1 tens disk, and 3 ones disk**
- **3 hundreds disks, 15 tens disks, and 2 ones disks**
- **2 hundreds disks, 15 tens disks, and 3 ones disks**

Follow by having students draw disks for 524, 231, and 513.

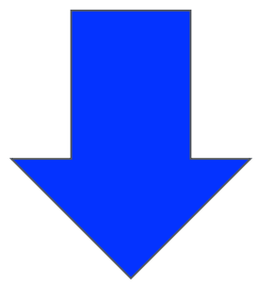
Group Counting

Count by threes to 30.

Say all of the numbers. Watch my fingers to know whether to count up or down. A closed hand means stop.



Count up



Count down

List Multiples and Factors

Repeat the process from Lesson 25 with the following possible sequence: 4 multiples of 6 starting from 60, the 4 factors of 6, the 4 factors of 8, 4 multiples of 8 starting at 80, the 3 factors of 9, and 4 multiples of 9 starting at 90.

List Prime Numbers

What's the smallest prime number?

On your paper, write 2.

Are there any other even prime numbers?

List Prime Numbers

On your paper, list the prime numbers in order from least to greatest, beginning with 2. You have one minute.

List Prime Numbers

Compare your list with your partner's. Look for differences in your lists and decide who is correct. Make changes to your lists as needed.

You have two minutes.

Application Problem

A coffee shop uses 8-ounce mugs to make all of its coffee drinks. In one week, they served 30 mugs of espresso, 400 lattes, and 5,000 mugs of coffee. How many ounces of coffee drinks did they make in that one week?

Concept Development

Materials

- [ ] (S) Personal white boards, thousands place value chart for dividing

Concept Development

9 ÷ 3

90 ÷ 3

Let's draw place value disks to represent these expressions.

Solve.

Compare your models to your partner's.

Give me a number sentence for each in unit form.

Concept Development

900 ÷ 3

9,000 ÷ 3

Tell your partner how you might model these two expressions.

Model these expressions, using place value disks, with your partner.

What do you notice?

Write the number sentences in unit form. Turn and talk with your partner about what you notice.

Concept Development

500 ÷ 5

On your personal white board, rewrite the expression in unit form.

Why don't you need a pencil and paper to solve this problem?

Concept Development

550 ÷ 5

Now let's look at 350 divided by 5.

Rewrite this expression in unit form. Talk to your partner about how representing this expression is different from the last one.

Let's use 35 tens. Say the number sentence you will use to solve in unit form.

Concept Development

550 ÷ 5

What is the quotient of 350 divided by 5?

Let's model this on the place value chart just to be sure you really understand. Draw 3 hundreds and 5 tens and change the hundreds into smaller units.

Concept Development

3,000 ÷ 5

Discuss with your partner a way to solve this problem.

Solve.

Compare your solution with a pair near you. Discuss the strategy you used.

Is there a pair that would like to share their solution?

Concept Development

3,000 ÷ 5

How is this problem related to 350 ÷ 5?

Good connections. Turn and restate the ideas of your peers to your partner in your own words.

Concept Development

Let me fire some quick problems at you. Tell me the first expression you would solve. For example, if I say 250 ÷ 2, you say 2 hundreds divided by 2. If I say 250 ÷ 5, you would say 25 tens divided by 5. Ready?

Concept Development

The Hometown Hotel has a total of 480 guest rooms. That is 6 times as many rooms as the Travelers Hotel down the street. How many rooms are there in the Travelers Hotel?

Let's read this problem together.

Draw a tape diagram to model this problem. When you have drawn and labeled your diagram, compare it with your partner's.

Concept Development

The Hometown Hotel has a total of 480 guest rooms. That is 6 times as many rooms as the Travelers Hotel down the street. How many rooms are there in the Travelers Hotel?

How can we determine the value of 1 unit?

Yes, 480 divided by 6 units will give us the value of 1 unit. What strategy can you use to solve?

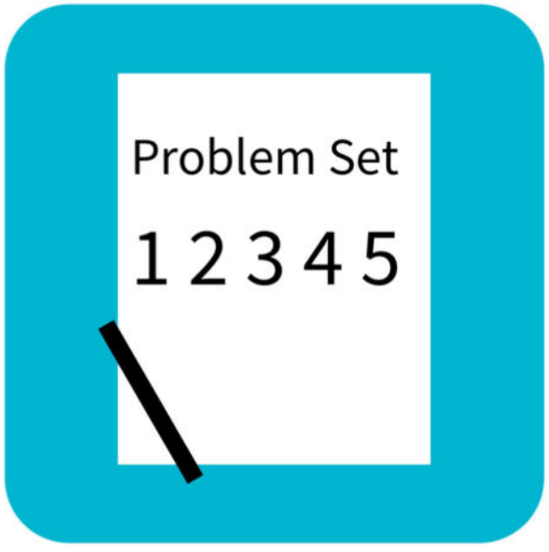
Concept Development

The Hometown Hotel has a total of 480 guest rooms. That is 6 times as many rooms as the Travelers Hotel down the street. How many rooms are there in the Travelers Hotel?

Okay, how does that help?

One unit is equal to…?

So, how many rooms are there in the Travelers Hotel?



Problem Set

Name _____ Date _____

1. Draw place value disks to represent the following problems. Rewrite each in unit form and solve.

   a. 6 ÷ 2 = _____

   (1) (1) (1) (1) (1) (1)

   6 ones ÷ 2 = _____ ones

   b. 60 ÷ 2 = _____

   6 tens ÷ 2 = _____

   c. 600 ÷ 2 = _____

   _____ ÷ 2 = _____

Debrief

How is writing the number sentence in unit form helpful for solving problems like Problem 1?

How did you rename the numbers in Problems 2(b) and 2(c) to divide?

How are Problems 3(a) and 3(e) alike? How are they different?

Explain to your partner how to solve Problem 3(g). How can you start dividing in the hundreds when there aren't enough hundreds to divide?

How did the Application Problem connect to today's lesson?

Exit Ticket

Name _____ Date _____

1. Solve for the quotient. Rewrite each in unit form.

a. 600 ÷ 3 = 200 6 hundreds ÷ 3 = ____ hundreds	b. 1,200 ÷ 6 = _____	c. 2,100 ÷ 7 = _____	d. 3,200 ÷ 8 = _____

2. Hudson and 7 of his friends found a bag of pennies. There were 320 pennies, which they shared equally. How many pennies did each person get?