Eureka Math

4th Grade
Module 3
Lesson 27

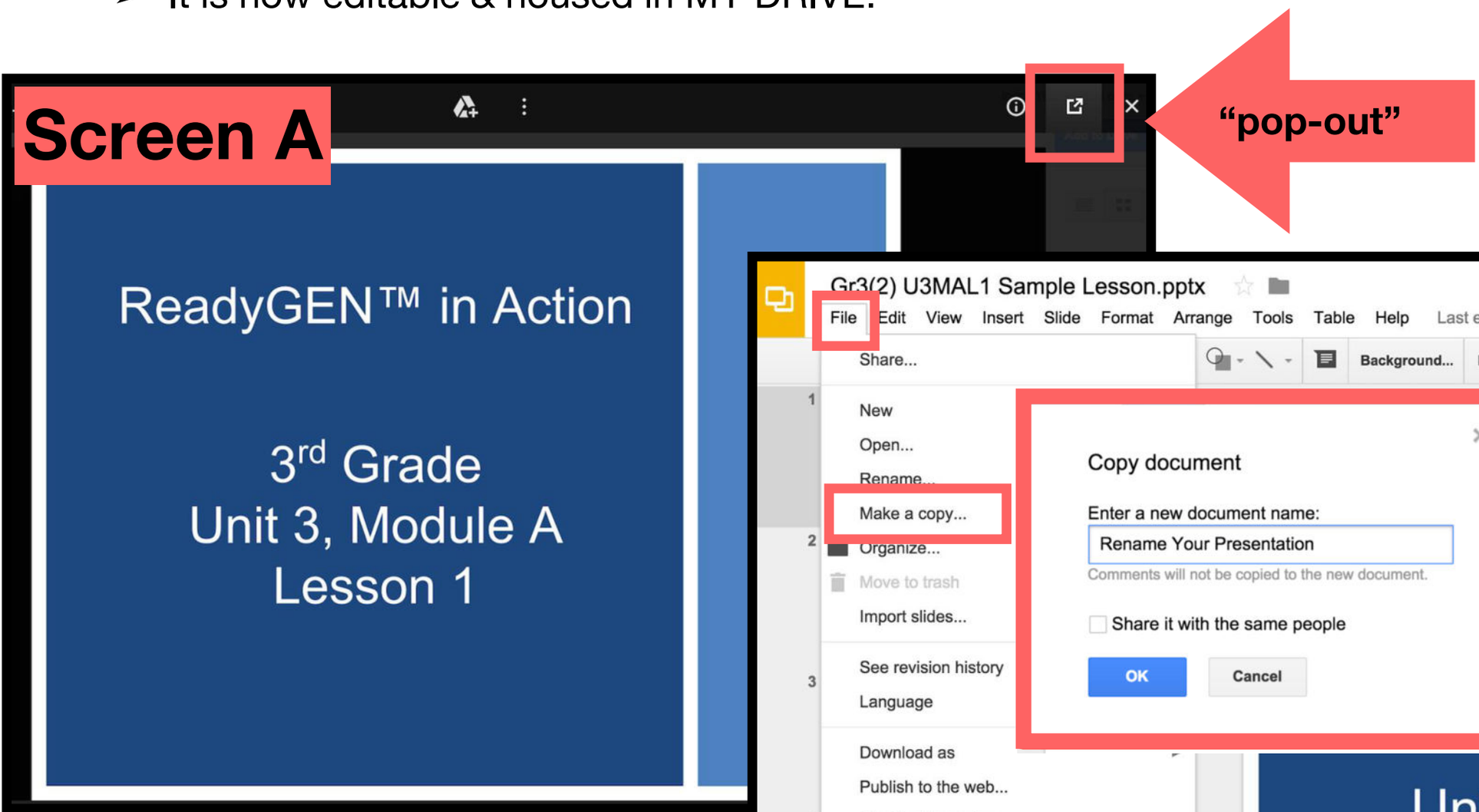
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

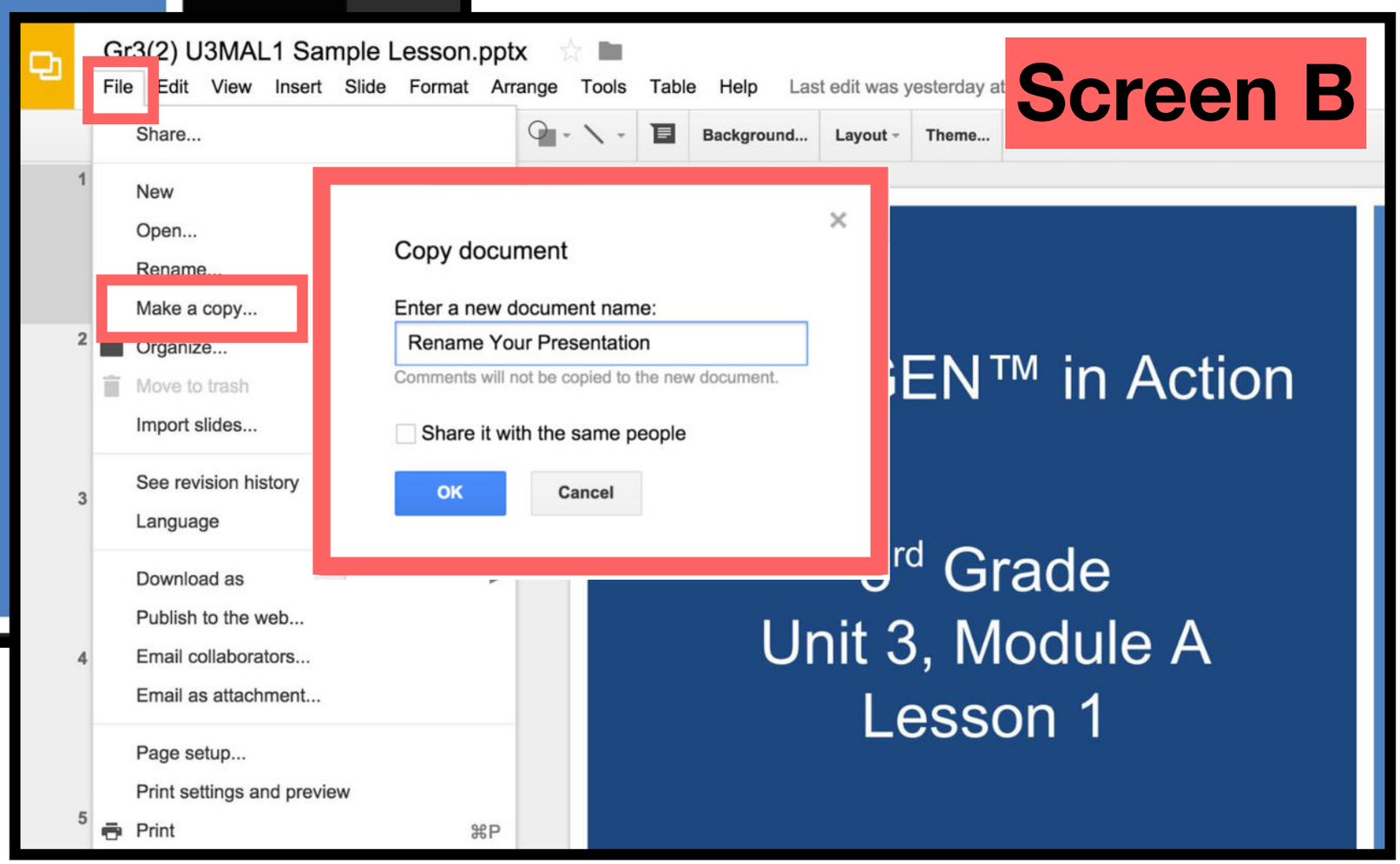
Directions for customizing presentations are available on the next slide.

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.



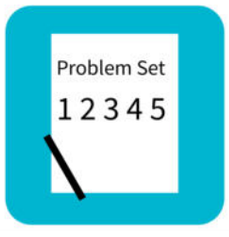


Icons

Read, Draw, Write

Learning Target

Personal White Board

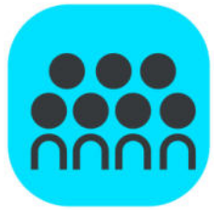


Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

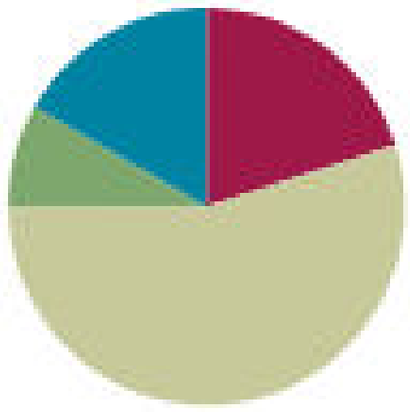
Small Group Time

Lesson 27

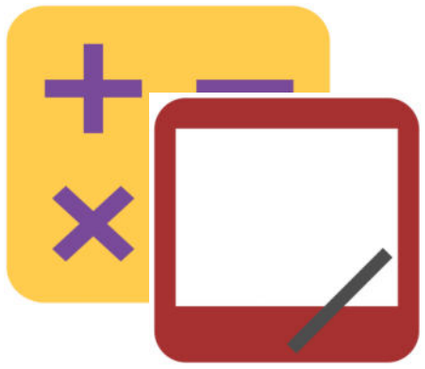
Objective: Represent and solve division problems with up to a three-digit dividend numerically and with place value disks requiring decomposing a remainder in the hundreds place.

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 represent and solve division problems with up to a three-digit dividend numerically and with place value disks requiring decomposing a remainder in the hundreds place.



Sprint: Circle the Prime Number

Divide with Place Value Disks

6 ÷ 2 =

On your personal white board, draw place value disks to represent the expression.

Say the division sentence in unit form.

Application Problem

Emma takes 57 stickers from her collection and divides them up equally between 4 of her friends. How many stickers will each friend receive?

Emma puts the remaining stickers back in her collection. How many stickers will Emma return to her collection?

Concept Development

Materials

- [ ] (S) Personal white boards, thousands place value chart for dividing (Lesson 26 Template)

Concept Development

423 ÷ 3

Let's find the quotient. Represent 423 on the place value chart. Tell your partner how many groups below will be needed.

Four hundreds divided by 3. Distribute your disks and cross of what you've used. What is the quotient?

Concept Development

423 ÷ 3

Tell me how to decompose the remaining 1 hundred.

Let's decompose 1 hundred. Turn to your partner and decide together what to do next.

Why didn't we stop when we had a remainder of 1 hundred?

Concept Development

423 ÷ 3

12 tens divided by 3. What is the quotient? Distribute your disks and cross off what you've used.

Does that mean we are finished?

Do that now. Distribute and cross off your disks. 3 ones divided by 3. What is the quotient?

Concept Development

423 ÷ 3

Is there any more dividing we need to do?

Great! So, what is the quotient of 423 divided by 3?
Say the whole number sentence.

Concept Development

783 ÷ 3

Let's solve 783 ÷ 3 using a place value chart and long division side by side. Represent 783 in a place value chart and prepare for long division.

Starting with the largest unit, tell me what to divide.

Do that on your chart. 7 hundreds divided by 3. What is the quotient?

Concept Development

783 ÷ 3

In your place value chart, you recorded 2 hundred three times. Say a multiplication sentence that tells me that.

We started with 7 hundreds, distributed 6 hundreds, and have 1 hundred remaining. Tell me a subtraction sentence for that.

Concept Development

783 ÷ 3

How many tens remain to be divided?

We decompose the remaining 1 hundred for 10 tens and add on the 8 tens. Decompose the 1 hundred. Say a division sentence for how we should distribute 18 tens.

Concept Development

783 ÷ 3

You recorded 6 tens, three times. Say a multiplication sentence that tells that.

We renamed 10 tens, distributed all 18 tens, and have no tens remaining. Say a subtraction sentence for that.

Concept Development

783 ÷ 3

What is left to distribute?

How many ones remain to be divided?

Say a division sentence for how we should distribute 3 ones.

Concept Development

783 ÷ 3

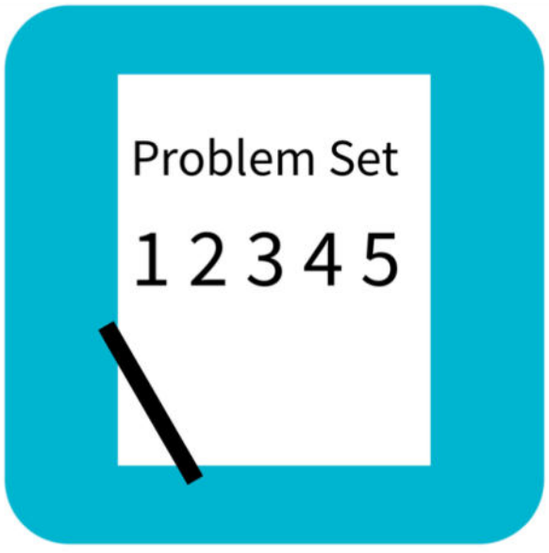
You recorded 1 one, three times. Say a multiplication sentence that describes that.

We have 3 ones, and we distributed 3 ones. Say a subtraction sentence for that.

Concept Development

546 ÷ 3

Work together with a partner to solve 546 ÷ 3 using place value disks and long division. One partner solves the problem using a place value chart and disks, while the other partner uses long division. Work at the same pace, matching the action of the disks with the written method, and, or course, compare your quotients.



Problem Set

Name _____ Date _____

1. Divide. Use place value disks to model each problem.

a. 324 ÷ 2

Debrief

Think about ways to connect the division Problems in 1(a) and 1(b) to word problems. What are some other ways to say *divided by two*? Try making a connection to fractions by using words like half.

Problems 1(c) and 1 (d) have the same divisor. Problem 1(d) has a larger whole. What conclusions can you make about quotients when the wholes are different, but the divisors are the same?

The size of a remainder is closely connected with that of the divisor. What conclusions can you make about remainders, whether they are in the hundreds, tens, or ones columns?

Exit Ticket

Name _____ Date _____

Divide. Use place value disks to model each problem. Then, solve using the algorithm.

1. 423 ÷ 3

Disks | Algorithm