Eureka Math

4th Grade
Module 3
Lesson 19

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.

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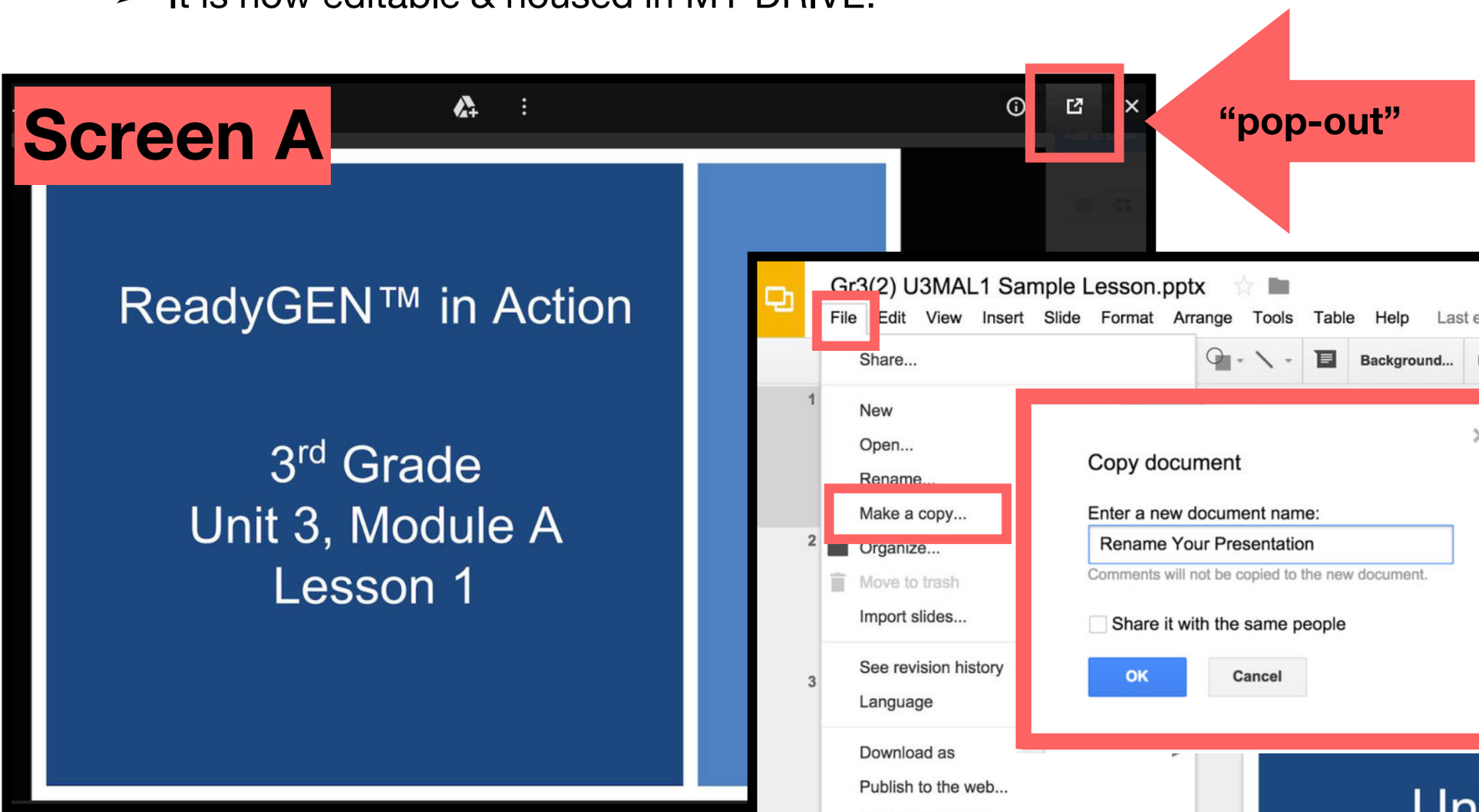
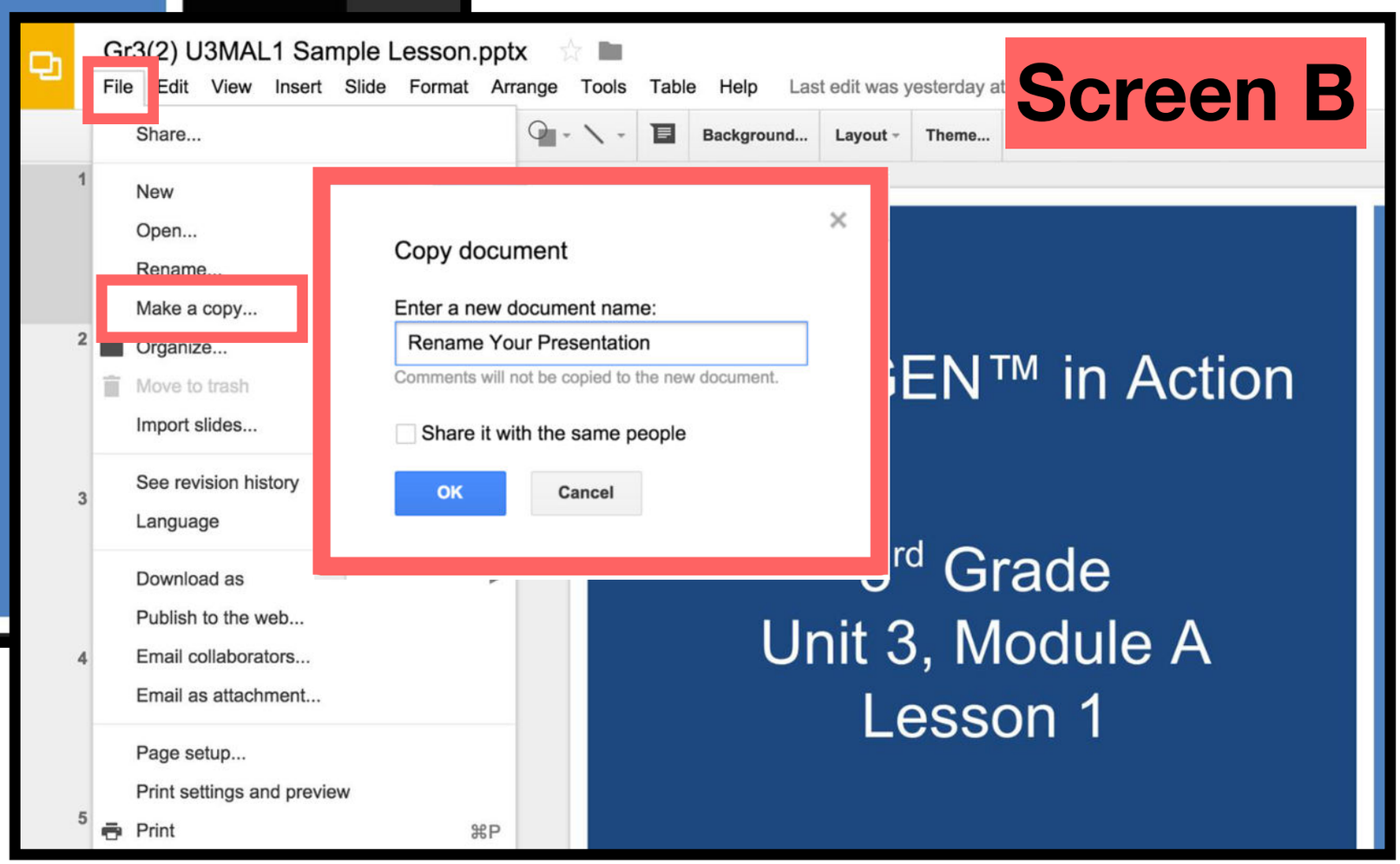
Customize this Slideshow

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.



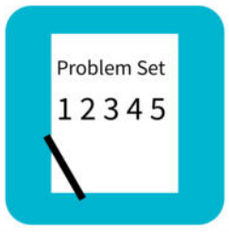


Icons

Read, Draw, Write

Learning Target

Personal White Board

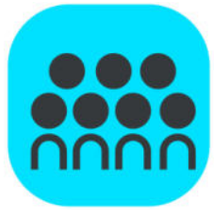


Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

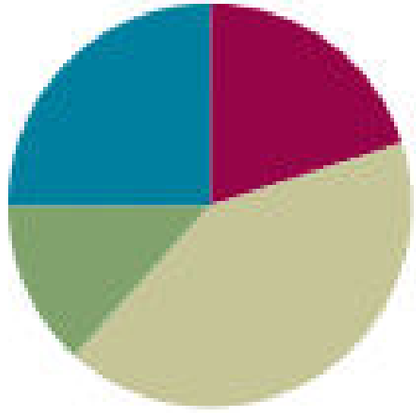
Small Group Time

Lesson 19

Objective: Explain remainders by using place value understanding and models.

Suggested Lesson Structure

Fluency Practice	(12 minutes)
Application Problem	(8 minutes)
Concept Development	(25 minutes)
Student Debrief	(15 minutes)
Total Time	**(60 minutes)**



I can explain remainders by using place value understanding and models.

Fluency Practice

SPRINT!!!

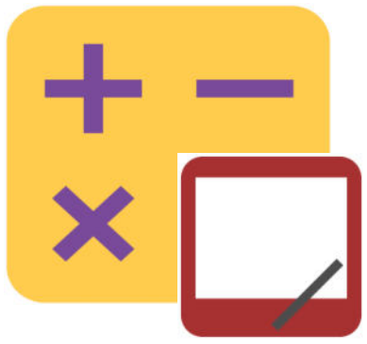
A

Number Correct: _____

Mental Division

1.	20 ÷ 2 =	
2.	4 ÷ 2 =	
3.	24 ÷ 2 =	
4.	30 ÷ 3 =	
5.	6 ÷ 3 =	

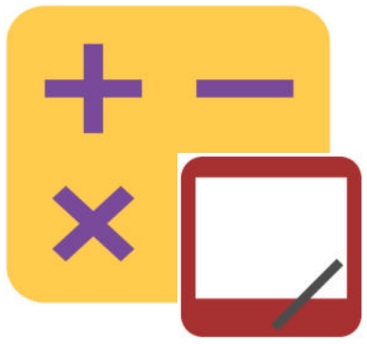
23.	68 ÷ 2 =	
24.	96 ÷ 3 =	
25.	86 ÷ 2 =	
26.	93 ÷ 3 =	
27.	88 ÷ 4 =	



Fluency Practice

Divide Using the Standard Algorithm

37 ÷ 2



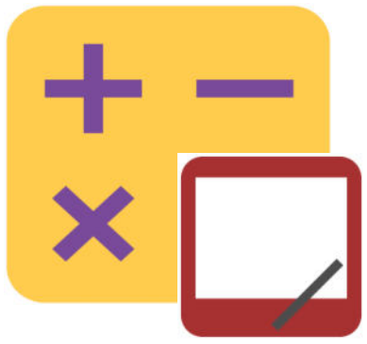
Fluency Practice

Divide Using the Standard Algorithm

37 ÷ 2

30 divided by 2 is 15

7 divided by 2 is 6 . . . with one left over



Fluency Practice

Divide Using the Standard Algorithm

37 ÷ 2

30 divided by 2 is 15

7 divided by 2 is 6 . . . with one left over

37 ÷ 2 = 21 r.1

Fluency Practice

Divide Using the Standard Algorithm

45 ÷ 3

26 ÷ 4

58 ÷ 3

Application Problem

Two friends start a business writing and selling comic books. After one month, they have earned $38. Show how they can share their earnings fairly, using $1, $5, $10, and $20.

Concept Development

Materials

(T) Tens place value chart (lesson 16 template)

(S) Personal white board, tens place value chart (lesson 16 template)

Concept Development

Solve division, with remainders

Use place value disks to solve.

41 ÷ 3

What disks will you draw to represent 41?

How many equal groups will we divide 41 into?

Concept Development

Solve division, with remainders

Draw 41 place value disks

Tens	Ones

Concept Development

Solve division, with remainders

How can we divide the 41 place value disks equally into 3 groups?

Tens	Ones

Concept Development

Solve division, with remainders

How can we divide the remaining ten?

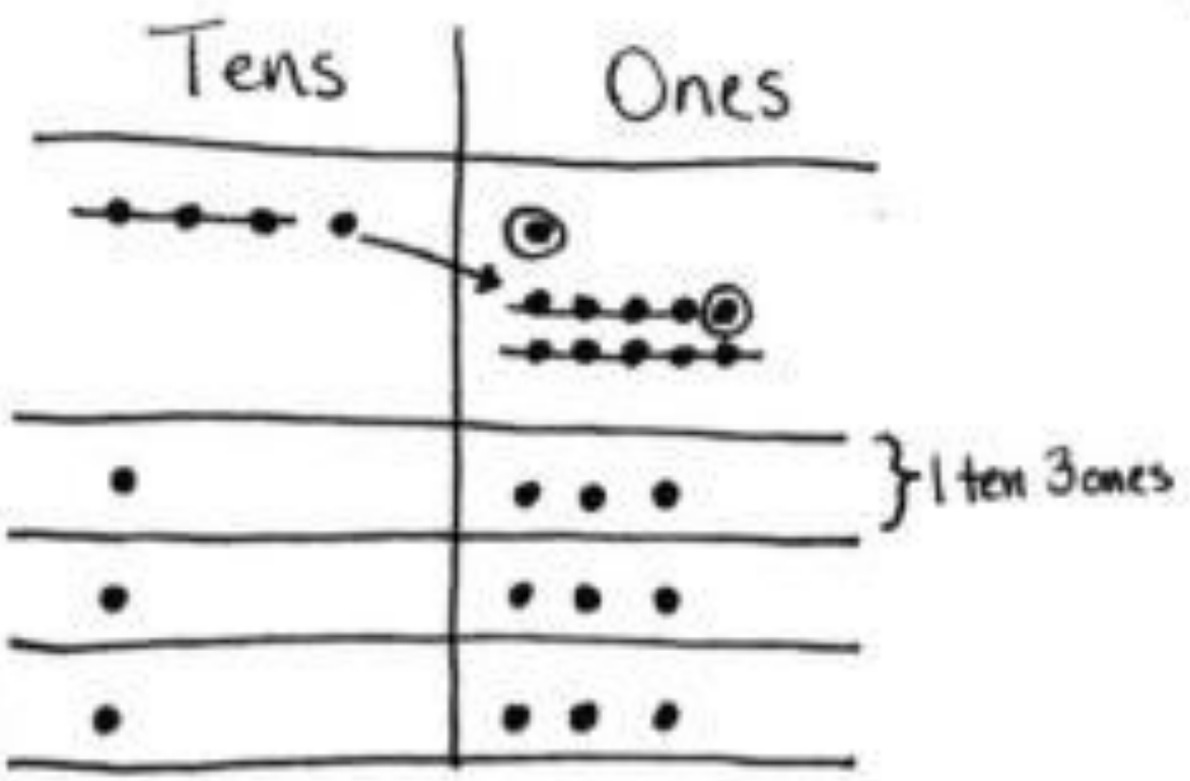
Tens	Ones

Concept Development

Solve division, with remainders

Use place value disks to solve.

41 ÷ 3



Concept Development

Solve division, with remainders

Use place value disks to clearly show the solution for 41 ÷ 3.

Tell me the quotient.

Tell me the remainder.

Concept Development

Solve division, with remainders

41 ÷ 3 = 13 r.2

With your partner, write an equation we can use to check the division.

Concept Development

Solve division, with remainders

41 ÷ 3 = 13 r.2

With your partner, write an equation we can use to check the division.

(13 x 3) + 2 =

Concept Development

Solve division, with remainders

41 ÷ 3 = 13 r.2

With your partner, write an equation we can use to check the division.

(13 x 3) + 2 =

39 + 2 = 41

Concept Development

Solve division, with remainders

Tell your partner what happens when we have an extra ten we can't distribute.

Concept Development

Solve division, with remainders

Can you think of a real life situation in which you might change a ten for 10 ones?

Concept Development

Solve division, with remainders

Let's say I give 4 students $64 to share equally -- 6 ten-dollar bills and 4 one-dollar bills.

Write an equation and draw place value disks to show how to divide the money.

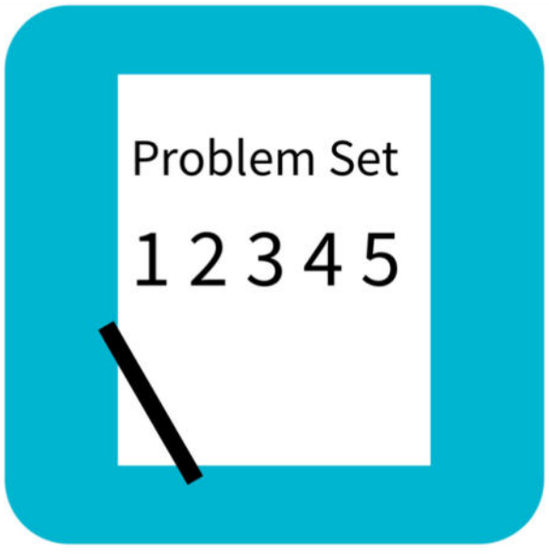
Concept Development

Solve division, with remainders

Let's say I give 4 students $64 to share equally -- 6 ten-dollar bills and 4 one-dollar bills.

64 ÷ 4

How much money does each student receive?



Problem Set

Name _____ Date _____

1. When you divide 94 by 3, there is a remainder of 1. Model this problem with place value disks. In the place value disk model, how did you show the remainder?

Debrief

In Problem 2, Cayman's remainder is larger than the divisor. What rule can you suggest to Cayman so he doesn't make this mistake again? Was his answer completely wrong? Why not?

In Problem 4, the friends have to make change for the 1 ten-dollar bill. Why can't they tear the bill in half? How does that relate to the place value disks?

In Problem 5, how did your script describe the remainder in the tens and ones?

Select a few students to share and compare their scripts for solving 45 ÷ 3.

Debrief

Compare using place value disks and other methods to divide. Which do you prefer? Why?

We related a remainder in the tens place to making change with money. What other real-life situations can you relate it to? Is this similar to mixed metric units, such as having 5 liters of water to share among 4 people?

With money, sometimes we might use units other than ones and tens, such as fives or twenties. Why do you think we use only ones and tens to model division on the place value chart?

Exit Ticket

Name _____ Date _____

1. Molly's photo album has a total of 97 pictures. Each page of the album holds 6 pictures. How many pages can Molly fill? Will there be any pictures left? If so, how many? Use place value disks to solve.