Eureka Math

4th Grade
Module 3
Lesson 17

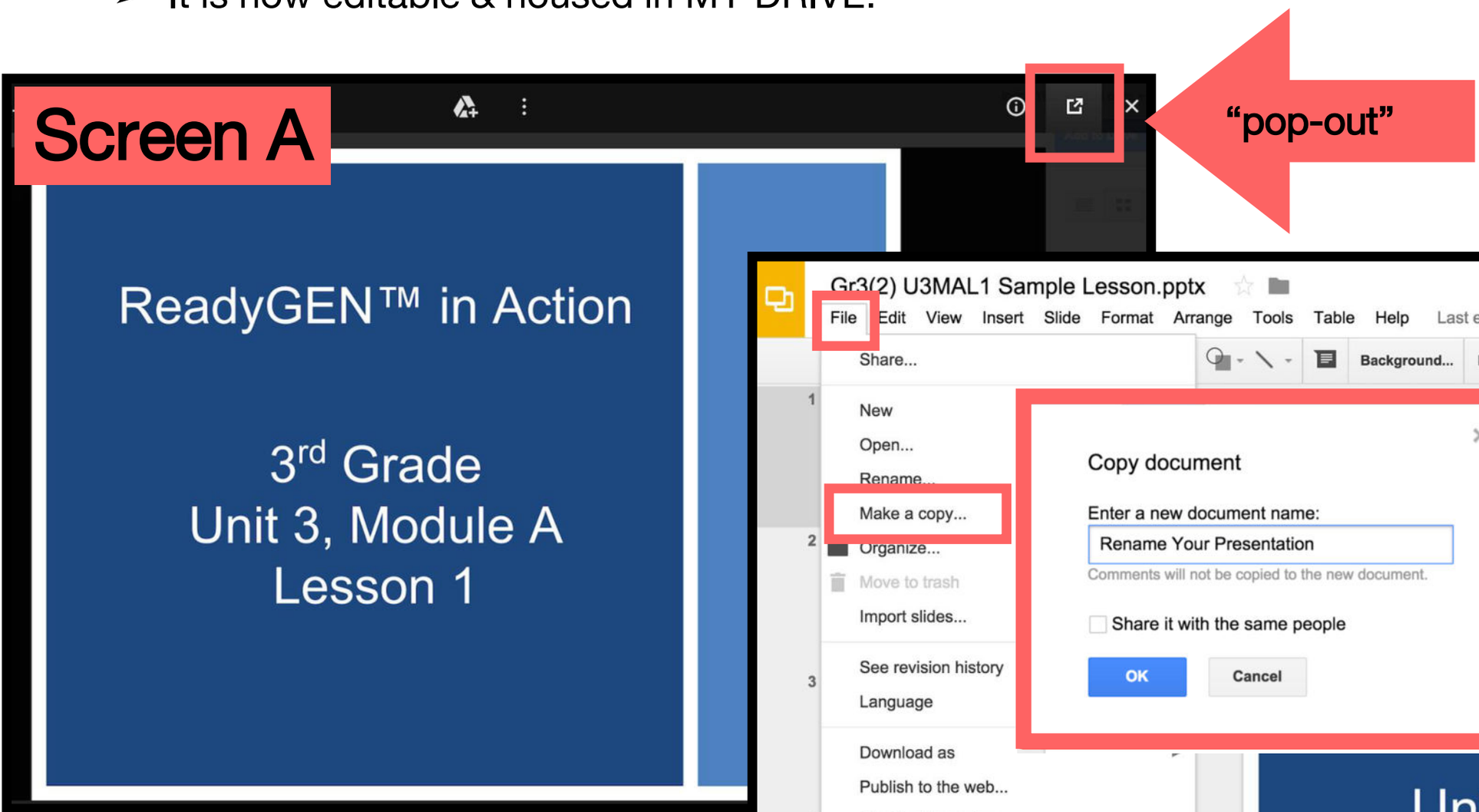
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

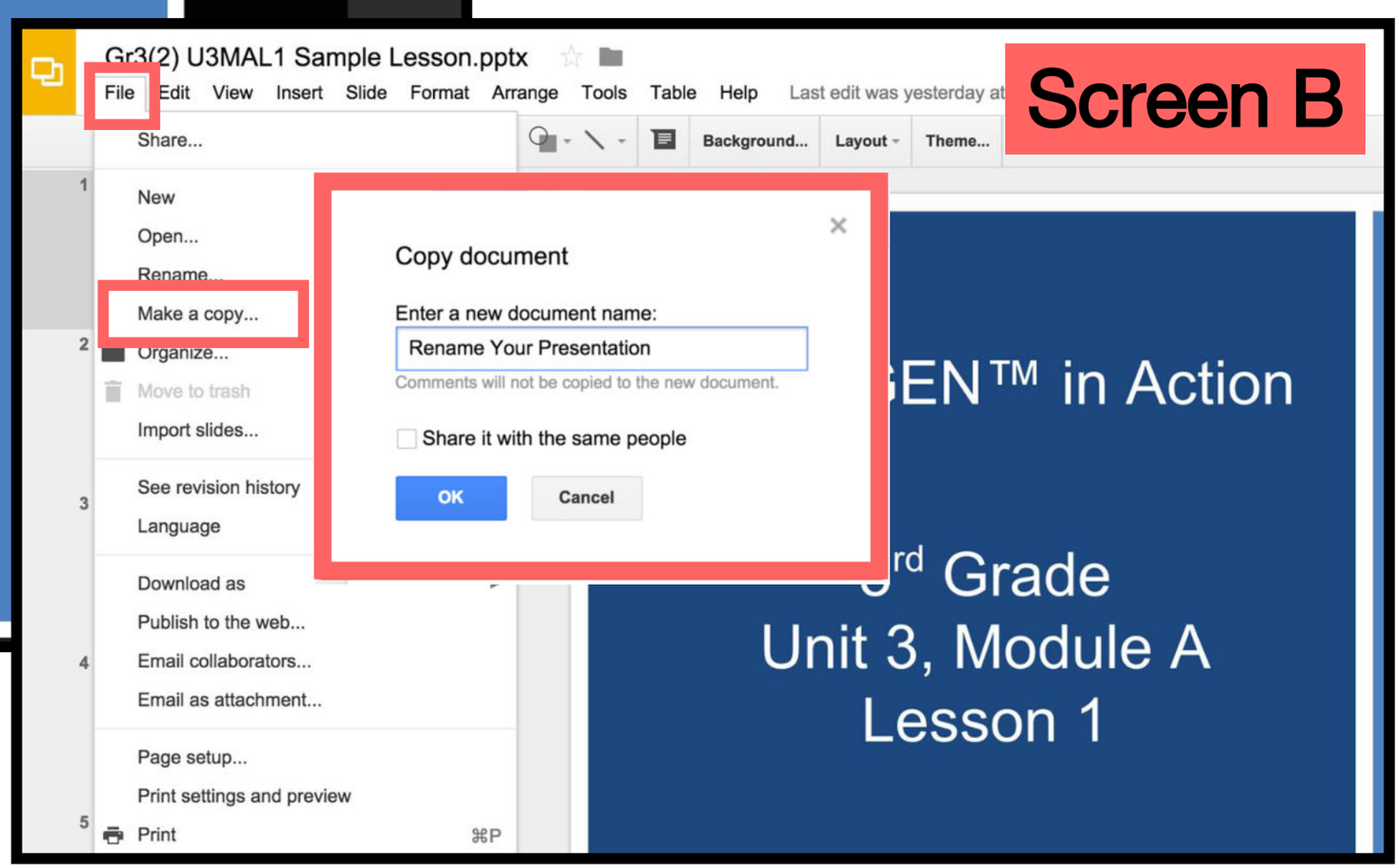
Directions for customizing presentations are available on the next slide.

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.



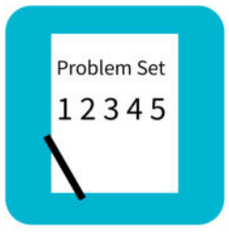


Icons

Read, Draw, Write

Learning Target

Personal White Board

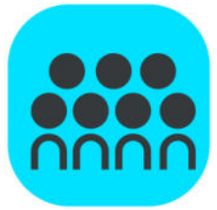


Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

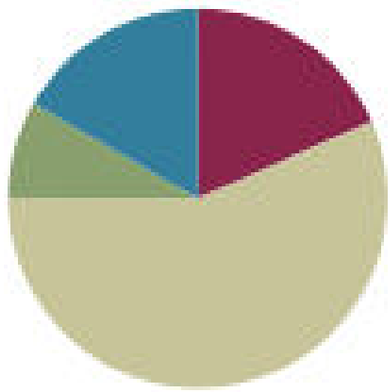
Small Group Time

Lesson 17

Objective: Represent and solve division problems requiring decomposing a remainder in the tens.

Suggested Lesson Structure

Fluency Practice	(11 minutes)
Application Problem	(5 minutes)
Concept Development	(34 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**



Objective: Represent and solve division problems requiring decomposing a remainder in the tens.

Group Counting

Count forward and backward. Watch me for the signal to change direction.

Count by:

- Twos to 20
- Threes to 30
- Fours to 40
- Fives to 50

Divide Mentally

$$40 \div 2$$

Say the completed division sentence in unit form.

$$8 \div 2$$

Say the completed division sentence in unit form.

$$48 \div 2$$

Draw a number bond to connect the two original problems to this new problem. Say the completed division sentence in unit form.

Divide Mentally

$$90 \div 3$$

Say the completed division sentence in unit form.

$$3 \div 3$$

Say the completed division sentence in unit form.

$$93 \div 3$$

Draw a number bond to connect the two original problems to this new problem. Say the completed division sentence in unit form.

Divide Mentally

$$80 \div 4$$

Say the completed division sentence in unit form.

$$8 \div 4$$

Say the completed division sentence in unit form.

$$88 \div 4$$

Draw a number bond to connect the two original problems to this new problem. Say the completed division sentence in unit form.

Divide Using the Standard Algorithm

$$24 \div 2$$

On your boards, solve the division problem using long division.
Continue with the following possible sequence:

$$36 \div 3$$
$$37 \div 3$$
$$55 \div 5$$
$$57 \div 5$$
$$88 \div 4$$
$$87 \div 4$$
$$96 \div 3$$
$$95 \div 3.$$

Application Problem

Audrey and her sister found 9 dimes and 8 pennies. If they share the money equally, how much money will each sister get?

Concept Development

Materials

- (S) Personal white board, tens place value chart (Lesson 16 Template)

Solve a Division Problem

3 ÷ 2

Model on a place value chart and with the standard algorithm.

Solve a Division Problem

30 ÷ 2

Using mental math, tell your partner the answer to 30 ÷ 2.

Let’s confirm your quotient. Represent 30 on the place value chart. Tell your partner how many groups below are needed.

Solve a Division Problem

$$30 \div 2$$

Let’s solve 30 ÷ 2 using long division.

$$2\overline{)30}$$

Solve a Division Problem

4 ÷ 3

Represent 4 ones on the place value chart. With your partner, solve 4 ÷ 3 using place value disks and long division.

Solve a Division Problem

42 ÷ 3

Represent 4 tens 2 ones on the place value chart, and get ready to solve using long division.

Share with a partner how the model matches the steps of the algorithm, paying particular attention to the decomposition of 1 ten and how it is combined with the ones.

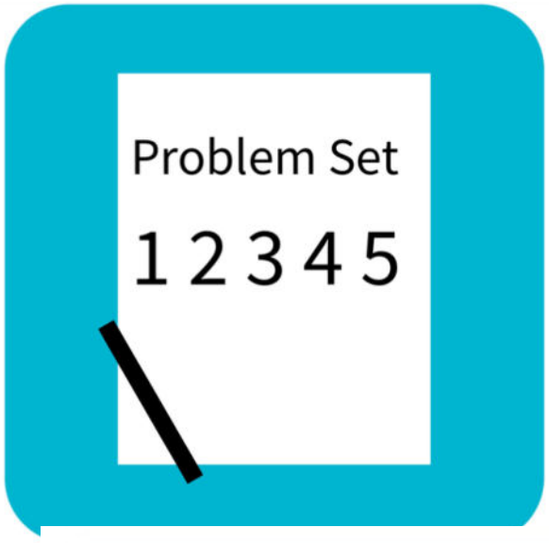
Solve a Division Problem

84 ÷ 3

Solve for 84 ÷ 3 by using place value disks and long division.

What was different about the place value chart with this problem?

Check your answer using multiplication.



Problem Set

Name _____ Date _____

Show the division using disks. Relate your model to long division. Check your quotient and remainder by using multiplication and addition.

1. $5 \div 2$

Ones

$2 \overline{)5}$

quotient = _____

remainder = _____

Check Your Work

$$\begin{array}{r} 2 \\ \times\ 2 \\ \hline \end{array}$$

Debrief

Participate in the discussion by...

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

Debrief

How did Problem 2 allow you to see only the remaining 1 ten in the ones column?

Explain why 1 ten remains in Problem 4.

How is the long division recording different in today's lesson compared to yesterday's lesson?

Exit Ticket

Name _____ Date _____

Show the division using disks. Relate your model to long division. Check your quotient by using multiplication and addition.

1. $5 \div 4$

Ones

$4 \overline{)5}$

quotient = _____

remainder = _____

Check Your Work