Eureka Math

3rd Grade
Module 7
Lesson 33

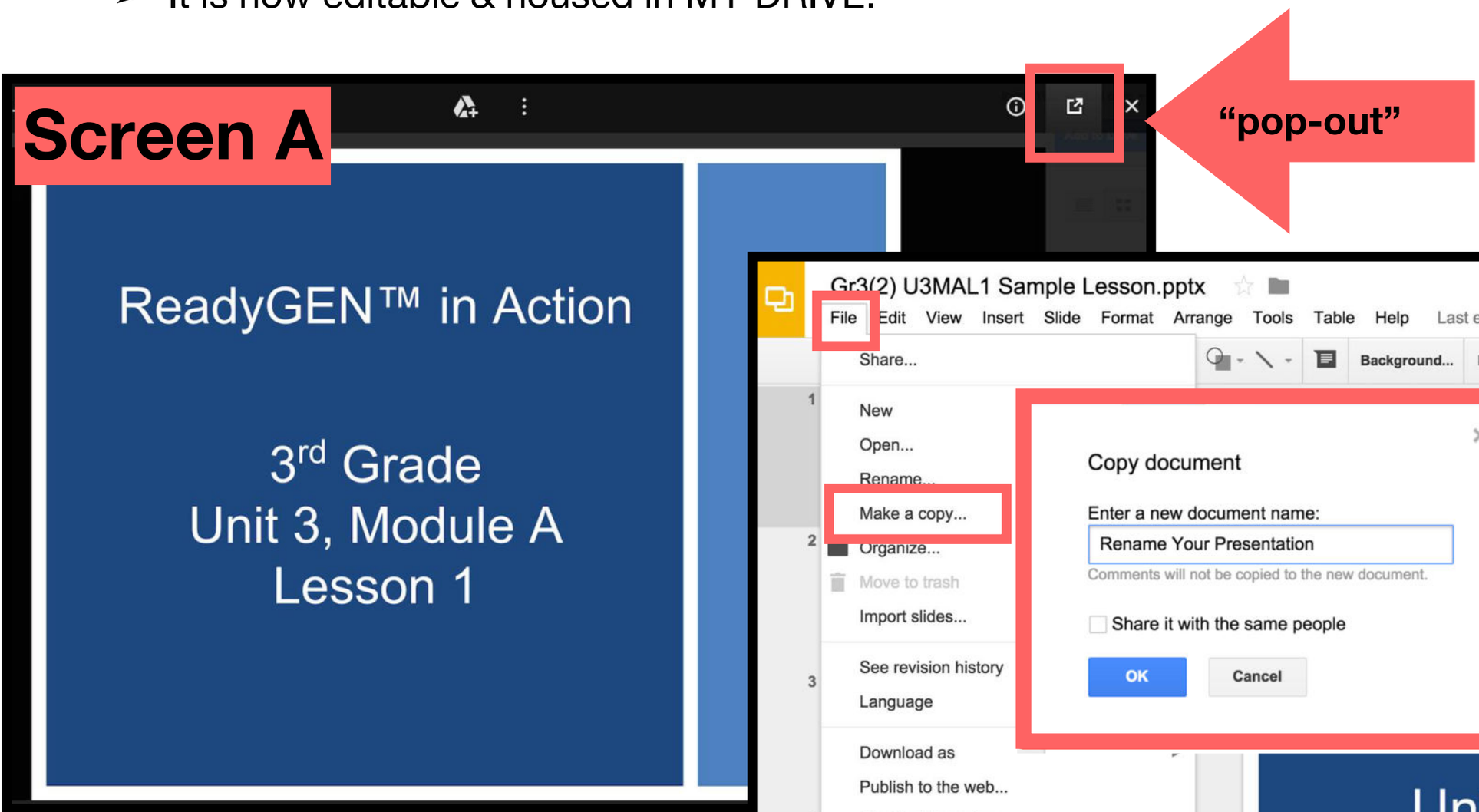
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

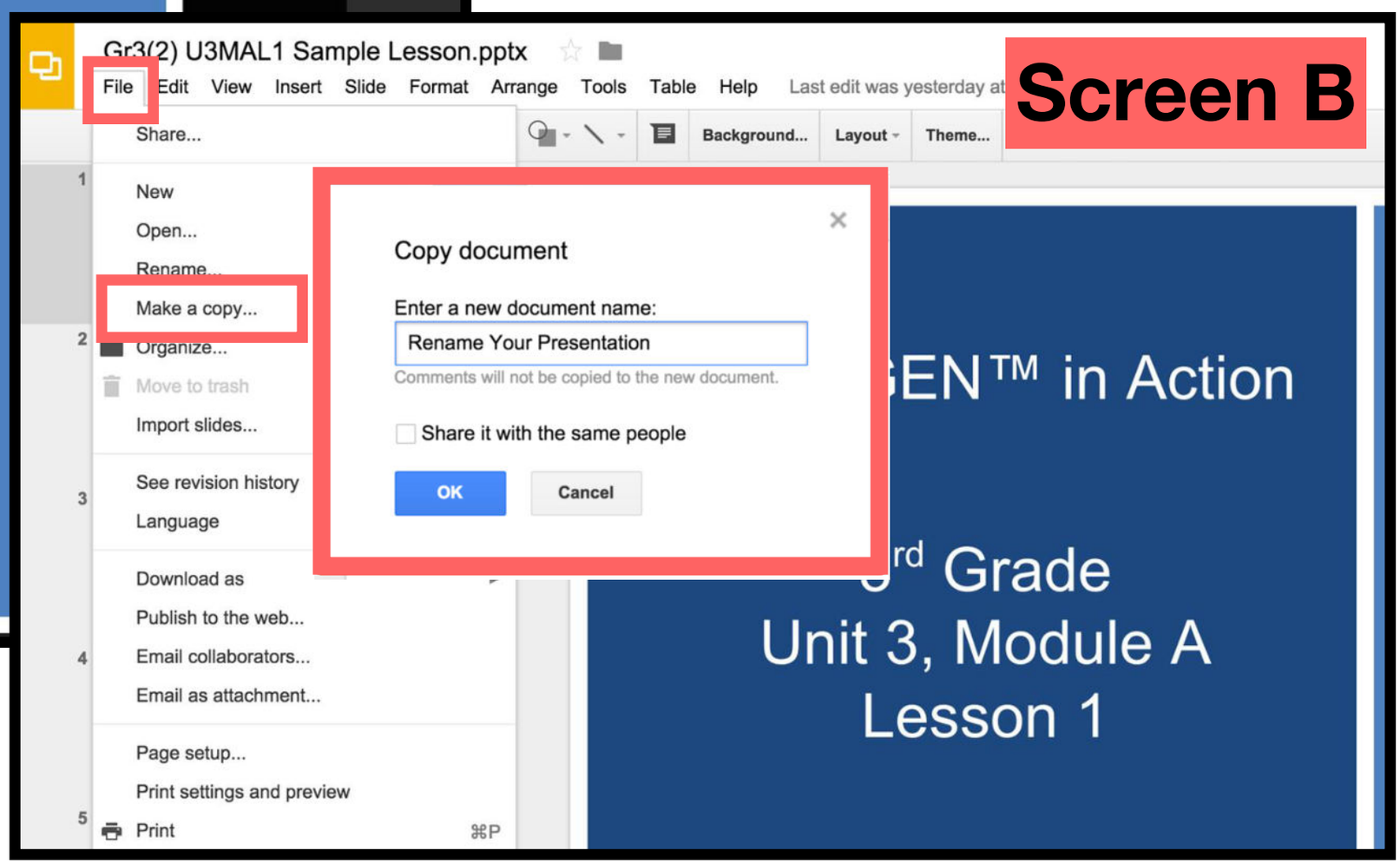
Directions for customizing presentations are available on the next slide.

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.



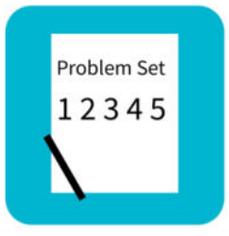


Icons

Read, Draw, Write

Learning Target

Personal White Board

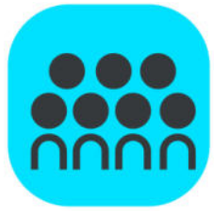


Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

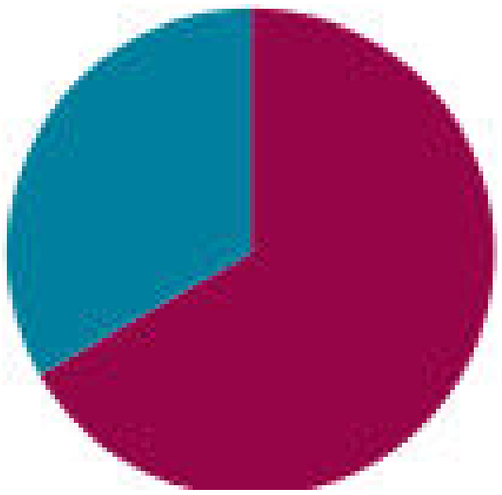
Small Group Time

Lesson 33

Objective: Solidify fluency with Grade 3 skills.

Suggested Lesson Structure

Fluency Practice	(50 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**



I can prove my skills with grade 3 fluency.

Fluency Practice

Sprint: Mixed Division (10 minutes)

A

Number Correct: _____

Mixed Division

1.	4 ÷ 2 =		23.	16 ÷ 8 =	
2.	6 ÷ 2 =		24.	40 ÷ 8 =	
3.	10 ÷ 2 =		25.	32 ÷ 8 =	
4.	20 ÷ 2 =		26.	56 ÷ 8 =	
5.	10 ÷ 5 =		27.	18 ÷ 9 =	
6.	15 ÷ 5 =		28.	45 ÷ 9 =	
7.	25 ÷ 5 =		29.	36 ÷ 9 =	
8.	20 ÷ 5 =		30.	63 ÷ 9 =	
9.	8 ÷ 4 =		31.	64 ÷ 8 =	
10.	12 ÷ 4 =		32.	48 ÷ 8 =	
11.	20 ÷ 4 =		33.	81 ÷ 9 =	
12.	16 ÷ 4 =		34.	54 ÷ 9 =	
13.	6 ÷ 3 =		35.	24 ÷ 6 =	
14.	9 ÷ 3 =		36.	16 ÷ 2 =	
15.	15 ÷ 3 =		37.	28 ÷ 7 =	
16.	12 ÷ 3 =		38.	27 ÷ 3 =	
17.	60 ÷ 6 =		39.	24 ÷ 8 =	
18.	12 ÷ 6 =		40.	32 ÷ 4 =	
19.	18 ÷ 6 =		41.	27 ÷ 9 =	
20.	35 ÷ 7 =		42.	72 ÷ 9 =	
21.	14 ÷ 7 =		43.	56 ÷ 7 =	
22.	21 ÷ 7 =		44.	72 ÷ 8 =	

Fluency Practice

Multiply (4 minutes)

Write each multiplication sentence.
Then fill in with the missing quotient.

4 x 2= ___

3 x 4 = ___

4 x 4 = ___

5 x 6 = ___

7 x 6 = ___

8 x 7 = ___

9 x 6 = ___

Mixed Review Games

Materials: (S) Fluency game materials (listed with each activity and included at the end of the lesson), Problem Set

- Play with a partner
- Take turns being teacher/student
- Record your games on the problem set

Multiplication

Materials: (S) Personal white board

T: (Draw an array with 3 rows of 2.) Say the repeated addition sentence.
S: 2 + 2 + 2 = 6.
T: (Write 3 × ____ = ____.) On your personal white board, complete the multiplication sentence.
S: (Write 3 × 2 = 6.)

Repeat using the following ideas: 4 rows of 10, 3 rows of 4, 7 rows of 3, and 8 rows of 2. Or you can think of your own.

Equal Groups

Materials: (S) Personal white board

T: (Draw a picture with 2 groups of 4 circled.) Say the total as a repeated addition sentence.
S: 4 + 4 = 8.
T: Write a division sentence that means the number of groups is unknown.
S: (Write 8 ÷ 4 = 2.)
T: Below that division sentence, write a division sentence that means the number in each group is unknown.
S: (Write 8 ÷ 2 = 4.)

Repeat using the following ideas: 5 groups of 3, 3 groups of 4, and 6 groups of 2. Or you can think of your own.

Commutative Multiplying

Materials: (S) Personal white board

T: (Draw an array with 3 rows of 2 dots.) How many rows of 2 do you see?
S: 3 rows of 2.
T: Write four different multiplication sentences for the picture.
S: (Write 3 × 2 = 6, 2 × 3 = 6, 6 = 3 × 2, and 6 = 2 × 3.)

Repeat using the following ideas: 3 rows of 5 and 4 rows of 3. Or you can think of your own.

T: (Write 4 × 2 = 2 × ___.) On your personal white board, fill in the blank.
S: (Write 4 × 2 = 2 × 4.)

Repeat using the following ideas: 9 × 5 = 5 × ___ and 3 × 6 = 6 × ___. Or you can think of your own.

Tape Diagrams

Materials: (S) Personal white board

T: (Draw a tape diagram with 5 equal units and 2 stars in the first unit.) What is the value of each unit?
S: 2 stars.
T: How many units are there?
S: 5 units.
T: Write a multiplication sentence for this tape diagram.
S: (Write 5 × 2 = 10.)

Repeat using the following ideas:
4 × 3 = 12, 8 ÷ 4 = 2, and 15 ÷ 3 = 5. Or you can think of your own.

Tens

Materials: (S) Place value cards, personal white board

Note: Place value cards can be made with index cards for personal practice.

T: (Write 7 tens = ____.) Say the number.

S: 70.

Repeat using the following ideas: 10 tens, 12 tens, 20 tens, 28 tens, 30 tens, and 37 tens. Or you can think of your own.

Place value cards

Tens and Hundreds

Materials: (S) Personal white board

T: (Write 9 + __ = 10.) Say the missing number.

S: 1.

T: (Write 90 + __ = 100.) Say the missing number.

S: 10.

T: (Write 91 + __ = 100.) Say the missing number.

S: 9.

T: (Write 291 + __ = 300.) Say the missing number.

S: 9.

Repeat using the following ideas:

1 + __ = 10, 10 + __ = 100, 11 + __ = 100, 211 + __ = 300, 8 + __ = 10, 80 + __ = 100, 85 + __ = 100, and 385 + __ = 400.

Or you can think of your own.

Make Twenty-Four Game

Materials: (S) Set of 6 cards per pair

Note: Students play in pairs. Each pair has a set of 6 cards, each with a number (2, 3, 4, 6, 8, and 12).

T: (Write ___ × ___ = 24.) Spread the cards out in front of you.

T: Put your hands behind your back. I'll put a number in the first blank. When you know the number that belongs in the second blank, touch the card that shows the number. The first one of us to touch the card keeps it. Whoever has the most cards at the end wins. (Write 12 in the first blank.)

S: (Touch the 2 card. The first to touch it keeps the card.)

Repeat. This time, however, you might make 36 with the same cards plus 9 and 18.

Write in the Parentheses

Materials: (S) Personal white board

T: (Write 10 – 5 + 3 = 8.) On your personal white board, copy the equation. Then, insert parentheses to make the statement true.

S: (Write (10 – 5) + 3 = 8.)

Repeat using the following ideas:
10 – 5 + 3 = 2, 10 = 20 – 7 + 3, 16 = 20 – 7 + 3, 8 + 2 × 4 = 16, 8 + 2 × 4 = 40, 12 = 12 ÷ 2 × 2, 3 = 12 ÷ 2 × 2, 10 = 35 – 5 × 5, and 20 – 10 ÷ 5 = 2.

Or you can think of your own.

Round Three- and Four-Digit Numbers

Materials: (S) Personal white board

T: (Write 87 ≈ ____.) What is 87 rounded to the nearest ten?

S: 90.

Repeat using the following ideas: 97, 43, 643, 35, and 835. Or you can think of your own.

T: (Write 253 ≈ ____.) What is 253 rounded to the nearest hundred?

S: 300.

Repeat using the following ideas: 1,253, 735, 1,735, 850, 1,850, 952, 1,371, and 1,450. Or you can think of your own.

Partition Shapes

Materials: (S) Personal white board

T: Draw a square.

S: (Draw a square.)

T: (Write $\frac{1}{2}$.) Estimate to equally partition the square into halves.

S: (Partition.)

Repeat using the following ideas: line $\frac{1}{5}$, circle $\frac{1}{4}$, circle $\frac{1}{8}$, bar $\frac{1}{10}$, and bar $\frac{1}{6}$.

Or you can think of your own.

Write the Unit Fraction

Materials: (S) Personal white board

T: (Draw a shape with $\frac{1}{2}$ shaded.) Write the unit fraction.

S: (Write $\frac{1}{2}$.)

Repeat using the following ideas: $\frac{1}{4}$, $\frac{1}{8}$, $\frac{1}{6}$, $\frac{1}{10}$, and $\frac{1}{5}$.

Or you can think of your own.

Greater or Less Than 1?

T: (Write $\frac{1}{2}$.) Greater or less than 1?

S: Less!

Repeat using the following ideas: $\frac{3}{2}$, $\frac{5}{4}$, $\frac{3}{4}$, $\frac{3}{7}$, $\frac{5}{3}$, and $\frac{5}{2}$.

Or you can think of your own.

Draw Fractions from Part to Whole

Materials: (S) Personal white board

T: Draw 1 unit on your personal white board.

S: (Draw 1 unit.)

T: Label the unit $\frac{1}{3}$. Now, draw the whole that goes with your unit of $\frac{1}{3}$.

Repeat using the following ideas: $\frac{1}{5}$, $\frac{1}{6}$, $\frac{1}{4}$, and $\frac{1}{2}$.

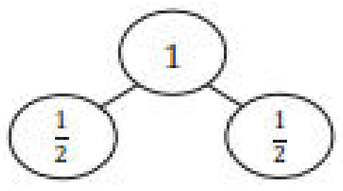
Or you can think of your own.

Draw Number Bonds of One

Materials: (S) Personal white board

T: Draw a number bond to partition one into halves.

S: (Draw.)



T: How many copies of 1 half did you draw to make one?

S: 2 copies.

Repeat using the following ideas: thirds, fourths, fifths, sixths, sevenths, etc. Or you can think of your own.

Problem Set (10 mins.)

Name _____ Date _____

List some games we played today in the chart below. Place a check mark in the box that shows how you felt about your level of fluency as you played each activity. Check off the last column if you would like to practice this activity over the summer.

Activity	I still need some practice with my facts.	I am fluent.	I would like to put this in my summer activity book.
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			

Debrief

Any combination of the questions below may be used to lead the discussion.

- What is something you did today that you could not do before you came to the third grade?
- Are there any activities that were still a little challenging? What might you do to get better?
- Which of these games might be fun to play over the summer so you can keep your math skills sharp? Who will you teach to play with you?

Exit Ticket (3 minutes)

Name _____ Date _____

What fluency activity helped you the most in becoming fluent with your multiplication and division facts this year? Write three or four sentences to explain what made it so useful.