Eureka Math

2nd Grade
Module 8
Lesson 8

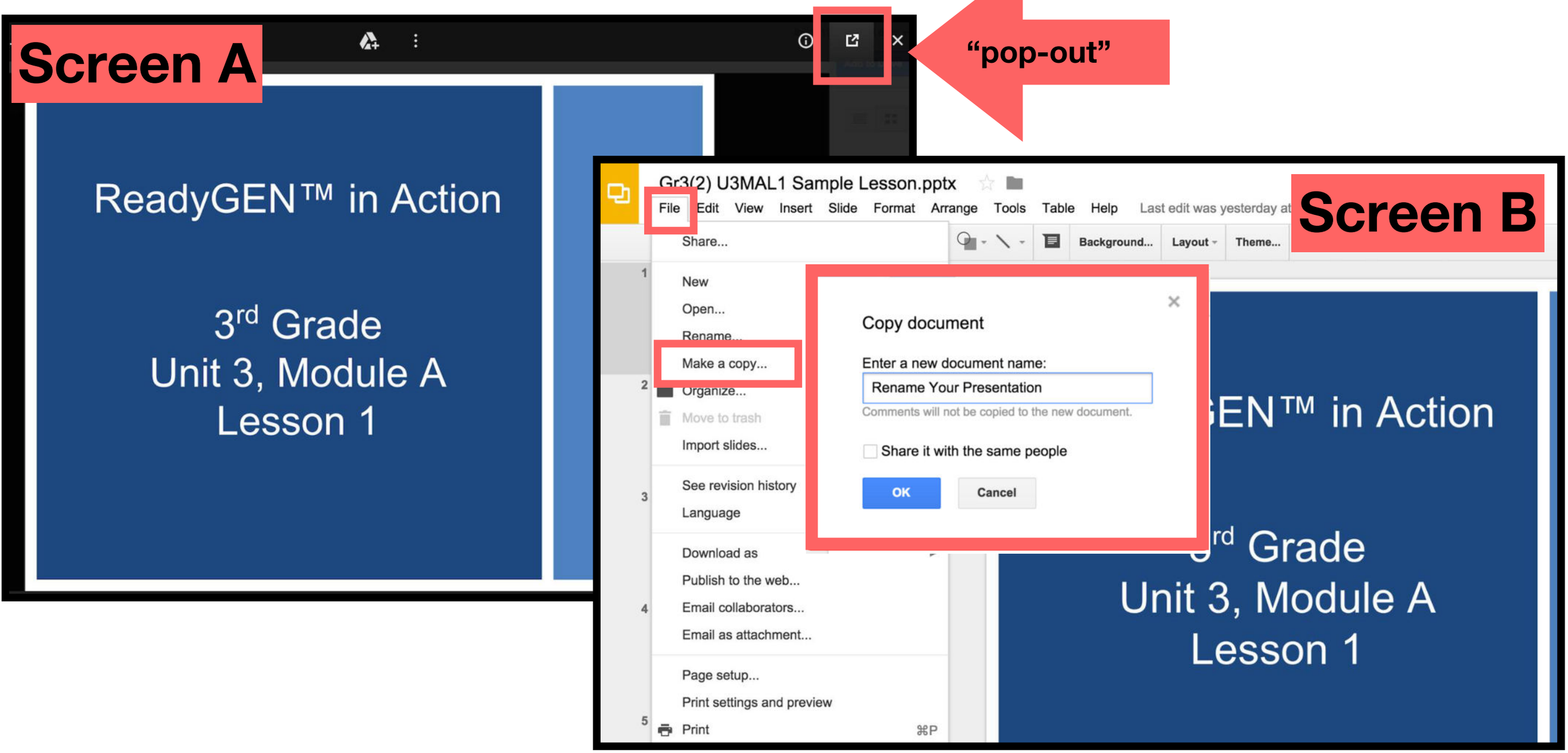
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

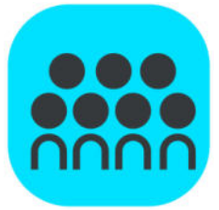
Personal White Board

Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

Small Group Time

Materials Needed:

Materials:
Fluency
(S) Whiteboard, hundreds place value chart
(lesson 3 Fluency template)

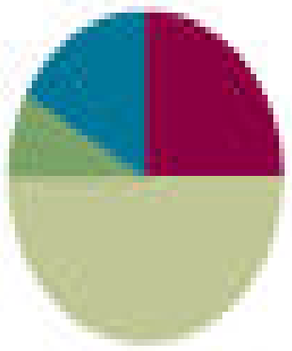
Concept Development:
(T/S)Tangram (Template 6),
(T) document camera, chart paper, pattern blocks
(S) Pattern blocks in individual plastic bags:
1 hexagon, 4 squares, 3 triangles,
2 trapezoids, 3 wide (not thin) rhombuses

Lesson 8

Objective: Interpret equal shares in composite shapes as halves, thirds, and fourths.

Suggested Lesson Structure

Fluency Practice	(15 minutes)
Application Problem	(5 minutes)
Concept Development	(30 minutes)
Student Debrief	(10 minutes)
Total Time	(60 minutes)



I can interpret equal shares in composite shapes as halves, thirds, and fourths.

Rename for the Smaller Unit

I’m going to give you a number in unit form. I want you to rename 1 of the hundreds as 10 tens and then tell me how many hundreds, tens, or ones. Ready?

121 = ___ tens ___ ones

Say the number sentence!

158 =___ tens ___ ones

203 = ___ tens ___ ones

213 = ___ tens ___ ones

Subtraction with Renaming

Slide your place value chart into your white board

123 - 47 is ___ ? Use a chip model to subtract.

132 - 59 = ___

231 - 65 =___

300 - 26 = ___

446 - 77 = ___

Sprint

A STORY OF UNITS | Lesson 1 Core Fluency Practice Set A | 2•6

A STORY OF UNITS | Lesson 1 Core Fluency Practice Set B | 2•6

A STORY OF UNITS | Lesson 1 Core Fluency Practice Set C | 2•6

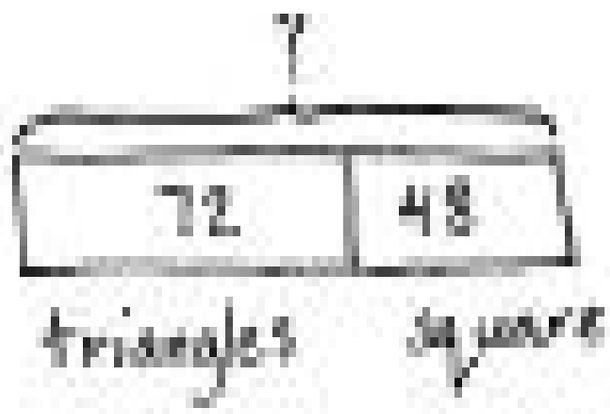
A STORY OF UNITS | Lesson 1 Core Fluency Practice Set D | 2•6

Name _____ Date _____

1.	19 – 9 =	21.	16 – 7 =

Application Problem

Students were making larger shapes out of triangles and squares. They put away all 72 triangles. There were still 48 squares on the carpet. How many triangles and squares were on the carpet when they started?



72 + 48 = 120

11 tens + 1 ten = 12 tens

There were 120 shapes on the carpet when they started.

Concept Development

Use one pattern block to cover half the rhombus

Complete Problem 1. Share your thinking with your partner. Close your eyes and visualize how you moved the smaller polygons to create the rhombus. Describe how you flip, slide, or turn the pieces.

How can looking at angles and sides help you find the block that is half a rhombus?

If the rhombus was made from a piece of paper, how many different ways could you cut it to get two halves?
Draw the different ways you could cut the rhombus into two halves.

Concept Development

Problem 2: Use one pattern block to cover half the hexagon.

Cover the bottom half of the hexagon with three triangles. Is it still half covered? Why or why not?

Cover the bottom half of the hexagon with a rhombus and a triangle. Is it still half covered?

Problem 3: Use one pattern block to cover one-third of the hexagon.

How many thirds do you need to fill the whole hexagon?

Cover one-third with two triangles. Is the hexagon one-third covered?
What fraction is not covered?

Concept Development

Problem 4: Use one pattern block to cover one-third of the trapezoid.

Use your drawing of the trapezoid formed by thirds to talk about how many small triangles would make a whole hexagon

How many thirds are in the trapezoid? In the hexagon?

Concept Development

Problem 5: Use four pattern blocks to make one larger square.

How many equal shares does the large square have?

How many fourths make up the large square?

How many fourths equal one whole square?

Use your blocks to show that 2 fourths is the same as a half of the large square.

Concept Development

Problem 6: Use one pattern block to cover one-sixth of the hexagon.

How many equal parts does the hexagon have?

How many sixths make up the hexagon?

Name _____ Date _____

1. Use one pattern block to cover half the rhombus.
   a. Identify the pattern block used to cover half of the rhombus. _____
   b. Draw a picture of the rhombus formed by the 2 halves.

2. Use one pattern block to cover half the hexagon.
   a. Identify the pattern block used to cover half of a hexagon. _____
   b. Draw a picture of the hexagon formed by the 2 halves.

3. Use one pattern block to cover 1 third of the hexagon.
   a. Identify the pattern block used to cover 1 third of a hexagon. _____
   b. Draw a picture of the hexagon formed by the 3 thirds.

Debrief

Review your solutions for the Problem Set

Which problem was most difficult to solve? What strategies did you use to solve it? What made you keep trying even when it was hard?

How did knowing the attributes of each shape help you solve the problems?

Look at Problem 3. What part of the hexagon am I showing? How many more triangles do I need to fill the hexagon?

Can this triangle be a half, a third, or a fourth? Explain

Exit Ticket

Name _____ Date _____

Name the pattern block used to cover half the rectangle. _____

Use the shape below to draw the pattern blocks used to cover 2 halves.