Eureka Math

2nd Grade
Module 8
Lesson 7

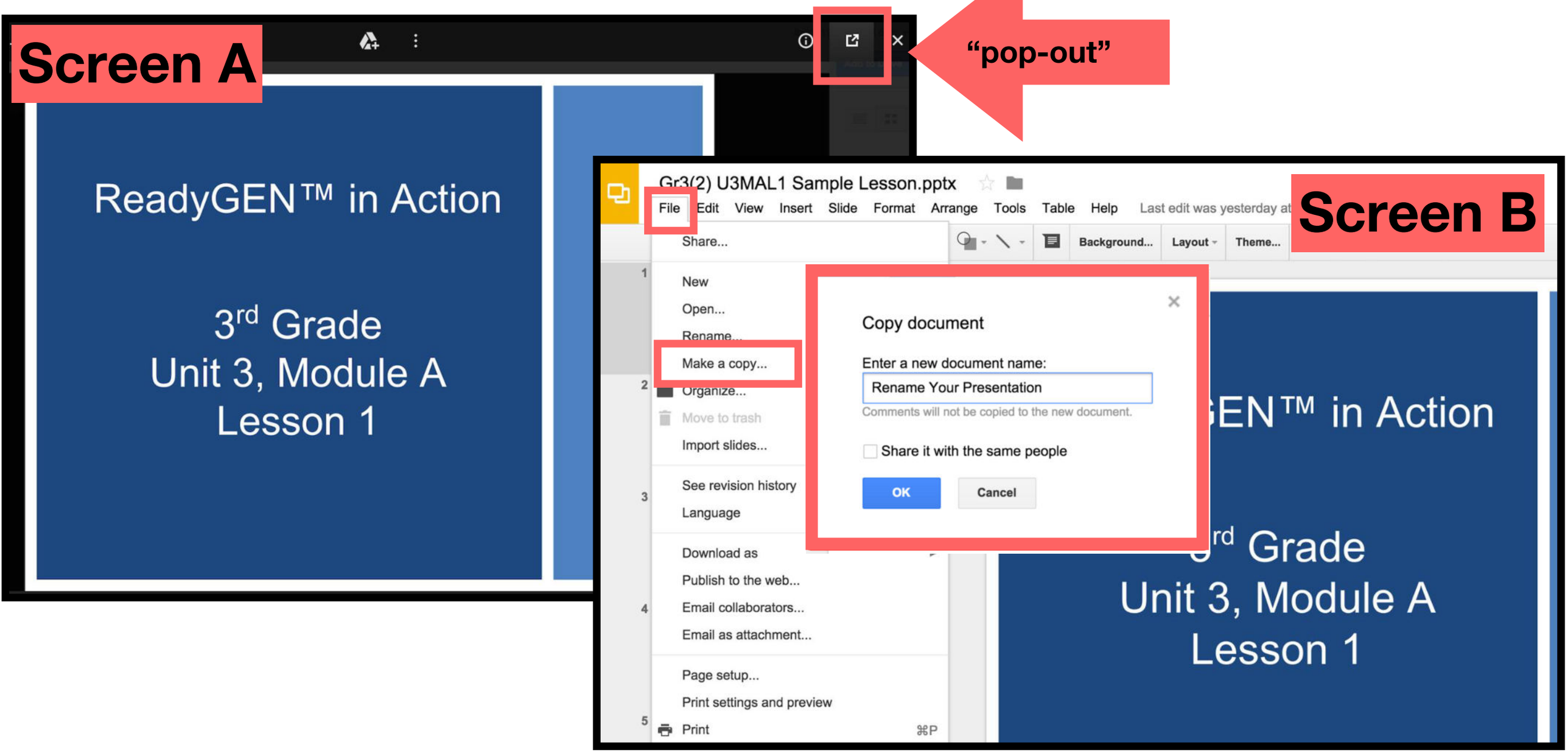
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

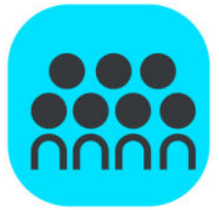
Personal White Board

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)

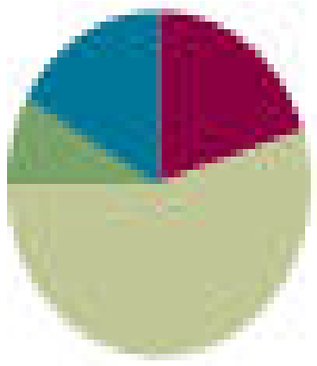
Concept Development:
(T/S)Tangram (Template 6),
(T) document camera, chart paper, pattern blocks
(S) Pattern blocks in individual plastic bags:
1 hexagon, 4 squares, 3 triangles,
2 trapezoids, 3 wide (not thin) rhombuses

Lesson 7

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

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

Subtraction with Renaming

Slide your place value chart into your white board

161 - 18 is ___ ? Use a chip model to subtract.

152 - 29 = ___

237 - 56 =___

319 - 28 = ___

463 - 54 = ___

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

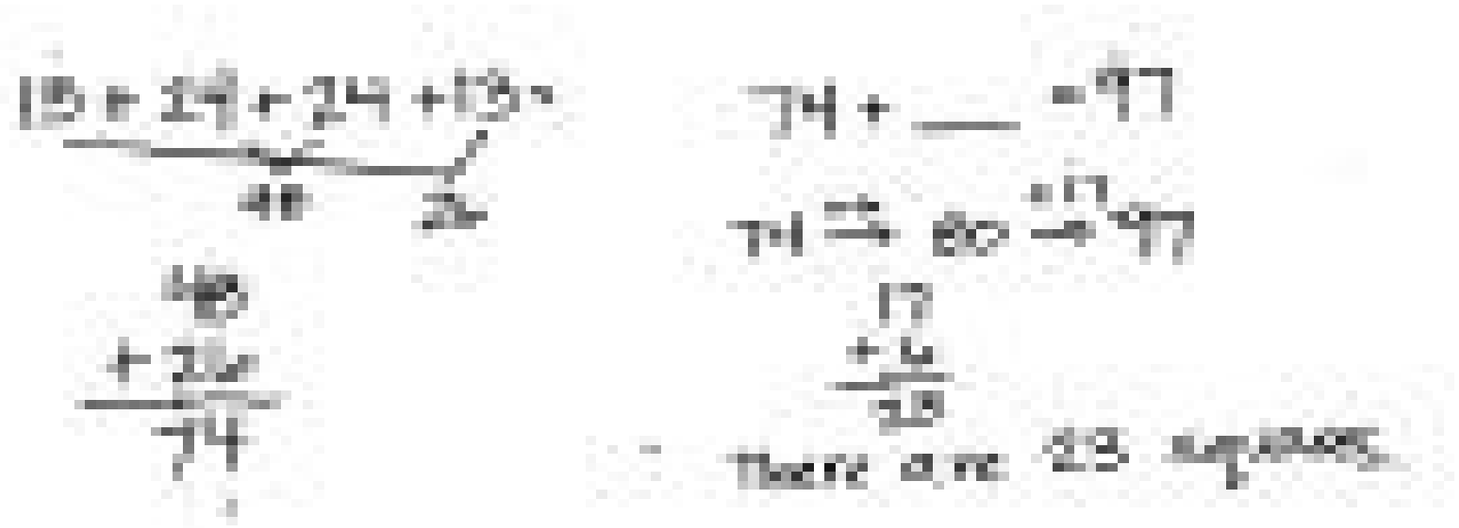
Name _____ Date _____

1.	19 – 9 =	21.	16 – 7 =

Application Problem

RDW

Mrs. Libarian's students are picking up tangram pieces. They collect 13 parallelograms, 24 large triangles, 24 small triangles, and 13 medium triangles. The rest are squares. If they collect 97 pieces in all, how many squares are there?



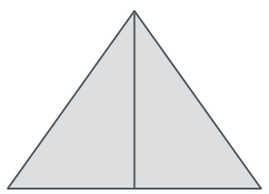
Concept Development

Part 1: Using Tangrams to create Composite shapes Described as Halves

Let’s continue exploring ways to compose new shapes using our tangram pieces.

Start with just the two smallest triangles. What shapes can you make that you can name?

What’s the name of this polygon?
How many parts? Are they equal?



We can say this triangle is made up of two equal shares, or parts, called halves.

Let’s record this.

Concept Development

Part 1

If you didn't make one of these shapes, move your pieces to make the shape now. If you did make all the shapes, try moving back and forth between them smoothly.

Can we make halves by putting together a small triangle and a parallelogram? Why or why not? Discuss with your partner.

To be halves, the two parts must be equal in size, which means they take up the same amount of space.

How many halves make a whole? Give me a complete sentence.

Concept Development

Part 2: Using Pattern Blocks to Create Composite Shapes Described as Halves, Thirds, and Fourths

Let’s explore halves using pattern blocks. Start with a hexagon.

What smaller polygon could you use to cover half of the hexagon?

One trapezoid covers half the hexagon. Put another trapezoid on top to cover the whole hexagon. How many trapezoids make a whole hexagon?

Are they equal shares?
How many halves are in the hexagon?
Let’s record this on our Halves chart.

Concept Development

Part 2: Using Pattern Blocks to Create Composite Shapes Described as Halves, Thirds, and Fourths

Let’s try something different. This time we’ll use a trapezoid.

Can you cover the trapezoid with three smaller polygons?

How many trapezoids make a whole hexagon?
Are they equal in size?
How many equal shares compose a whole trapezoid?

We call three equal shares, or parts, thirds. Let’s make a new chart and record this.

Concept Development

Part 2: Using Pattern Blocks to Create Composite Shapes Described as Halves, Thirds, and Fourths

Work with a partner. Leave one triangle on, and cover the rest of the trapezoid with a rhombus.

Talk with your partner: Are these halves? Why or why not?

Is it thirds?

Now, can you make one large square that is created with equal parts?

Name _____ Date _____

1. Solve the following puzzles using your tangram pieces. Draw your solutions in the space below.

a. Use the two smallest triangles to make one larger triangle.	b. Use the two smallest triangles to make a parallelogram with no square corners.
c. Use the two smallest triangles to make a square.	d. Use the two largest triangles to make a square.

Debrief

Review your solutions for the Problem Set

Look at your Problem Set, and show your partner a shape that has two equal shares. What do we call those shares?

In Problem 4, does the trapezoid show thirds?
Why or why not?

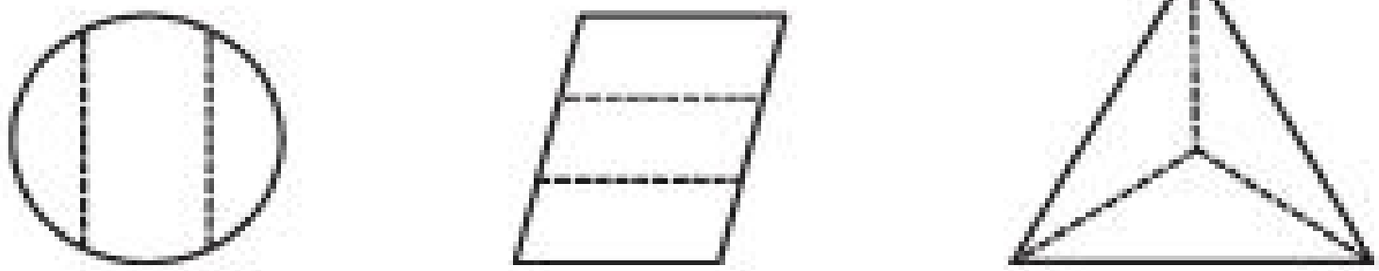
When would you want to have equal shares of something?

Use your pattern blocks to show me an example of halves. Show me an example of thirds. Now, show me an example that has three blocks but does not show thirds.

Exit Ticket

Name _____ Date _____

1. Circle the shapes that show thirds.



2. Circle the shapes that show fourths.