Eureka Math

2nd Grade
Module 8
Lesson 6

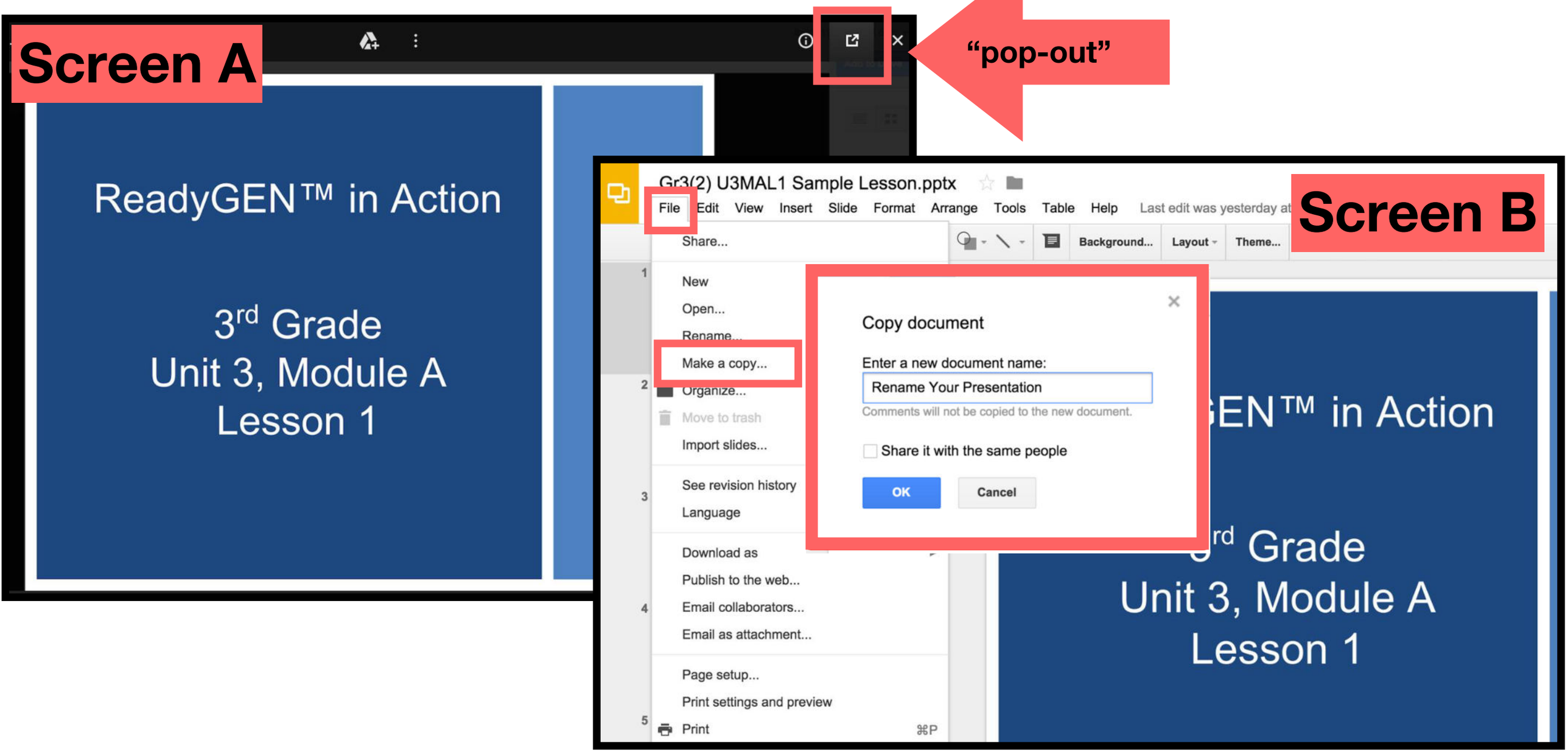
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

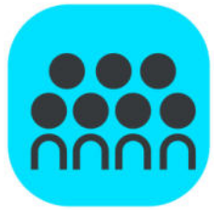
Personal White Board

Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

Small Group Time

Materials Needed:

Materials:
Fluency - Sprint

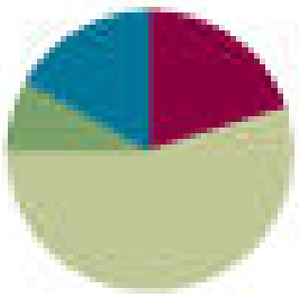
Concept Development:
(T/S)Tangram (Template), scissors
(T) document camera
(S) Personal white board

Lesson 6

Objective: Combine shapes to create a composite shape; create a new shape from composite shapes.

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 combine shapes to create a composite shape; create a new shape from composite shapes.

Rename for the smaller unit

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?

101 = ___ tens ___ ones

121 = ___ tens ___ ones

203 = ___ hundred ___ tens ___ ones

213 = ___hundreds ___ tens ___ ones

Sprint

A

Number Correct: _____

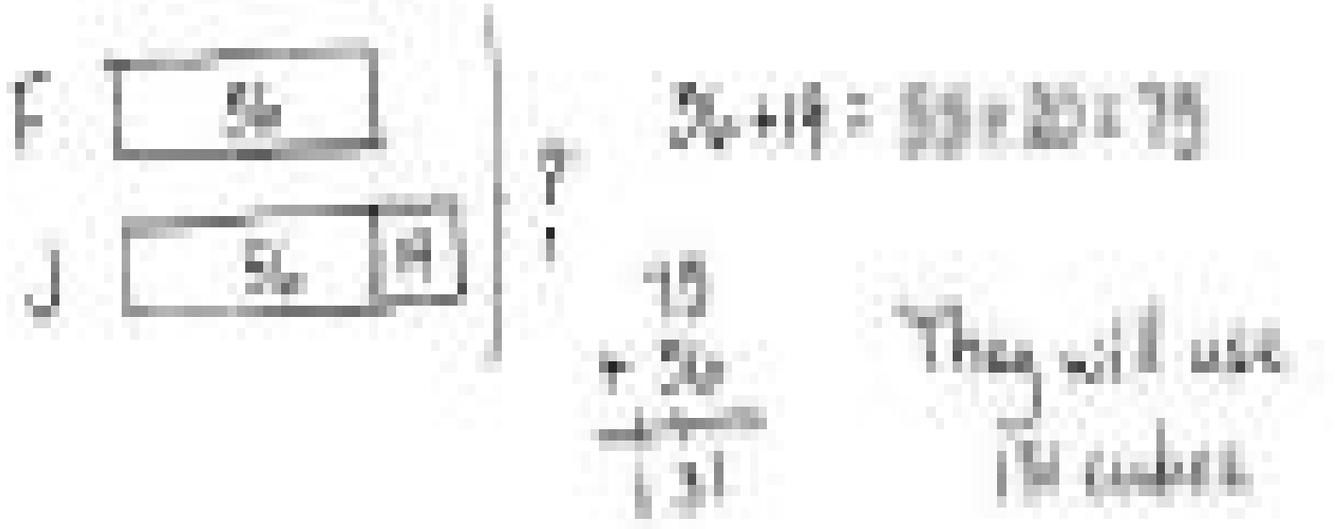
Addition and Subtraction Patterns

1.	8 + 3 =	
2.	11 – 3 =	
3.	9 + 2 =	
4.	11 – 2 =	
5.	6 + 5 =	
6.	11 – 6 =	
7.	7 + 4 =	
8.	11 – 7 =	
9.	8 + 4 =	
10.	12 – 4 =	
11.	9 + 3 =	
12.	12 – 3 =	
13.	7 + 6 =	
14.	12 – 7 =	
15.	6 + 6 =	
16.	12 – 6 =	

23.	8 + 8 =	
24.	16 – 8 =	
25.	9 + 6 =	
26.	15 – 9 =	
27.	9 + 9 =	
28.	18 – 9 =	
29.	7 + 7 =	
30.	14 – 7 =	
31.	8 + 9 =	
32.	17 – 8 =	
33.	7 + 9 =	
34.	16 – 7 =	
35.	19 – 6 =	
36.	6 + 7 =	
37.	17 – 6 =	
38.	11 – 7 =	

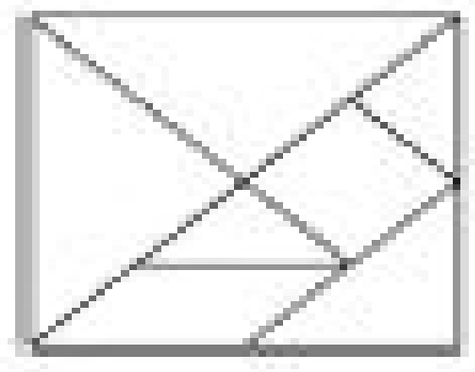
Application Problem

Frank has 19 fewer cubes than Josie. Frank has 56 cubes. They want to use all of their cubes to build a tower. How many cubes will they use?



Concept Development

Part 1: Cutting the Tangram and Analyzing the Polygons



Who remembers what this is called?

Let's describe the polygons as we cut them out.

Cut out the large square. As you cut talk to your partner:
What are the attributes, or characteristics, of a square?

Fold your large square down the diagonal line that goes through the middle. What polygon do you see in the top half?
As you cut it out, tell your partner the attributes.

Concept Development

How many triangles make up this whole triangle?

Cut apart the two smaller triangles, and set them aside.

Look at the other half. What polygons do you see inside this triangle?

Which of the shapes are quadrilaterals? Hold them up as you say their names.

Let’s cut off the triangle on top and place that with the other two.

Now we have the large trapezoid. What are the attributes of this trapezoid?

Next, cut off the parallelogram and trace, touch, and count its sides and angles. Cut out the remaining square and two Triangles. How many polygrams make up a tangram?

Concept Development

Part 2: Creating Composite Shapes

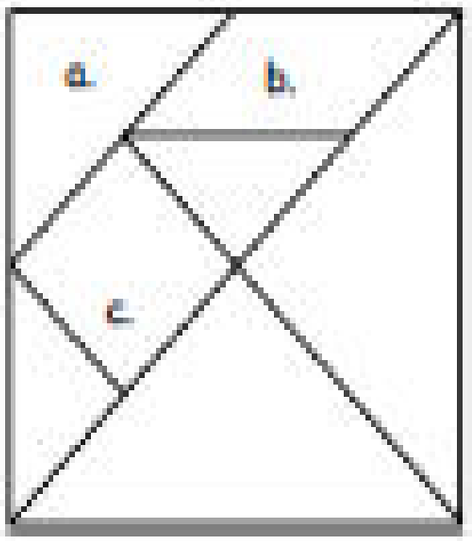
Try this! Create a triangle out of a square and the two smallest triangles?

Now, combine the triangle you just made with your partner's to make a square.

Is it possible for us to make a really big square with all of the squares you just made?

Name _____ Date _____

1. Identify each polygon labeled in the tangram as precisely as possible in the space below.



a. _____

b. _____

c. _____

Debrief

Review your solutions for the Problem Set

Share the polygons you made in Problem 5 with your partner. Describe the attributes of each polygon.

Why do you think we used tangrams for this lesson?

Can you think of any real-world objects that are made up of lots of smaller shapes?

How is breaking big shapes into smaller shapes kind of like decomposing numbers? Pennies and dimes? Centimeters and meters?

How is Frank and Josie's tower of cubes from the Application Problem similar to what we did today?

Exit Ticket

Name _____ Date _____

Use your tangram pieces to make two new polygons. Draw a picture of each new polygon, and name them.

1.

2.