Eureka Math

2nd Grade
Module 8
Lesson 4

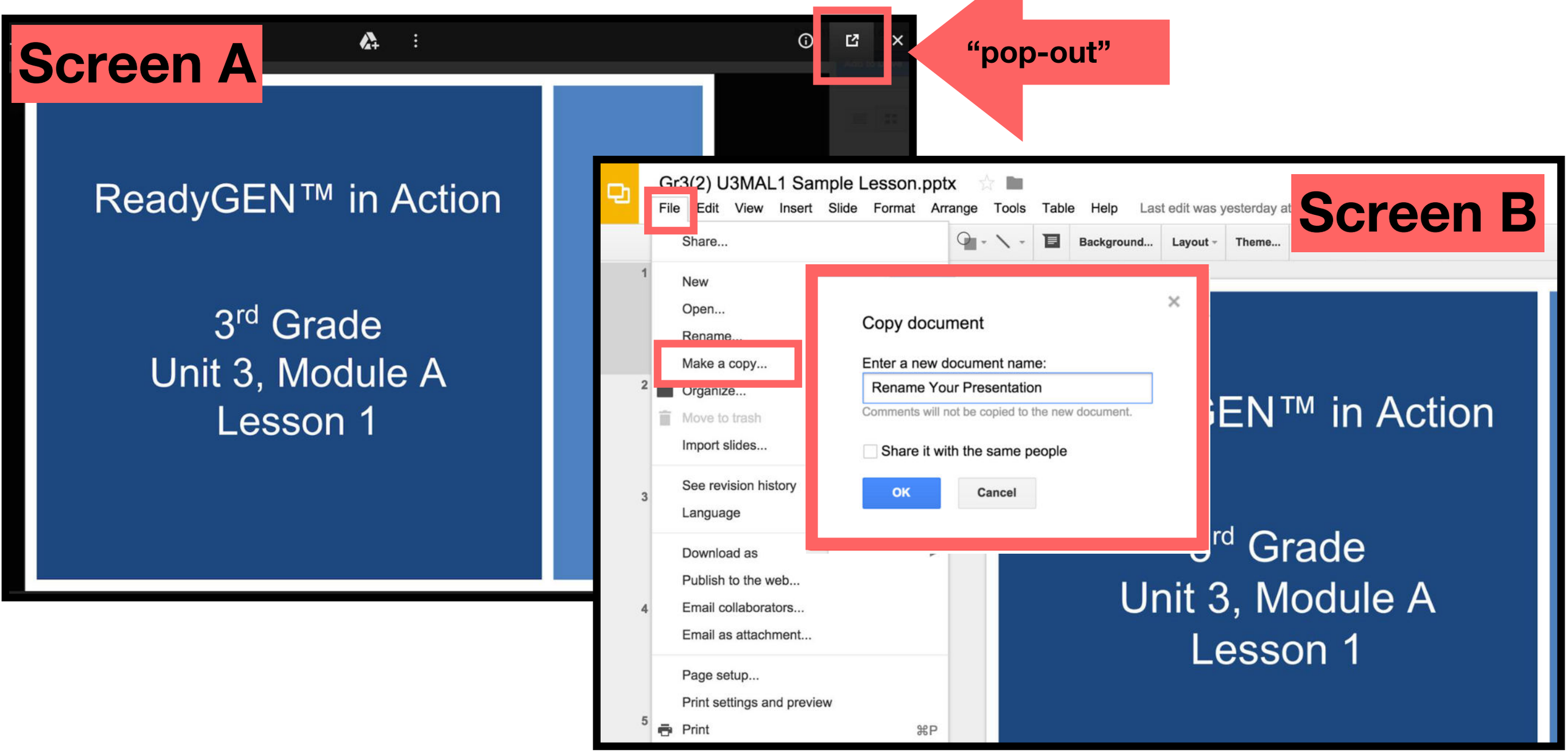
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

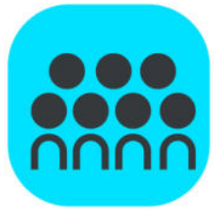
Personal White Board

Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

Small Group Time

Materials Needed:

Materials:
Fluency - Personal White Board, hundreds place value chart

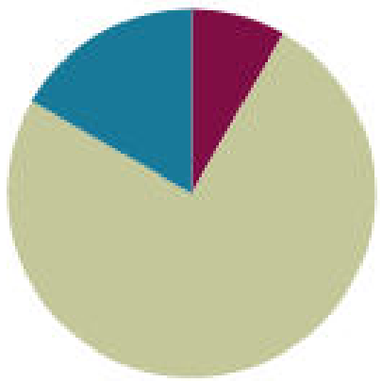
Concept Development:
(T) Chart from lesson 1, index card, square tile, drawing of rhombus
(S) 1 piece of 8 ½ x 11 white paper, centimeter ruler

Lesson 4

Objective: Use attributes to identify and draw different quadrilaterals including rectangles, rhombuses, parallelograms, and trapezoids.

Suggested Lesson Structure

Fluency Practice	(5 minutes)
Concept Development	(45 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**



I can use attributes to identify and draw different quadrilaterals including rectangles, rhombuses, parallelograms, and trapezoids.

Fluency

Addition with Renaming

Slide the place value chart template into your personal white boards. Let's use the chips model to solve.

167+47

1 hundred 6 tens 7 ones+ 4 tens 7 ones

285+38

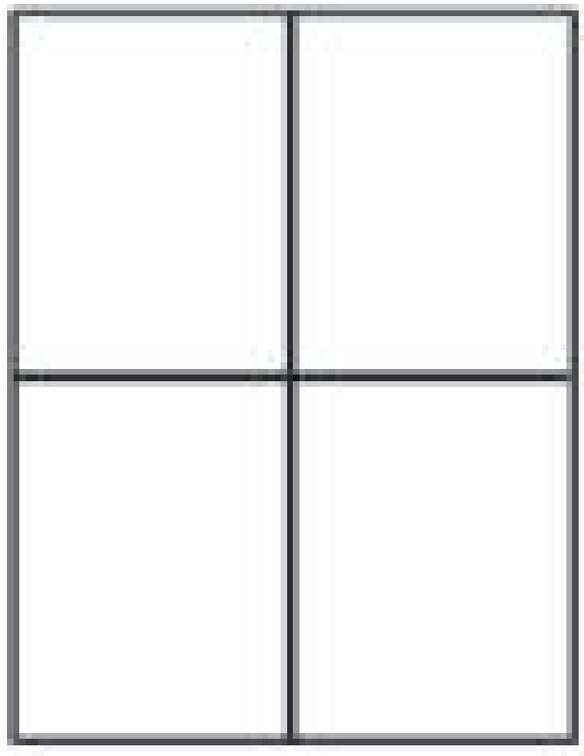
234+67

317+94

367+55

Concept Development

Follow me as I fold my paper in half twice. We will have four sections on both sides of the paper for drawing.



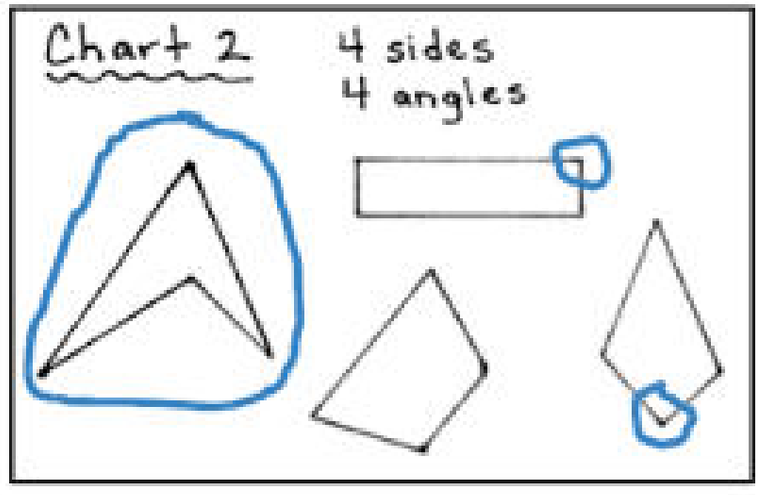
Concept Development

Look at your index card. How many angles does it have?

How are the angles, or corners, on your index card different from those of this shape?

We call the angles on our index cards **square corners**.

Concept Development



Look at Chart 2 again. Let's circle a **square corner.**

Let's use our index cards as a tool to help us draw a quadrilateral with one square corner.

In one of the sections on your paper, draw a square corner using your index card as a guide. Then use the straight edge of your card to draw two more lines to complete your quadrilateral.

Concept Development

In the next section of your paper, use your centimeter ruler vertically to draw a straight line within the section.

Without moving your ruler, use the opposite edge to draw a second staight line within the section.

What do you notice about these lines?

If I used a really long ruler and a really long piece of paper and kept drawing these lines, they would never cross or touch.

Concept Development

We call these lines **Parallel lines.** Look at the word parallel. The two ll's in the middle of the word are parallel.

In the next section, position your ruler in different ways- horizontally, diagonally- and practice making more pairs of parallel lines.

Concept Development

Part 2: Drawing and Identifying a Trapeziod

Position your ruler horizontally in a new section on your paper.
Use your ruler to draw a straight line that is 8 cm long.

Without moving your ruler, use the opposite edge of the ruler to draw a second straight line. Then, with your ruler, join the ends of both lines.

You made a four sided polygon! What do we call it?

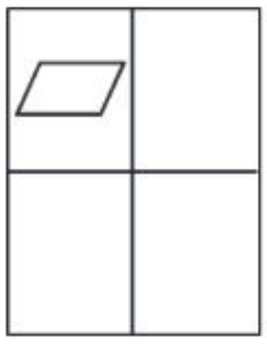
What new attribute do you notice about the sides of *these* quadrilaterals?

Does this quadrilateral have at least two pairs of parallel sides?

Concept Development

Part 3: Drawing and Identifying a Parallelogram

Turn your paper over. In another section, use both sides of your ruler to draw two parallel lines that are each 8cm long. Draw one line starting at zero and stopping at 8cm. Draw the other starting at any number but advancing 8 centimeters.



Use these parallel lines to make another quadrilateral by joining the ends of the parallel sides.

What do you notice about the connecting sides?

Concept Development

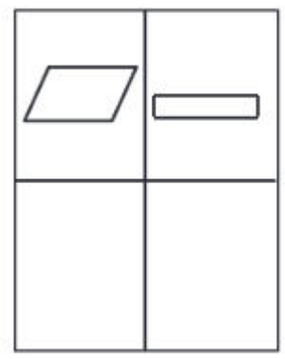
Since this quadrilateral has two pairs of parallel sides, we call it a **parallelogram.**

Concept Development

Part 4: Drawing and Identifying a Rectangle and Square and Relating the Rhombus to a Square

Now, let's draw another quadrilateral. In another section on your paper, use both sides of your ruler to draw two parallel lines that are 8 cm long. This time, start both lines at zero on your ruler.

Complete the quadrilateral by drawing two more lines.



What do you notice about the angles of this special quadrilateral?

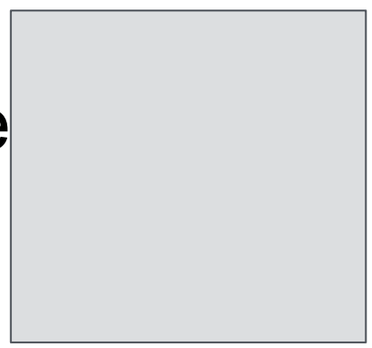
Concept Development

A quadrilateral with four corners is a **rectangle**.

There is a special rectangle too. It is special because it has four square corners and four sides that are the same length. What do you think it is?

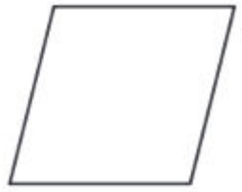
A **square!**

Let's double check to see if a square is a rectangle. Check the corners to see if they are all square corners.
Check to see if the sides are the same length.



Concept Development

Just like a square, there is another quadrilateral that has four equal sides and looks like this.



What do you notice?

We call a quadrilateral with four equal sides a **rhombus**. It does have equal sides like a square, but it doesn’t have to have square corners.

Name _____ Date _____

1. Use your ruler to draw 2 parallel lines that are not the same length.

2. Use your ruler to draw 2 parallel lines that are the same length.

Debrief

Review your solutions for the Problem Set

Turn and talk: What do you know about **parallel lines**? Where do you see some in our classroom?

Can a shape have different names? Tell your partner other names that a quadrilateral can be called.

Use your fingers to show your partner a **square corner**. Use your fingers to show your partner an angle that is not square.

What did all the shapes we talked about today have in common?

Use some of the new vocabulary words you learned today to describe to your partner the attributes of a rectangle. A trapezoid. A parallelogram. A square. A rhombus.

What makes a square a special rectangle? Explain how you know.

Exit Ticket

Name _____ Date _____

Use crayons to trace the parallel sides on each quadrilateral. Use your index card to find each square corner, and box it.

1. 

2. 

3. 

4.