# Eureka Math

## 2nd Grade
## Module 8
## Lesson 3

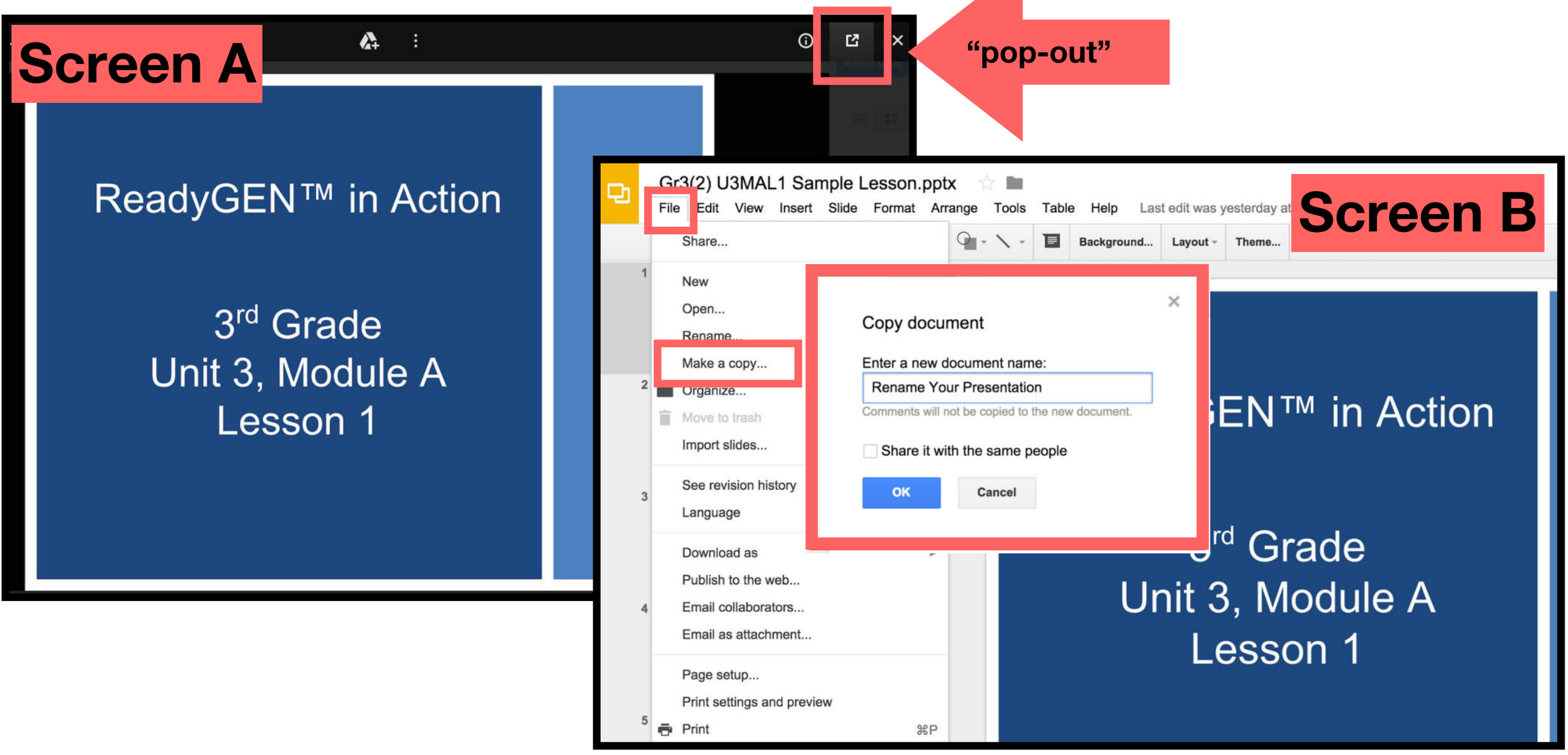
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

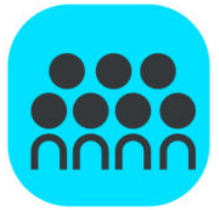
Personal White Board


Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

Small Group Time

# Materials Needed:

Materials:
Fluency - Core Fluency

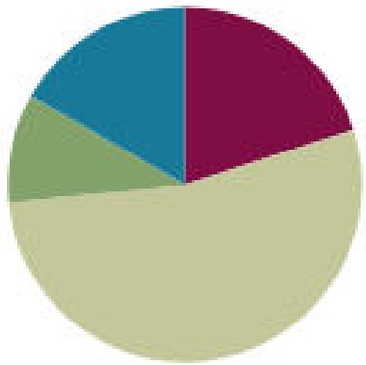
Concept Development:
(T) Doc camera, large piece of paper for polygon sort
(S) Straightedge, scissors, piece of white 8 ½ x 11 inch paper

# Lesson 3

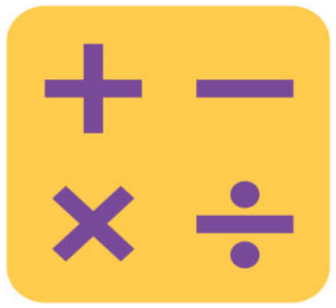
Objective: Use attributes to draw different polygons including triangles, quadrilaterals, pentagons, and hexagons.

**Suggested Lesson Structure**

| | |
|---|---|
| Fluency Practice | (12 minutes) |
| Application Problem | (6 minutes) |
| Concept Development | (32 minutes) |
| Student Debrief | (10 minutes) |
| **Total Time** | **(60 minutes)** |



I can use attributes to draw different polygons including triangles, quadrilaterals, pentagons, and hexagons.



# Fluency

## Addition with Renaming

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

**1 hundred 5 tens 9 ones plus 1 ten 7 ones**

**267+82**

**159+17**

**398+31**

**224+28**

**336+55**

# Sprint

# Core Fluency

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

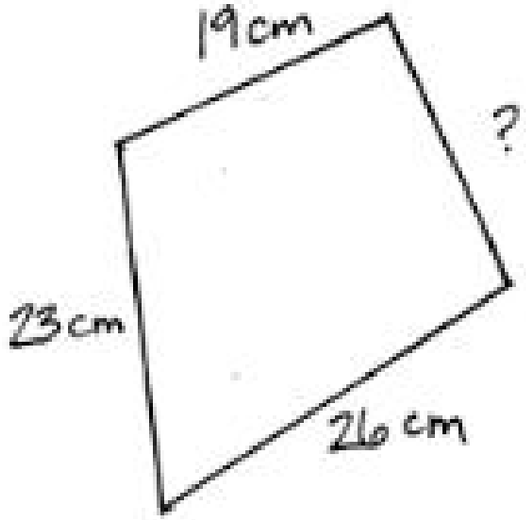
A STORY OF UNITS | Lesson 1 Core Fluency Practice Set C | 2•6

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

# Application Problem

RDW

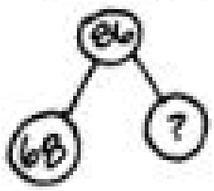
Three sides of a quadrilateral have the following lengths: 19cm, 23cm, and 26 cm. If the total distance around the shape is 86 cm, what is the length of the fourth side?




19 + 23 + 26 = ?

↑ 22

20 + 48 = 68




68 + __ = 86

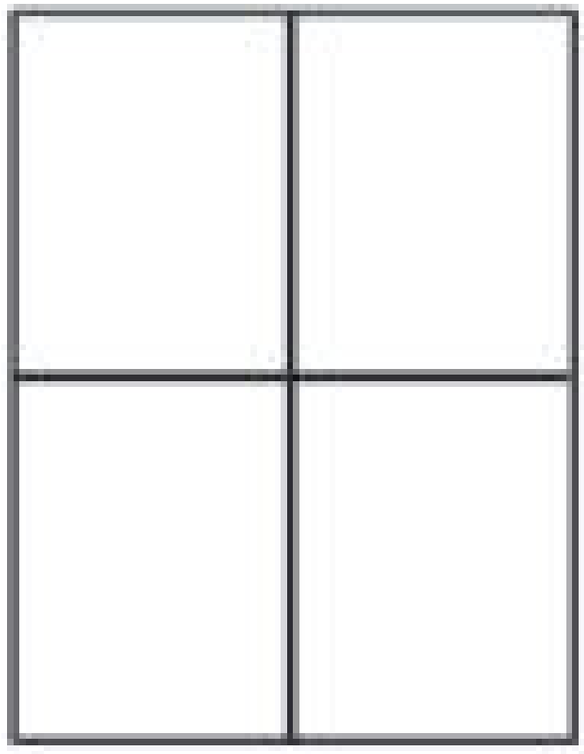
68 + 20 - 2 = 86

20 - 2 = 18

The fourth side is 18 cm long.

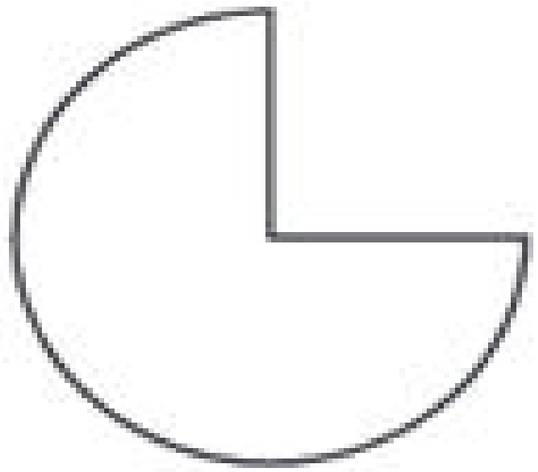
# Concept Development

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

Is this a polygon?



What attribute is missing? What is another word for corners?

# Concept Development

Since polygons have straight sides, and the sides meet neatly at corners to form angles, we are going to use a straightedge to be precise when drawing different polygons today.

In one section of the paper you folded earlier, use your straightedge to draw a polygon with four straight sides.

Describe your shape to your partner.

What do we call a polygon with four sides and four angles?

# Concept Development

In the next section of your paper, use your straightedge to draw a polygon with six angles.

Show your partner the six corners, or angles, of your polygon by circling them.

What do your shapes have in common?  What is that called when we have a six sided polygon?

# Concept Development

In the next space on your paper, draw a polygon with three sides.

After that, draw a polygon with five sides.

# Concept Development

FIND A FRIEND!

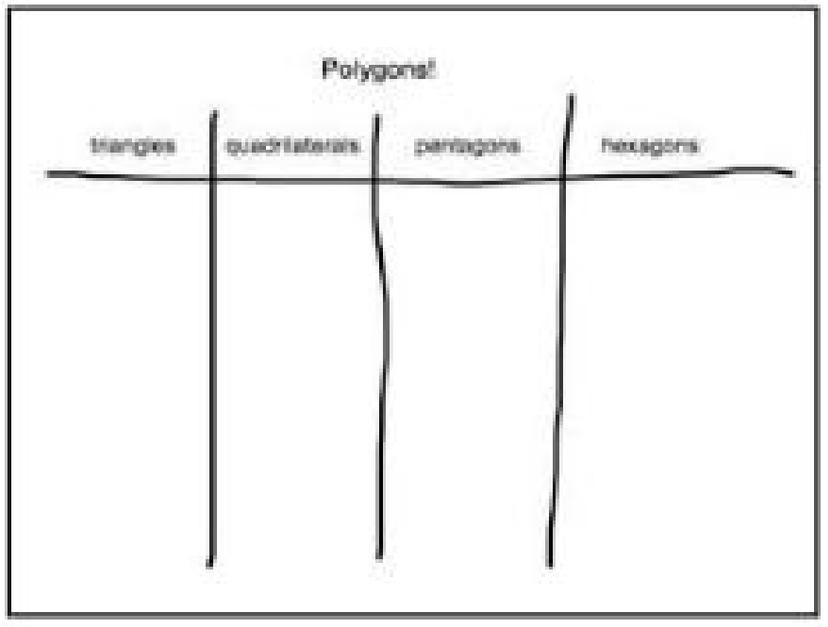
You may quietly walk to find a friend with a different looking polygon with three, four, five, and six sides.

# Concept Development

Now that you have drawn four polygons, use your scissors to cut on the folded lines so that you have four pieces of paper.

Trade shapes with a partner, and take turns describing the shapes' attributes. Then, name them by writing the words triangle, quadrilateral, pentagon, or hexagon.

Choose one polygon to put on our chart.  Place it on the edge of your desk so I can add it to the chart while you complete your Problem Set.



Name _____ Date _____

1. Use a straightedge to draw the polygon with the given attributes in the space to the right.

   a. Draw a polygon with 3 angles.

      Number of sides: _____

      Name of polygon: _____

   b. Draw a five-sided polygon.

      Number of angles: _____

# Debrief

Review your solutions for the Problem Set

Look at Problems 1(b) and 2(b). How are these problems similar? How are they different?

Look at Problems 1(d) and 2(d). Do all of your six-sided polygons look alike? What can we call a six-sided polygon? Can hexagons have five sides? Why not?

If you know how many corners a polygon has, what else do you know about that polygon?

# Debrief

Why is it important to use a straightedge when drawing polygons?

Look closely at our polygon chart.  Do you agree with the way that we sorted and named all of the polygons? If not, which do you disagree with, and why?

Pick a polygon that is not yours, and tell your partner why it is the correct column?

Did our polygon chart remind you of other work we have done in Grade?

Tell your partner one word that you learned today that you did not know before.

# Exit Ticket



Name _____ Date _____

Use a straightedge to draw the polygon with the given attributes in the space to the right.

Draw a five-sided polygon.