Materials List:

- Shape created in Lesson 10
- Blank paper
- Crayons
- White string
- Black markers

Eureka Math

3rd Grade
Module 7
Lesson 11

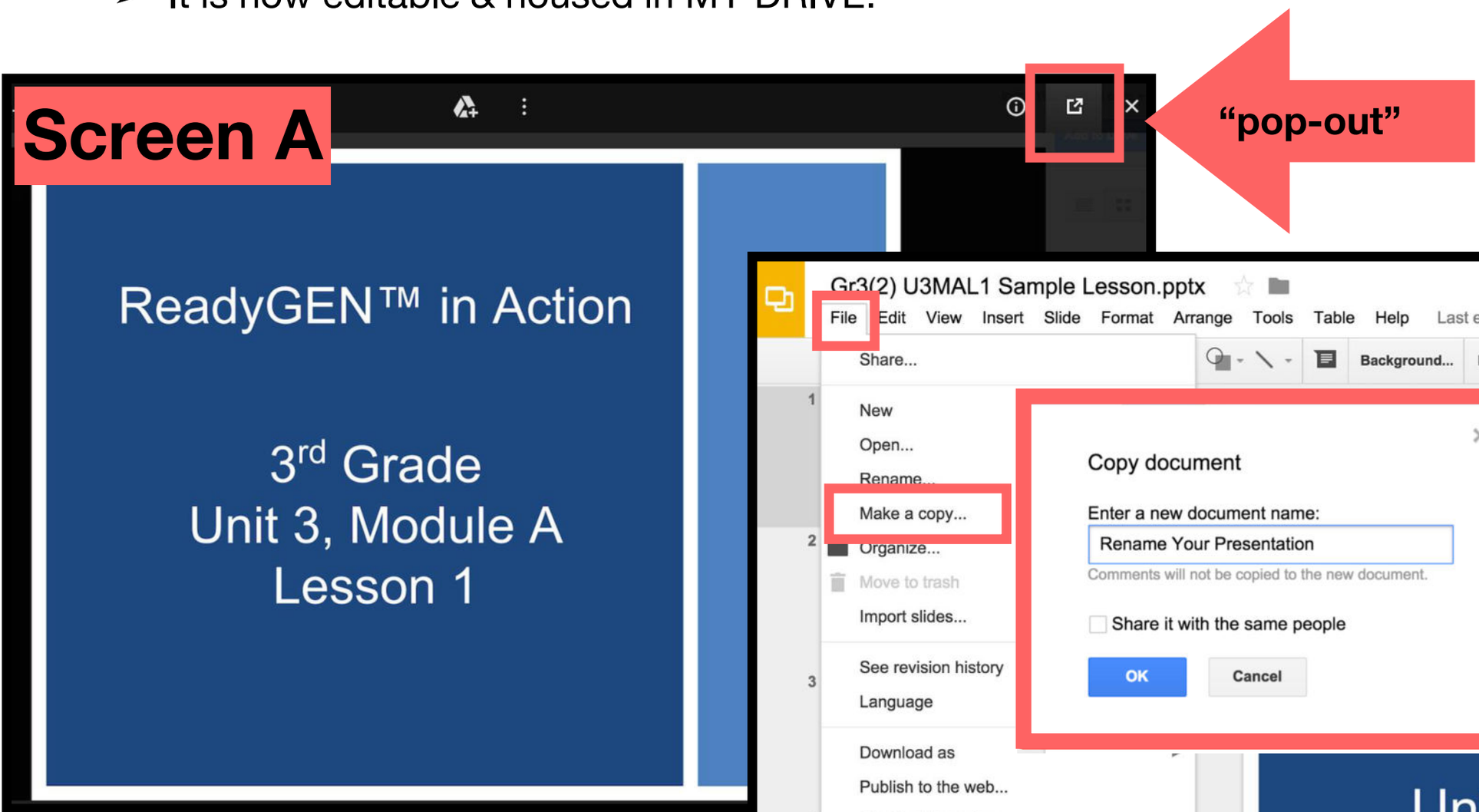
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

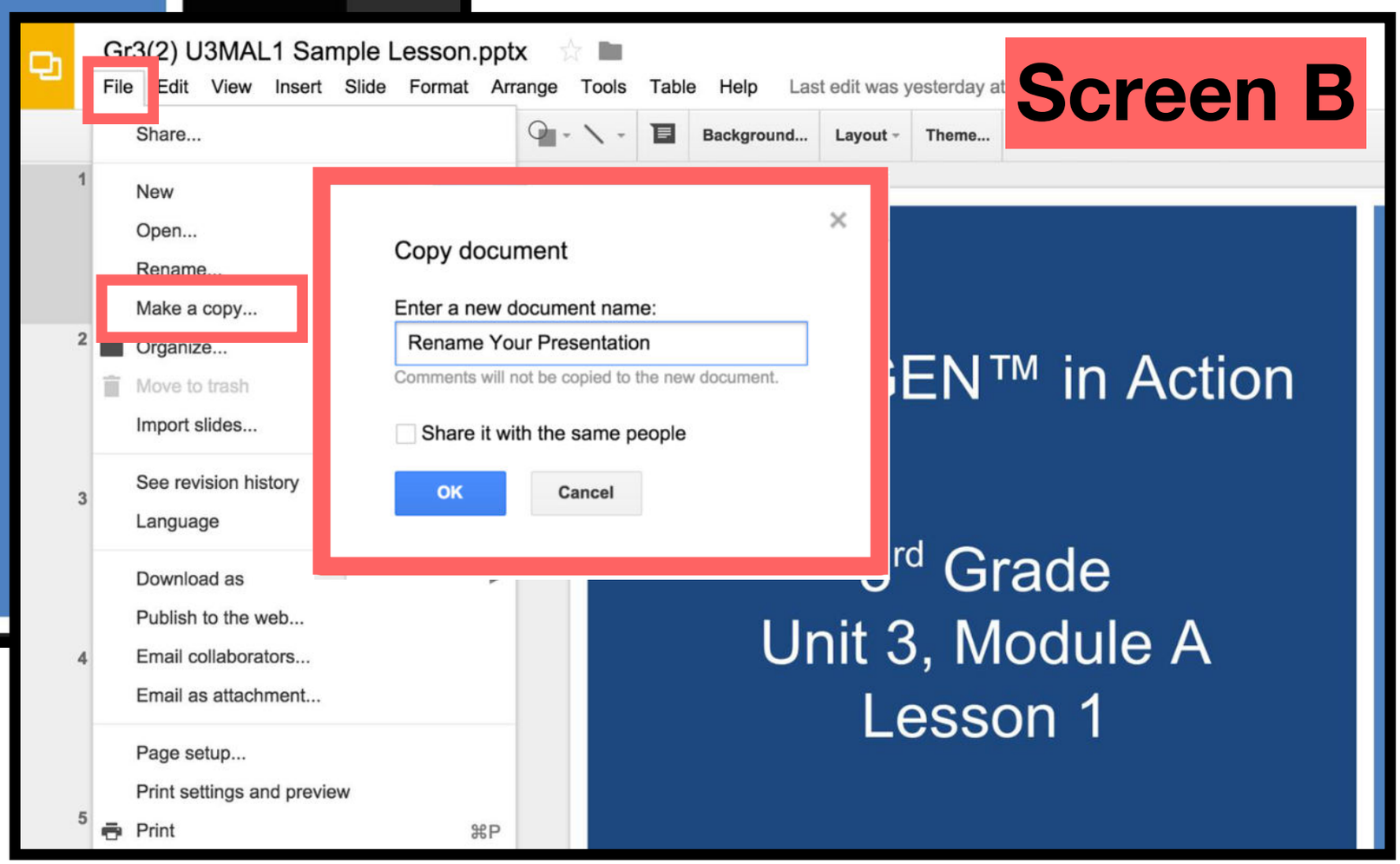
Directions for customizing presentations are available on the next slide.

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.



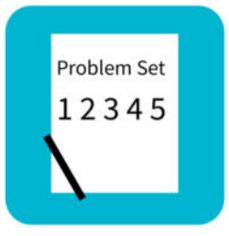


Icons

Read, Draw, Write

Learning Target

Personal White Board

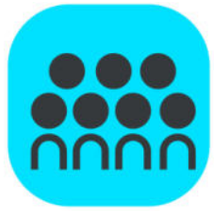


Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

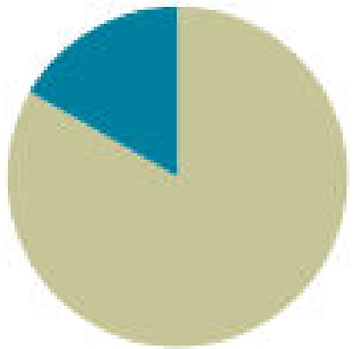
Small Group Time

Lesson 11

Objective: Tessellate to understand perimeter as the boundary of a shape. (Optional.)

Suggested Lesson Structure

Concept Development	(50 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**



NOTES ON MULTIPLE MEANS OF REPRESENTATION:

Topic C presents two possible optional lessons related to perimeter, including this lesson. The second option is a culminating lesson using the text

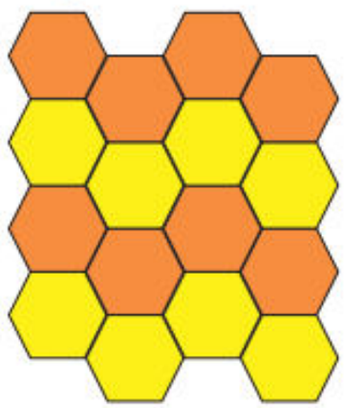
Objective: Tessellate to understand perimeter as the boundary of a shape.

Concept Development

Problem 1(a–c): Tessellate to explore perimeter

What shape do you see repeated in this figure?

Image A



Do all of the hexagons look the same? Discuss with your partner.

Yes, all of the hexagons are the same size. In fact, this figure was made by tracing the same hexagon over and over. Do you see any gaps or overlaps between each hexagon?

We call this figure a **tessellation** because it was made by copying a shape many times, without any gaps or overlaps. You're going to create your own tessellation using the shape you made yesterday.

Concept Development

Problem 1(d) and Problem 2: Use a string to measure and compare perimeters.

Use a string to measure the perimeter of your tessellation.

Compare the perimeter of your tessellation to a partner's. Whose tessellation has a greater perimeter? How do you know?

Work with a partner and use a white string to measure the total perimeter of the figure you created when you tessellated. Switch roles so that each partner can measure the total perimeter of their figure. Compare the perimeters of your figures using the marks on your strings and then answer Problem 2 on the Problem Set.

Problem Set (5 minutes)

Students should do their personal best to complete Problems 3 and 4 of the Problem Set within the allotted 5 minutes.

3. How could you increase the perimeter of your tessellation?

4. How would overlapping your shape when you tessellated change the perimeter of your tessellation?

Debrief (10 minutes)

- Explain to a partner the steps you used to tessellate your shape in Problem 1(a).
- Share your answer to Problem 3. How could you decrease the perimeter of your tessellation?
- Use your string to measure the perimeter of the piece of paper on which you made your tessellation. Compare the perimeter of the paper to the perimeter of your tessellation.
- Discuss the tessellations you saw during the gallery walk. Were any the same? Why or why not? How were they similar to your tessellation? How were they different?

Exit Ticket (3 minutes)

Name _____ Date _____

Estimate to draw at least four copies of the given regular hexagon to make a new shape, without gaps or overlaps. Outline the perimeter of your new shape with a highlighter. Shade in the area with a colored pencil.