Materials List:

- Multiply by 7 Pattern Sheet
- Grid Paper
- whiteboards
- Shapes (template)
- rulers

Eureka Math

3rd Grade
Module 7
Lesson 12

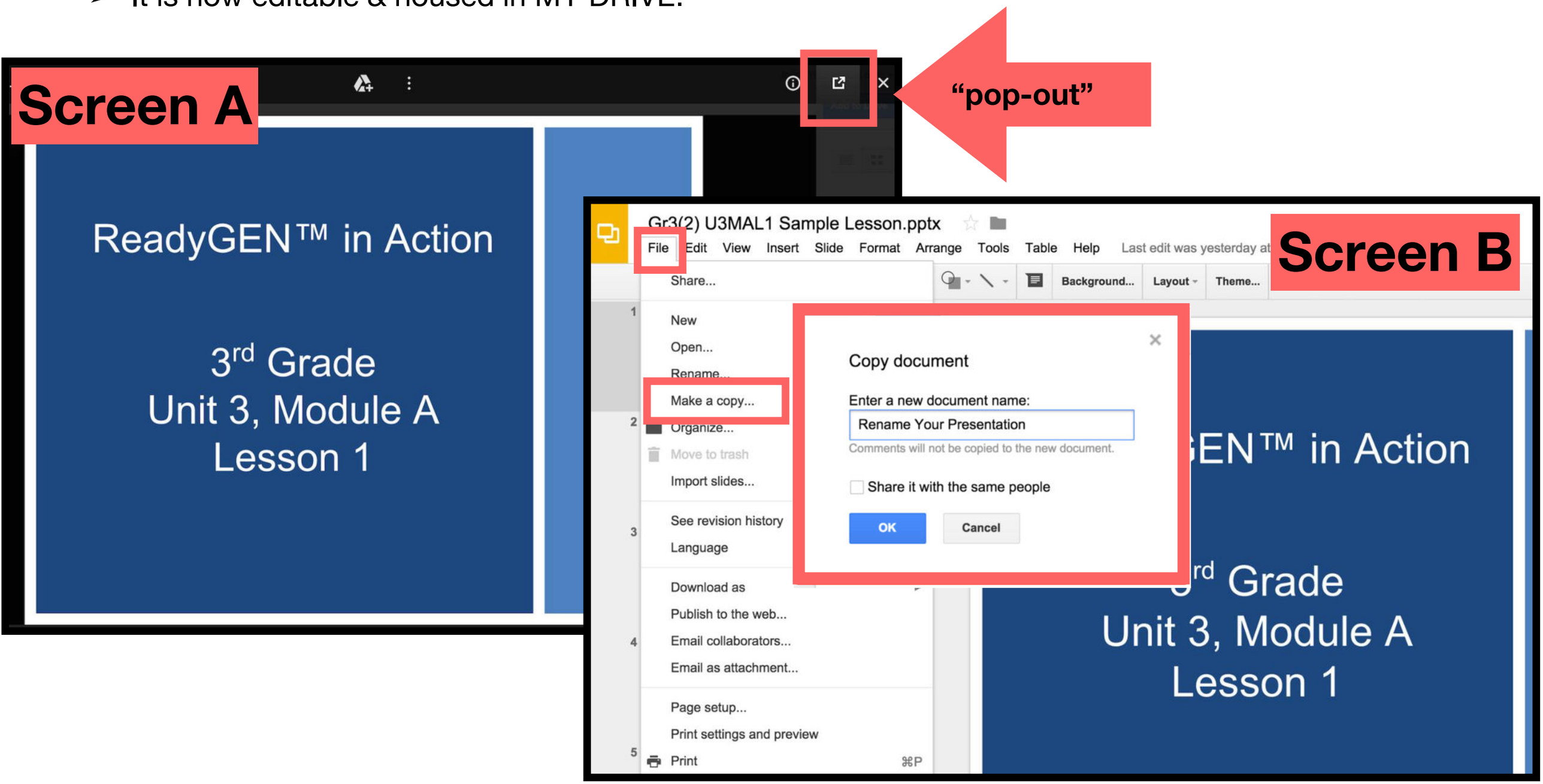
At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this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

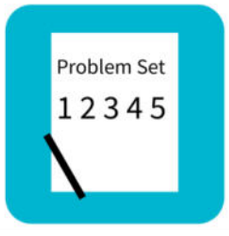


Icons

Read, Draw, Write

Learning Target

Personal White Board

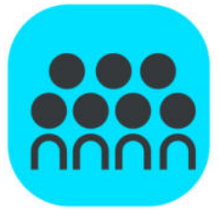


Problem Set

Manipulatives Needed

Fluency

Think Pair Share



Whole Class

Individual

Partner

Small Group

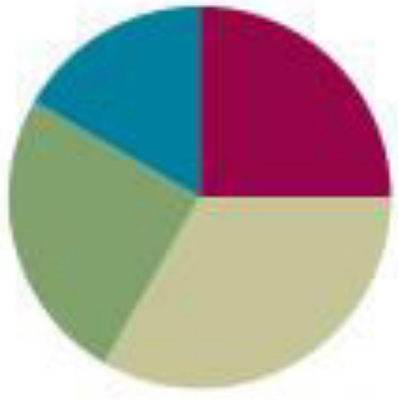
Small Group Time

Lesson 12

Objective: Measure side lengths in whole number units to determine the perimeter of polygons.

Suggested Lesson Structure

Fluency Practice	(15 minutes)
Concept Development	(20 minutes)
Application Problem	(15 minutes)
Student Debrief	(10 minutes)
Total Time	**(60 minutes)**



NOTES ON LESSON SEQUENCE:

In this lesson, the Application Problem comes after the Concept Development and before independent work time on

I can measure side lengths in whole number units to determine the perimeter of polygons.

Fluency Practice

Multiply by 7 (5 minutes)

Let’s skip-count up by sevens. I’ll raise a finger for each seven.

7x7=

7, 14, 21, 28, 35, 42, 49.

Let’s skip-count up by sevens starting at 35. Why is 35 a good place to start?

35, 42, 49, 56, 63, 70

Let’s see how we can skip-count down to find the answer, too. Start at 70 with 10 fingers, 1 for each seven.

70, 63, 56, 49, 42, 35, 28, 21, 14, 7

Let´s try it again with:
9 × 7
6 × 7
8 × 7

Fluency Practice

Pattern Sheet (2 minutes)

Multiply.

7 x 1 = _____	7 x 2 = _____	7 x 3 = _____	7 x 4 = _____
7 x 5 = _____	7 x 6 = _____	7 x 7 = _____	7 x 8 = _____
7 x 9 = _____	7 x 10 = _____	7 x 5 = _____	7 x 6 = _____
7 x 5 = _____	7 x 7 = _____	7 x 5 = _____	7 x 8 = _____
7 x 5 = _____	7 x 9 = _____	7 x 5 = _____	7 x 10 = _____

Fluency Practice

Equivalent Counting with Units of 3 (4 minutes)

Count by threes to 30.

3	6	9	12	15	18	21	24	27	30
1 three	2 threes	3 threes	4 threes	5 threes	6 threes	7 threes	8 threes	9 threes	10 threes

Count to 10 threes.

Let’s count to 10 threes again. This time, stop when I raise my hand and then say the multiplication sentence.

Fluency Practice

Area and Perimeter (3 minutes)

On your grid paper, shade a rectangle that is 2 units wide by 3 units long.

What is the area of the rectangle?

Draw a line around the perimeter of the rectangle.

At the signal, show your paper.

Continue with the following possible sequence: 4 units by 2 units and 5 units by 3 units.

Concept Development

(20 minutes)

Yesterday you learned that the boundary of a shape is the shape's perimeter. What forms the boundary of Shape A? Talk to a partner.

The sides form the boundary of Shape A. Trace the perimeter of Shape A with your finger.

Your finger just traveled around the perimeter of Shape A. What tool can you use to figure out how many centimeters your finger traveled?

Measure and label the side lengths of Shape A in centimeters. Check your side lengths against mine. Write and solve a number sentence to show how to find the total of Shape A's side lengths.

Concept Development

(20 minutes)

What strategy did you use to find the total of the side lengths?

What is 28 centimeters a measurement of?

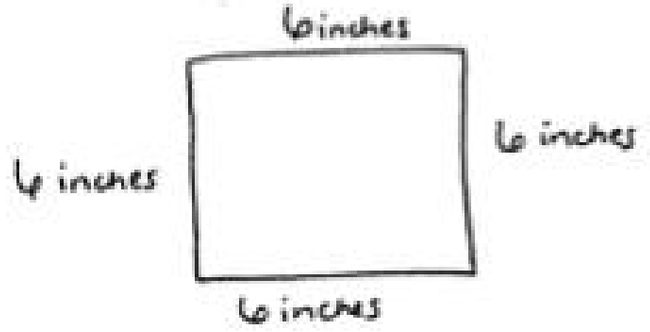
What kind of polygon is Shape A?

A quadrilateral because it has four sides. A parallelogram because it has two sets of parallel lines. A rectangle because the opposite sides are equal and the corners look like right angles.

Application Problem

(15 minutes)

Angela measures the sides of a square napkin with her ruler. Each side measures 6 inches. What is the perimeter of the napkin?



6 x 4 = 24

The perimeter of the napkin is 24 inches.

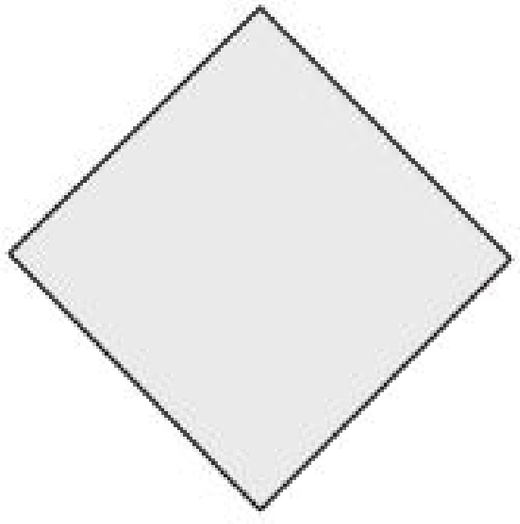
Problem Set

(10 minutes)

Name _____ Date _____

1. Measure and label the side lengths of the shapes below in centimeters. Then, find the perimeter of each shape.

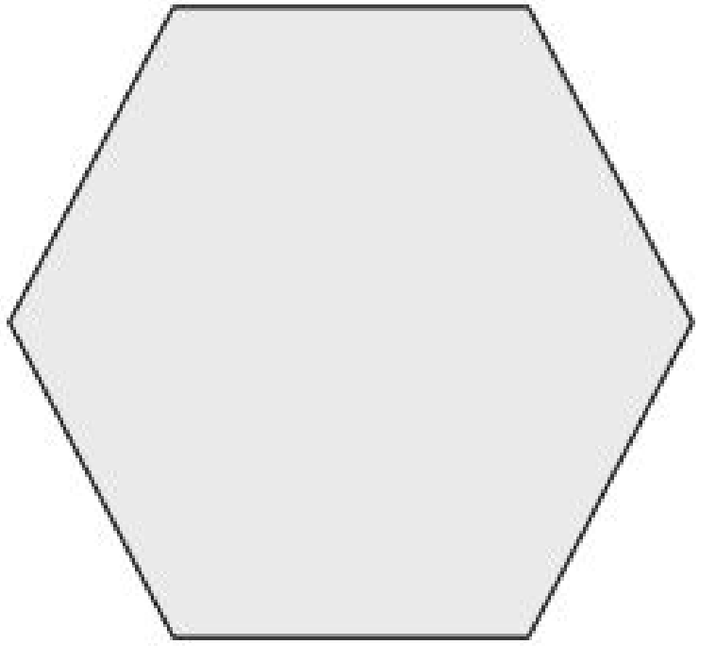
a.



Perimeter = _____cm +_____cm +_____cm +_____cm

= _____ cm

b.



Perimeter = _____

= _____ cm

Debrief (10 minutes)

- Which shape has the smallest perimeter in Problem 1? How do you know?
- What unit did you use to record the perimeters of the shapes in Problem 1? Why?
- What do you notice about the perimeters of the shapes in Problem 1 (b) and (e)?
- How did doing the Application Problem together help you get ready for the Problem Set?
- How could you find the perimeter of each triangle in Problem 2?
- Whose shape has more sides in Problem 3? Do more sides mean a greater perimeter? Why or why not?
- What multiplication equation can you use to find the perimeter of the square in Problem 4?
- Explain to a partner how to use a ruler to find the perimeter of a shape.

Exit Ticket (3 minutes)

Name _____ Date _____

Measure and label the side lengths of the shape below in centimeters. Then, find the perimeter.