

Eureka Math Parent Guide

A GUIDE TO SUPPORT PARENTS AS THEY WORK WITH THEIR STUDENTS IN MATH.

**GRADE 3
MODULE 7**

GRADE FOCUS

Third Grade mathematics is about (1) developing understanding of multiplication and division and strategies for multiplication and division within 100; (2) developing understanding of fractions, especially unit fractions (fractions with numerator 1); (3) developing understanding of the structure of rectangular arrays and of area; and (4) describing and analyzing two-dimensional shapes.

- Module 1: Properties of Multiplication and Division and Solving Problems with Units of 2—5 and 10
- Module 2: Place Value and Problem Solving with Units of Measure
- Module 3: Multiplication and Division with Units of 0, 1, 6–9, and Multiples of 10
- Module 4: Multiplication and Area
- Module 5: Fractions as Numbers on the Number Line
- Module 6: Collecting and Displaying Data

» Module 7: Geometry and Measurement Word Problems

LET'S CHECK IT OUT!

MODULE 7 FOCUS

In Module 7, students will get intensive practice with word problems, as well as hands-on investigation experiences with geometry and perimeter. Students will solve one- and two-step word problems, classify shapes based on their attributes, learn what a tessellation is, study perimeter and area, and end with a review of Grade 3 fundamental skills.

MORE SPECIFICALLY, CHILDREN WILL LEARN HOW TO:

- Solve problems involving the four operations (addition, subtraction, multiplication and division) and identify and explain patterns in arithmetic.
- Represent and interpret data.
- Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.
- Reason with shapes and their attributes.

TOPIC OVERVIEW

Topics are the lessons within a module that help children master the skills above. Here are the lessons that will guide your child through Module 7:

- Topic A: Solving Word Problems
- Topic B: Attributes of Two-Dimensional Figures
- Topic C: Problem Solving with Perimeter
- Topic D: Recording Perimeter and Area Data on Line Plots
- Topic E: Problem Solving with Perimeter and Area
- Topic F: Year in Review

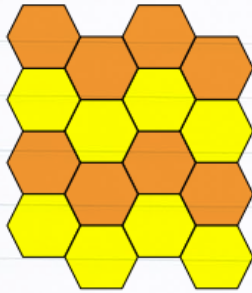
WORDS TO KNOW

- **Attribute:** any characteristic of a shape, including properties and other defining characteristics, e.g., straight sides, and non-defining characteristics, blue
- **Diagonal:** e.g., the line drawn between opposite corners of a quadrilateral
- **Perimeter:** boundary or length of the boundary of a two-dimensional shape
- **Property:** e.g., having all sides equal in length
- **Regular polygon:** polygon whose side lengths and interior angles are all equal
- **Tessellate:** to tile a plane without gaps or overlaps
- **Tetrominoes:** four squares arranged to form a shape so that every square shares at least one side with another square

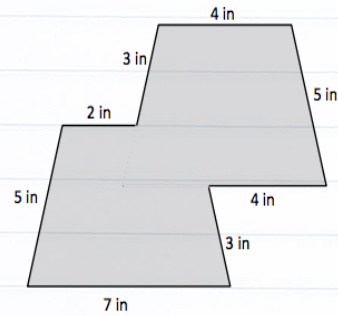
SAMPLE PROBLEMS

SAMPLE 1

A simple tessellation of hexagons

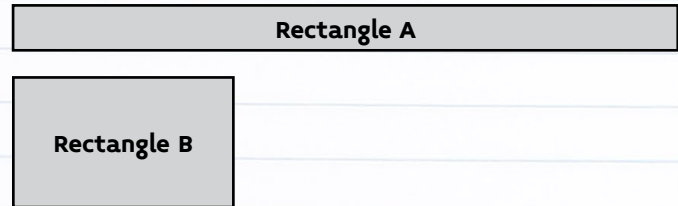


Students are asked to find the perimeter of shapes in Module 7.



SAMPLE 2

Both Rectangle A and Rectangle B below are made of 15 square units. Students are asked to determine which one has the greatest perimeter, and why? They will explore what happens to perimeter as side lengths change in shapes with the same area.



SAMPLE 3

Sample two-step word problem: The third-graders raised \$437 in a fundraiser. The fourth-graders raised \$68 less than the third-graders. How much money did the two grade levels raise altogether?

Handwritten student work for Sample 3:

$$\boxed{\$437}$$

$$\boxed{f} \text{ } \$68 \text{ less}$$

$$\begin{array}{r} 12 \\ 3 \cancel{2} 17 \\ - 68 \\ \hline \$369 \end{array}$$

$$\begin{array}{r} + \\ \hline \$437 \quad \$369 \\ \hline 437 \\ + 369 \\ \hline 806 \end{array}$$

The 2 grades raise \$806 altogether.

HOW YOU CAN HELP AT HOME

- Ask your student about the attributes of basic shapes that you encounter (how many sides, are the angles equal, are the sides the same length, are they parallel, etc.).
- Play Tetris, a tetrominoe-based game!