



3rd Grade Math

Module 7: Geometry and Measurement Word Problems

Math Parent Letter

This document is created to give parents and students a better understanding of the math concepts found in Eureka Math (© 2013 Common Core, Inc.) that is also posted as the Engage New York material which is taught in the classroom. Module 7 of Eureka Math (Engage New York) covers practice with word problems, as well as hands-on investigation experiences with geometry and perimeter. This newsletter will discuss Module 7, Topic C.

Topic C: Problem Solving with Perimeter

Perimeter

The **perimeter** is the total distance around the outside of a 2D shape.



OBJECTIVE OF TOPIC C

- 1 Decompose quadrilaterals to understand perimeter as the boundary of a shape.
- 2 Tessellate to understand perimeter as the boundary of a shape.
- 3 Measure side lengths in whole number units to determine the perimeter of polygons.
- 4 Explore perimeter as an attribute of plane figures and solve problems.
- 5 Determine the perimeter of regular polygons and rectangles when whole number measurements are missing.
- 6 Solve word problems to determine perimeter with given side lengths.
- 7 Use string to measure the perimeter of various circles to the nearest quarter inch.
- 8 Use all four operations to solve problems involving perimeter and missing measurements.

Focus Area– Topic C

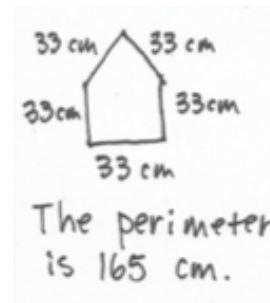
Problem Solving with Perimeter

Vocabulary Words

- Attribute: any characteristic of a shape, including properties and other characteristics.
- Classify: to put things into groups
- Perimeter: boundary or length of the boundary of a two-dimensional shape
- Polygon: a closed figure with three or more straight sides
- Tessellation: to tile a plane without gaps or overlaps

Students will solve word problems to determine perimeter with given side lengths.

Jason built a model of a Pentagon. He made each outside wall 33 cm long. What is the perimeter of Jason's model?



$$\begin{aligned} P &= 33 \text{ cm} + 33 \text{ cm} + 33 \text{ cm} + 33 \text{ cm} + 33 \text{ cm} \\ &= \underbrace{66 \text{ cm}} + \underbrace{66 \text{ cm}} + 33 \text{ cm} \\ &= \underbrace{66 \text{ cm}} + \underbrace{99 \text{ cm}} \\ &= \underbrace{65} + 100 \text{ cm} \\ &= 165 \text{ cm} \end{aligned}$$