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Curriculum Units by Fellows of the National Initiative

2019 Volume V: Perimeter, Area, Volume, and All That: A Study of Measurement

Exploring Perimeter and Area with Third Graders

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by Kathleen G. Gormley

This curriculum unit explores the concepts of geometric measurement, specifically perimeter and area. Using manipulatives and hands on activities, students will build connections between areas of rectangles and multiplication, and will solve real world problems. The unit starts with students using non-standard unit to measure various lengths. They then move to standard units, and understanding how to measure length using tools such as rulers, yardsticks and tape measures. Next, they will study area, especially how partitioning rectangles into arrays of squares gives rise to the standard formula for area as length times width. Study of irregular figures will help students learn to distinguish between area and perimeter, This unit is designed for a third grade class, but many of the activities and strategies can be easily adapted for younger or older grade levels. The purpose of the unit is to help students to develop a stronger awareness of number in a geometric context, and to build problem solving skills.

(Developed for Mathematics, grade 3; recommended for Mathematics, grades 2 and 4)

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