

Unit Guide

Building a Solid Foundation in Geometry

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Geometry is everywhere around us. First grade students recognize two-dimensional shapes frequently within their environments; however students often confuse three-dimensional and two-dimensional shapes. The goal of this two-week unit is to draw upon young students' understandings of two-dimensional shapes, then build and extend that knowledge through various explorations with the characteristics and properties of those shapes. After a foundation for identifying and describing two-dimensional shapes is formed three-dimensional shapes are introduced, allowing the children to compare plane and solid figures. This unit is designed for first grade students; however it can be modified for kindergarten and second grade. The unit is planned for 50 minute to one hour blocks of mathematics instruction. First grade students will identify, sort, compare, and build two and three-dimensional shapes. The activities are designed to be hands-on, using various manipulatives and intended to be collaborative with students working in pairs or groups. The culminating activity will have students working together to construct three-dimensional shapes, assembling a structure with those shapes, and analyzing the strength and stability of each group's structure.