

NCTM Standards and Focal Points

NCTM's (2000) *Principles and Standards for School Mathematics* provides guidance for educational decision makers in grades Pre-K through 12. The development of the geometry unit assumes that students in grade 3 possess the prior knowledge indicated by the standards for grades Pre-K-2 and extends this knowledge by focusing on the standards for grades 3-5. In addition, the authors of this unit relied on the NCTM focal points, which provide additional specificity of content for grade 3. Connections to NCTM's geometry and measurement standards and focal points for each lesson within the unit have been delineated in the tables.

NCTM Curriculum Standards and Focal Points	Lesson 1: Classifying 2-Dimensional Shapes	Lesson 2: What's the Right Angle?	Lesson 3: The Greedy Triangle	Lesson 4: The Rectangles Only Club!	Lesson 5: Your Height Can Change Your Life	Lesson 6: A World Without Congruence	Lesson 7: Same Size, Same Shape	Lesson 8: Going in Circles	Lesson 9: The Ants Go Marching	Lesson 10: Ruler of the Ruler	Lesson 11: The 2-Inch Ruler	Lesson 12: Same Perimeter, Different Shape	Lesson 13: A Fair Way to Shade	Lesson 14: Square Units in an Unsquare World	Lesson 15: A Mathematical Border
	GEOMETRY														
Students describe, analyze, compare, and classify two-dimensional shapes by their sides and angles and connect these attributes to definitions of shapes.	X	X	X	X				X							
Students investigate, describe, and reason about polygons.	X		X	X								X			
Students understand attributes and properties of two-dimensional space and the use of those attributes and properties in solving problems including applications involving congruence.						X	X								
Students extend their understanding of properties of two-dimensional shapes as they find the areas of polygons.													X	X	
Students should make conjectures about geometric properties and relationships.							X				X				
Students should recognize geometric ideas and relationships and apply them to other disciplines and to problems that arise in the classroom or in everyday life.		X				X									
Students strengthen their understanding of fractions as they confront problems in linear measurement that call for more precision than the whole unit.					X					X					X

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	MEASUREMENT														
Students develop measurement concepts and skills through experiences in analyzing attributes and properties of two dimensional objects.	X	X	X	X	X	X	X								
Students form an understanding of perimeter as a measurable attribute and select appropriate units, strategies, and tools to solve problems involving perimeter.	X				X										
Students recognize area as an attribute of two-dimensional regions.			X	X											
Students learn that they can quantify area by finding the total number of same-sized units of area that cover the shape without gaps or overlaps.			X	X											
Students understand that a square that is 1 unit on a side is the standard unit for measuring area.			X	X											