Unit 8: Geometry

Unit #:	APSDO-00040517	Duration:	10.0 Day(s)	Date(s)	04-17-2016

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Grade(s)
5
Subject(s)
Mathematics

Unit Focus

In this unit, students will identify and classify polygons by their properties. Students will also identify, describe, and classify 3 dimensional figures. Using their properties, students will classify and draw triangles and quadrilaterals. Primary instructional materials for this unit include On Core and Everyday Mathematics.

Stage 1: Desired Results - Key Understandings

Standard(s)	Transfer
Common Core *Mathematics: 5*	**T1** (T30) Describe, classify, and compare objects. **T2** (T41) Compose/decompose shapes or attributes to form new shapes.

	Meaning

Standard(s) (cont.)	**Understanding(s)**	**Essential Question(s)**
• Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of	**U1** (U400) Objects in the world can be described by their shape. **U2** (U401) Every shape has properties that define it. **U3** (U402) Shapes in different categories may share attributes that can define a larger category. **U4** (U410) Given a 2-D shape and its scale, mathematicians can compute its area and	**Q1** (Q302) How do I compare/combine measurements of objects? **Q2** (Q400) What kinds of attributes/characteristics would I use to describe this object? What category do they belong to? **Q3** (Q407) How much space does this shape (2-D and 3-D) take up/enclose? (Gr. 5-12) **Q4** (Q550) Did I use clear language (symbols,

the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate). *CCSS.MATH.CONTENT.5.G.A.1* • Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation. *CCSS.MATH.CONTENT.5.G.A.2* • Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles. *CCSS.MATH.CONTENT.5.G.B.3* • Classify two-dimensional figures in a hierarchy based on properties. *CCSS.MATH.CONTENT.5.G.B.4*	perimeter. **U5** (U411) 2-D shapes can be categorized by the number and nature of the attributes that form them. **U6** (U414) 3-D shapes can be categorized by the number and nature of their surfaces.

	labels, terms, units of measure and significant digits) to explain my reasoning to others?

Acquisition of Knowledge and Skill	
Knowledge	**Skill(s)**
	S1 Identify and classify polygons using their own properties **S2** Classify and draw triangles using their properties **S3** Classify and draw quadrilaterals using their properties **S4** Identify, describe, and classify 3-dimensional figures