

Scope and Sequence

Subject/Title of Unit	Grade	6 Weeks	Estimated Time Frame (# of days)
<u>Geometry</u> <u>Chapter 1</u> Essentials of Geometry	10	1 st	12 days
TEKS/Student Expectations		Examples/Specifications:	
<p>(G.1) Geometric structure. The student understands the structure of, and relationships within, an axiomatic system. The student is expected to:</p> <p>(A) develop an awareness of the structure of a mathematical system, connecting definitions, postulates, logical reasoning, and theorems;</p> <p>(B) recognize the historical development of geometric systems and know mathematics is developed for a variety of purposes;</p> <p>(G.2) Geometric structure. The student analyzes geometric relationships in order to make and verify conjectures. The student is expected to:</p> <p>(A) use constructions to explore attributes of geometric figures and to make conjectures about geometric relationships;</p> <p>(G.3) Geometric structure. The student applies logical reasoning to justify and prove mathematical statements. The student is expected to:</p> <p>(D) use inductive reasoning to formulate a conjecture;</p> <p>(G.4) Geometric structure. The student uses a variety of representations to describe geometric relationships and solve problems. The student is expected to select an appropriate representation (concrete, pictorial, graphical, verbal, or symbolic) in order to solve problems.</p> <p>(G.5) Geometric patterns. The student uses a variety of representations to describe geometric relationships and solve problems. The student is expected to:</p> <p>(A) use numeric and geometric patterns to develop algebraic expressions representing geometric properties;</p> <p>(B) use numeric and geometric patterns to make generalizations about geometric properties, including properties of polygons,</p>			

<p>ratios in similar figures and solids, and angle relationships in polygons and circles;</p> <p>(G.7) Dimensionality and the geometry of location. The student understands that coordinate systems provide convenient and efficient ways of representing geometric figures and uses them accordingly.</p> <p>The student is expected to:</p> <p>(A) use one- and two-dimensional coordinate systems to represent points, lines, rays, line segments, and figures;</p> <p>(C) derive and use formulas involving length, slope, and midpoint.</p> <p>(G.8) Congruence and the geometry of size. The student uses tools to determine measurements of geometric figures and extends measurement concepts to find perimeter, area, and volume in problem situations.</p> <p>The student is expected to:</p> <p>(A) find areas of regular polygons, circles, and composite figures;</p> <p>(B) find areas of sectors and arc lengths of circles using proportional reasoning;</p> <p>(C) derive, extend, and use the Pythagorean Theorem;</p> <p>a.1-6, 8.7.B, 8.12.C, 8.13.B</p>	
<p>Language of Instruction:</p>	<p>Instructional Resources/Textbook Correlations:</p>
<p>Undefined terms: point, line, plane Collinear points Coplanar points Defined terms Line segment Ray Opposite rays Endpoints Intersection</p>	
	<p>Weblinks/Other Resources:</p>

Postulate, axiom Coordinate Distance Between Congruent segments Midpoint Segment bisector Angle: sides, vertex, measure Angle: Acute, right, obtuse, straight Congruent angles Angle bisector Construction Complementary angle Supplementary angles Adjacent angles Linear pair Vertical angles Polygon: side, vertex Convex, concave n-gon equilateral, equiangular, regular	
Evaluation/External Assessment/Local Assessment:	Best Instruction Timeline:
Quizzes Project Chapter Test	12 days Geometry Best Instruction Timeline.xls