

Scope and Sequence

Subject/Title of Unit	Grade	6 Weeks	Estimated Time Frame (# of days)
Geometry Chapter 10 Properties of Circles	10	5 th	10 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>(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>(B) construct and justify statements about geometric figures and their properties;</p> <p>(C) use logical reasoning to prove statements are true and find counter examples to disprove statements that are false;</p> <p>(D) use inductive reasoning to formulate a conjecture; and</p> <p>(E) use deductive reasoning to prove a statement.</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, ratios in similar figures and solids, and angle relationships in polygons and circles;</p> <p>(G.7) Dimensionality and the geometry of location. The</p>		.	

student understands that coordinate systems provide convenient and efficient ways of representing geometric figures and uses them accordingly.

The student is expected to:

(A) use one- and two-dimensional coordinate systems to represent points, lines, rays, line segments, and figures;

(C) derive and use formulas involving length, slope, and midpoint.

(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.

The student is expected to:

(B) find areas of sectors and arc lengths of circles using proportional reasoning;

(C) derive, extend, and use the Pythagorean Theorem;

(G.9) Congruence and the geometry of size. The student analyzes properties and describes relationships in geometric figures.

The student is expected to:

(A) formulate and test conjectures about the properties of parallel and perpendicular lines based on explorations and concrete models;

(B) formulate and test conjectures about the properties and attributes of polygons and their component parts based on explorations and concrete models;

(C) formulate and test conjectures about the properties and attributes of circles and the lines that intersect them based on explorations and concrete models;

(G.10) Congruence and the geometry of size. The student applies the concept of congruence to justify properties of figures and solve problems.

The student is expected to:

(B) justify and apply triangle congruence relationships.

(G.11) Similarity and the geometry of shape. The student applies the concepts of similarity to justify properties of figures and solve problems.

The student is expected to:

<p>(A) use and extend similarity properties and transformations to explore and justify conjectures about geometric figures;</p> <p>a.4, a.5, A.1.A, A.1.E</p>	
<p>Language of Instruction:</p>	<p>Instructional Resources/Textbook Correlations:</p>
<p>Circle: center, radius, diameter Chord Secant Tangent Central angle Minor arc Major arc Semicircle Measure of a minor arc Measure of a major arc Congruent circles Congruent arc Inscribed angle Intercepted arc Inscribed polygon Circumscribed circle Segments of a chord Secant segment External segment Standard equation of a circle</p>	<p>Weblinks/Other Resources:</p>
<p>Evaluation/External Assessment/Local Assessment:</p>	<p>Best Instruction Timeline:</p>

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