

Geometry Course Description		
First Trimester	Second Trimester	Third Trimester
Text:	Text:	Text:
Geometry (Larson) Outside Sources: Khan Academy Geometry : ClassZone	Geometry (Larson) Outside Sources: Khan Academy Geometry : ClassZone	Geometry (Larson) Outside Sources: Khan Academy Geometry : ClassZone
Objectives:	Objectives:	Objectives:
<ul style="list-style-type: none"> *To become familiar with basic elements of geometry such as points, lines, angles, and polygons *To review perimeter and area of simple geometric figures *To develop skills in reasoning, both inductive and deductive *To know whether a geometric figure has sides that are parallel or perpendicular and to learn how to prove that lines are parallel or perpendicular *To develop an understanding of proof by using information about sides and angles to prove triangles are congruent *To use congruent figures to draw conclusions 	<ul style="list-style-type: none"> *To focus on properties of lines and segments associated with triangles *To use inequalities to make comparisons between triangles *To use ratios and proportions to solve problems involving lengths in similar polygons *To use information about sides and angles to prove triangles are similar *To use the Pythagorean Theorem to find side lengths in right triangles *To use the converse to enable the classification of triangles *To find angles in a right triangle using trig ratios *To classify quadrilaterals by using properties of their sides, angles, and diagonals *To extend results about angle sums in a triangle to other polygons 	<ul style="list-style-type: none"> *To explore relationships among lengths, arc measures, and angles formed when lines intersect circles in one or two points *To learn formulas for areas of quadrilaterals, regular polygons, and sectors of circles *To use ratios to find areas of similar polygons *To describe solids using their vertices, edges, and faces *To find the surface area and volume of prisms, cylinders, pyramids, cones, and spheres
Topics:	Topics:	Topics:
<ul style="list-style-type: none"> *Describing geometric figures *Measuring geometric figures *Understanding equality and congruence *Using inductive and deductive reasoning *Understanding geometric relationships in diagrams *Using properties of parallel and perpendicular lines *Proving relationships using angle measures *Making connections to lines in 	<ul style="list-style-type: none"> *Using properties of special segments in triangles *Using triangle inequalities to determine what triangles are possible *Extending methods for justifying relationships *Using ratios and proportions to solve geometry problems *Showing that triangles are similar *Using indirect measurement and similarity 	<ul style="list-style-type: none"> *Using properties of segments that intersect circles *Applying angle relationships in circles *Using area formulas for polygons *Relating length, perimeter, and area ratios in similar polygons *Comparing measures for parts of circles and the whole circle *Exploring solids and their properties *Solving problems using surface

<p>algebra</p> <ul style="list-style-type: none">*Proving triangles are congruent*Using coordinate geometry to investigate triangle relationships	<ul style="list-style-type: none">*Using Pythagorean Theorem and its converse*Using special relationships in right triangles*Using trigonometric ratios to solve right triangles*Using angle relationships in polygons*Using properties of parallelograms*Classifying quadrilaterals by their properties	<p>area and volume</p>
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