

**Performance Standards
Geometry**

Name _____

Standards					
1.0 Line and Angle Properties					
1.1 Make conjectures relating to vertical angles, complementary angles.					
1.2 Make conjectures related to angles and parallel lines, including alternate interior/exterior angles, and same-side interior/exterior angles.					
1.3 Solve problems related to angles and parallel lines.					
1.4 Determine the slope and the x- and y-intercepts of given lines.					
1.5 Determine slopes of lines parallel and perpendicular to given lines.					
1.6 Graph linear equations in two variables.					
1.7 Determine equations for lines with given conditions.					
2.0 Triangles					
2.1 Solve problems involving interior and exterior angles of triangles.					
2.2 Use properties related to altitudes and medians of triangles to solve problems.					
2.3 Use properties related to isosceles triangles to solve problems.					
2.4 Use inequalities in one triangles and inequalities between two triangles to solve problems.					
3.0 Congruent Triangles					
3.1 State the postulate or theorem (SSS, SAS, ASA, AAS, HL) which justifies the congruence of two triangles.					
3.2 Write paragraph proofs to demonstrate the congruence of triangles and its corresponding parts.					
4.0 Polygons					
4.1 Solve problems related to the measures of the interior and exterior angles of polygons.					
4.2 Solve problems related to properties of quadrilaterals.					
5.0 Transformations					
5.1 Determine the image of given figures under specified translations, reflections, rotations, and dilations.					
5.2 Describe the type of symmetry for given designs.					
6.0 Similarity					
6.1 Solve problems using ratio and proportion including finding missing terms and writing equivalent proportions.					
6.2 Determine whether given polygons are similar and identify corresponding parts.					
6.3 Solve problems related to similar figures.					

Standards					
7.0 Right Triangles					
7.1 Use the Pythagorean Theorem and its converse to solve problems.					
7.2 Solve problems related to 30-60-90 and 45-45-90 triangles.					
7.3 Find distances and midpoints between given points using the coordinate plane.					
8.0 Circles					
8.1 Draw and label figures to illustrate definitions for chords, diameters, secants, tangents, inscribed angles, and central angles.					
8.2 Solve problems related to properties for tangents of circles.					
8.3 Solve problems related to properties of chords.					
8.4 Solve problems related to properties of arcs and angles.					
9.0 Area and Volume					
9.1 Solve problems related to area of polygons, including the area of triangles, squares, rectangles, parallelograms, and trapezoids.					
9.2 Solve problems related to area of circles.					
9.3 Find lateral area and total area of selected solids, including prisms, pyramids, cylinders, and cones.					
9.4 Find the volume of prisms, pyramids, cylinders, cones, and spheres.					
9.5 Solve problems related to proportion with area and volume.					
10.0 Geometric Proof					
10.1 Recognize the hypothesis and conclusion of an if-then statement and state its converse					
10.2 Use inductive reasoning to observe data, recognize patterns, and make generalizations.					
10.3 Complete geometric proofs by applying appropriate postulates and theorems.					
11.0 Straightedge and compass Construction					
11.1 Perform basic constructions involving congruencies, bisectors, perpendiculars, and parallels.					
11.2 Apply geometric constructions to the solution of problems.					