Geometry
2023 Pacing Guide

Unit	Topic	2023 SOL	Pacing
1st Nine Weeks			
Points, Lines, Planes, and Angles	• Identify points, lines, planes, and angles • Measuring Segments and Angles • Midpoints • Exploring Angles	G.RLT.3 G.TR.2 G.PC.1	1 week
Reasoning and Proofs	• Converse, Inverse, and Contrapositive • Verbal Arguments into Symbolic Form • Determine the Validity of a Logical Argument • Venn Diagrams	G.RLT.1	1 week
Perpendicular and Parallel Lines	• Slopes of a Line • Angles and Parallel Lines • *Proving Lines Parallel and Perpendicular*	G.RLT.2 G.RLT.3 G.TR.2 G.PC.1	1 week
Congruent Triangles	• Classifying Triangles • Measuring Angles in Triangles • Proving Triangles Congruent	G.TR.2	1 week
Applying Congruent Triangles	• Special Segments • Right Triangles • Inequalities for Triangles	G.TR.1	1 week
Quadrilaterals	• Parallelograms • Rectangles • Squares and Rhombi • Trapezoids	G.PC.1	1 week
Proportion and Similarity	• Proportions • Similar Triangles • Parallel Lines and Proportional Parts • Parts of Similar Triangles	G.TR.3	1 week

Right Triangles and Trigonometry	• Geometric Mean • Pythagorean Theorem • Special Right Triangles • Trigonometry	G.TR.4	1 week
1 week for supplemental assignments. (Projects to be worked in)			
2nd Nine Weeks			
Circles	• Angles, Arcs, Chords • Inscribed Angles • Tangents and Secants • Special Segments • Write equations of a Circle	G.PC.3 G.PC.4	1 week
Polygons and Area	• Polygons • Tessellations • Areas of Polygons	G.PC.2	1 week
Surface Area and Volume	• Surface Area of Prisms, Cylinders, Pyramids, and Cones • Volume of Prisms, Cylinders, Pyramids, and Cones • Surface Area of Spheres	G.DF.1	1 week
Transformations	• Reflections • Translations • Rotations • Dilations	G.RLT.3	1 week
Surface Area and Volume	• Use Surface Area and Volume of 3-D Objects to Solve Practical Problems • Determine How Changes in One or More Dimensions of a Figure Affect Area and/or Volume of the Figure • Determine How Changes in Area and/or Volume of a Figure Affect One or Dimensions of the Figure • Solving Problems about Similar Geometric Figures	G.DF.1 G.DF.2	3 weeks
2 weeks for supplemental assignments. (Projects to be worked in)			

Deletions from Geometry (2016 SOL)	Additions to Geometry (2023 SOL)
• G.4h – Construction and justify the constructions of an equilateral triangle, a square, and a regular hexagon inscribed in a circle [Deleted] • G.10b [EKS] - Determine angle measures of a regular polygon in a tessellation [Deleted] • G.11b [EKS] - Find lengths of segments and non-central angle measures in a circle formed by intersecting chords, secants, and/or tangents [Deleted]	• G.RLT.1 - Included recognizing the relationship between a biconditional statement and a true conditional statement with a true converse; added Venn diagrams to represent set relationships and interpret Venn diagrams, including those representing situations in context • G.RLT.3 – Locate, count, and draw lines of symmetry given a figure, including figures in context • G.TR.1 – Solve for interior and exterior angles of a triangle, when given two angles • G.TR.2 – Given a triangle, use constructions to create a congruent triangle • G.TR.3 – Describe a sequence of transformations that can be used to verify similarity of triangles located in the same plane; solve problems involving attributes of similar figures, including problems in context • G.TR.4 – Find and verify trigonometric ratios using right triangles • G.PC.1 - Use constructions to verify properties of quadrilaterals • G.PC.3 - Determine the proportional relationship between the arc length or area of a sector and other parts of a circle; apply arc length or sector area to solve for an unknown measurement • G.PC.4 – Derive the equation of a circle given the center and radius using the Pythagorean Theorem • G.DF.1 – Identify the shape of a two-dimensional cross section of a three-dimensional figure • G.DF.2 – Recognize when two- and three-dimensional figures are similar