

Geometry Curriculum Map

UNIT 1 – GEOMETRY BASICS	
Nets and Drawings for Visualizing Geometry	
Points, Lines, and Planes	
Measuring Segments	
Measuring Angles	
Exploring Angle Pairs	
Classifying Polygons	
Midpoint and Distance in the Coordinate Plane	
Perimeter Circumferences and Area	
Construction	

	UNIT 2 – REASONING AND PROOF	
2-1	Inductive and Deductive Reasoning	
2-2	Logic	
2-3	Proving Theorems	
2-4	Algebraic Proofs	
2-5	Theorems About Angles and Perpendicular Lines	
2-6	Planning a Proof	

	UNIT 3 – PARALLEL AND PERPENDICULAR LINES	
3-1	Identify Pairs of Lines and Angles	
3-2	Use Parallel Lines and Traversals	



3-3	Prove Lines Parallel
3-4	Find and Use Slopes of Lines
3-5	Write and Graph Equations of Lines
3-6	Bonus Lesson: Prove Theorems about Perpendicular Lines

	UNIT 4 – CONGRUENT TRIANGLES	
4-1	Congruent Figures	
4-2	Triangle Congruency by SSS and SAS	
4-3	Triangle Congruency by ASA and AAS	
4-4	Using Corresponding Parts of Congruent Triangles	
4-5	Isosceles and Equilateral Triangles	
4-6	Congruence in Right Angles	
4-7	Bonus Lesson: Congruence in Overlapping Triangles	

	UNIT 5 – RELATIONSHIPS WITH TRIANGLES	
5-1	Midsegments of Triangles	
5-2	Perpendicular and Angle Bisectors	
5-3	Bisectors in Triangles	
5-4	Medians and Altitudes	
5-5	Indirect Proof	
5-6	Inequalities in One Triangle	
5-7	Inequalities in Two Triangles	



	UNIT 6 – THE POLYGON-ANGLE SUM THEOREMS	
6-1	The Polygon-Angle Sum Theorems	
6-2	Properties of Parallelograms	
6-3	Proving that a Quadrilateral is a Parallelogram	
6-4	Properties of Rhombus Rectangles and Squares	
6-5	Conditions of Rhombuses, Rectangles and Squares	
6-6	Trapezoids and Kites	
6-7	Polygons in the Coordinate Plane	
6-8	Applying Coordinate Geometry	
6-9	Proofs Using Coordinate Geometry	

	UNIT 7 – SIMILARITY	
7-1	Ratios and Proportions	
7-2	Similar Polygons	
7-3	Proving Triangles are Similar	
7-4	Similarity in Right Triangles	
7-5	Proportions in Triangles	

	UNIT 8 – RIGHT TRIANGLES AND TRIGONOMETRY	
8-1	The Pythagorean Theorem and its Converse	
8-2	Special Right Angles	
8-3	Trigonometry	
8-4	Angles of Elevation and Depression	
8-5	Law of Cosines	



8-6	Law of Sines

	UNIT 9 – TRANSFORMATIONS	
9-1	Translations	
9-2	Reflections	
9-3	Rotations	
9-4	Congruence Transformations	
9-5	Dilations	
9-6	Solving Rotational Equations	
9-7	Similarity Transformations	

	UNIT 10 – AREA	
10-1	Areas of Parallelograms and Triangles	
10-2	Areas of Trapezoids, Rhombuses and Kites	
10-3	Areas of Regular Polygons	
10-4	Perimeter and Area of Similar Figures	
10-5	Trigonometry and Area	
10-6	Circles and Arcs	
10-7	Areas of Circles and Sectors	
10-8	Geometric Probability	

	UNIT 11 – SURFACE AREA AND VOLUME
11-1	Spacing Figures and Cross Sections
11-2	Surface Areas of Cylinders and Prisms



11-3	Surface Areas of Pyramids and Cones
11-4	Volumes of Prisms and Cylinders
11-5	Volume of Pyramids and Cones
11-6	Surface Areas and Volumes of Spheres
11-7	Areas and Volumes of Similar Solids

	UNIT 12 – CIRCLES		
12-1	Tangent Lines		
12-2	Chords and Arcs		
12-3	Inscribed Angles		
12-4	Angle Measures and Segment Lengths		
12-5	Circles in the Coordinate Plane		
12-6	Locus A Set of Points		

UNIT 13 – PROBABILITY		
13-1	Experimental and Theoretical Probability	
13-2	Probability Distributions and Frequency Tables	
13-3	Permutations and Combinations	
13-4	Compound Probability	
13-5	Probability Models	
13-6	Conditional Probability Formulas	
13-7	Modeling Randomness	