

Topic/Time Frame (days)	Chapter and Sections/Resources	Learning Targets	Vocabulary	CCSSM Standards
Transformation, Congruence, and Proof	Chapters 7 and 3 from old Geometry book.	<ol style="list-style-type: none"> <li>1. Experiment with transformations in the plane.</li> <li>2. Use geometric descriptions of rigid motions to transform figures, predict the effect of a given rigid motion (isometry), and determine if two figures are congruent.</li> <li>3. Prove, apply, and construct theorems about lines and angles.</li> <li>4. Use the slope criteria for parallel and perpendicular lines.</li> </ol>	Transformation, translation, reflection, rotation, similar, congruent, vertical angles, linear pair, corresponding angles, alternate interior angles, alternate exterior angles, same-side interior angles, same-side exterior angles, perpendicular, parallel, bisect, perpendicular bisector	G-CO.A.1 G-CO.A.2 G-CO.A.3 G-CO.A.4 G-CO.A.5 G-CO.B.6 G-CO.C.9 G-CO.D.12 C-GPE.B.5
Triangles and Congruence	Chapters 1, 4, and 10	<ol style="list-style-type: none"> <li>1. Prove theorems about triangles and apply in modeling situations.</li> <li>2. Use rigid motions (isometries) to show if triangles are congruent.</li> <li>3. Prove and apply the criteria for triangle congruence (SSS, SAS, and ASA).</li> <li>4. Make geometric constructions</li> </ol>	Exterior angle, scalene triangle, isosceles triangle, equilateral triangle, right triangle, acute triangle, obtuse triangle, equiangular triangle, inscribed	G-CO.B.6 G-CO.B.7 G-CO.B.8 G-CO.C.10 G-CO.D.12 G-CO.D.13 G-C.A.3 G-MG.A.1 G-CO.A.2

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Similarity	Chapters 8 and 1	<ol style="list-style-type: none"> <li>1. Prove and apply the definition of similar and scale factor.</li> <li>2. Prove triangles are similar.</li> <li>3. Apply properties of similar triangles.</li> <li>4. Apply geometric methods to solve applications.</li> </ol>	Scale factor, ratio, midpoint, midsegment	G-CO.C.10 G-SRT.A.1 G-SRT.A.2 G-SRT.A.3 G-SRT.B.4 G-SRT.B.5 G-GPE.B.6 G-MG.A.3

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Quadrilaterals and Coordinate Geometry	Chapter 6	<ol style="list-style-type: none"> <li>1. Prove and apply theorems on the angles of polygons.</li> <li>2. Prove and apply theorems about parallelograms.</li> <li>3. Use coordinates to show properties of parallelograms.</li> <li>4. Use coordinates to find perimeter and area of polygons and a point that partitions a given segment by a given ratio.</li> </ol>	Polygon, quadrilateral, parallelogram, rectangle, rhombus, square, diagonal, diameter, distance, partitions, perimeter, area	G-CO.C.11 G-CO.C.13 G-GPE.B.4 G-GPE.B.5 G-GPE.B.6 G-GPE.B.7
Trigonometric Ratios	Chapters 9, 11	<ol style="list-style-type: none"> <li>1. Define trigonometric ratios and solve problems involving right triangles.</li> <li>2. Use coordinates to compute perimeter and area.</li> <li>3. Apply geometric concepts in modeling situations</li> </ol>	Sine, cosine, tangent, special right triangles, radical	G-SRT.C.6 G-SRT.C.7 G-SRT.C.8 G-GPE.B.7 G-MG.A.1 G-MG.A.3
Circles	Chapters 10, 11	<ol style="list-style-type: none"> <li>1. Understand and apply theorems about circles.</li> <li>2. Derive using similarity the fact that the length of the arc intercepted by an angle is proportional to the radius, and define the radian measure of the angle as the constant of proportionality; derive the formula for area of a sector.</li> </ol>	Radius, diameter, chord, secant, tangent, central angle, inscribed, circumscribed, radian, circumference, arc length, area of sector,	G-CO.D.13 G-C.A.1 G-C.A.2 G-C.A.3 G-C.B.5 G-GPE.A.1 G-GPE.B.4 G-MG.A.1 G-CO.1

		3. Derive the equation of a circle of given center and radius using the Pythagorean Theorem; complete the square to find the center and radius of a circle, given by an equation.		
Extending to 3 Dimensions	Chapter 12	1. Explain volume formulas and use them to solve problems.	Polyhedron, face, edge, vertex, surface area, volume, prism, cylinder, pyramid, cone, sphere	G-GMD.A.1 G-GMD.A.3

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Grade/Course: \_\_\_\_\_

Text: \_\_\_\_\_

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