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| Quarter 1 | Week | Major Concepts/Topics |
| 1 | * 1.1 Nets and Drawing for Visualizing Geometry
	+ I can make nets and drawings of three-dimensional figures.
	+ Prepares for **G-CO.A.1** Know precise definitions of angles, circles, perpendicular lines, parallel lines, and lines segments, based on the undefined notions of points, lines, distance along a line, and distance around a circular arc.
* 1.2 Points, Lines, and Planes
	+ I can understand basic terms and postulates of geometry.
	+ **G-CO.A.1** Know precise definitions of angle, circle, perpendicular lines, parallel lines, and line segments.
* 1.3 Measuring Segments
	+ I can find and compare lengths of segments
	+ **G-CO.A.1** Know precise definitions of angles, circle, perpendicular lines, parallel lines, and line segments.
* 1.4 Measuring Angles
	+ I can find and compare the measures of angle
	+ **G-CO.A.1** Know precise definitions of angles, circles, perpendicular line, parallel line and line segments.
* Chapter 1 Quiz
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| 2 | * 1.5 Exploring Angle Pairs
	+ I can identify special angle pairs and use their relationships to find angle measures.
	+ **G-CO.A.1** Know precise definitions of angle, circle, perpendicular line, and parallel line.
* 1.7 Midpoint and Distance in the Coordinate Plane
	+ I can find the midpoint of a segment and find the distance between two points in the coordinate plane.
	+ **G-GPE.B.4** Use coordinates to prove simple geometric theorems
	+ **G-GPE.B.7** Use coordinates to compute perimeters and area
* 1.8 Perimeter, Circumference, and Area
	+ I can find the perimeter or circumference of basic shapes and find the area of basic shapes.
	+ **N-Q.A.1** Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas.
* Chapter 1 Test
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| 3 | * 2.1 Patterns and Inductive Reasoning
	+ I can use inductive reasoning to make conjectures
	+ **G-CO.C.9** Prove theorems about lines and angles
* 2.2 Conditional Statements
	+ I can recognize conditional statements and their parts and write converses, inverses, and contrapositives of conditionals.
	+ **G-CO.C.9** Prove theorems about lines and angles.
* 2.3 Conditional and Definitions
	+ I can write biconditionals and recognize good definitions
	+ **G-CO.C.9** Prove theorems about lines and angles.
* 2.4 Deductive Reasoning
	+ I can use the Law of Detachment and the Law of Syllogism
	+ **G-CO.C.9** Prove theorems about lines and angles.
* Chapter 2 Quiz
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| 4 | * 2.5 Reasoning in Algebra and Geometry
	+ I can connect reasoning in algebra and geometry
	+ **G-CO.C.9** Prove theorems about lines and angles.
* 2.6 Proving Angles Congruent
	+ I can prove and apply theorems about angles.
	+ **G-CO.C.9** Prove theorems about lines and angles. Theorems include vertical angles are congruent.
* Chapter 2 Test
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| 5 | * 3.1 Lines and Angles
	+ I can identify relationships between figures in space and identify angles formed by wo lines and a transversal.
	+ **G-CO.A.1** Know precise definitions of parallel
* 3.2 Properties of Parallel Lines
	+ I can prove theorems about parallel lines and use properties of parallel lines to find angle measures
	+ **G-CO.C.9** Prove theorems about lines and angles. Theorems include when a transversal crosses parallel lines, alternate interior angles are congruent.
* 3.3 Proving Lines Parallel
	+ I can determine whether two lines are parallel
	+ **G-CO.C.9** Prove theorems about lines and angles. Theorems include when a transversal crosses parallel lines, alternate interior angles are congruent and corresponding angles are congruent.
* 3.4 and 3.5 Parallel and Perpendicular Lines
	+ I can relate parallel and perpendicular lines
	+ **G-MG.A.3** Apply geometric methods to solve design problems.
	+ I can use parallel lines to prove a theorem about triangles and find measures of angles of triangles.
	+ **G-CO.C.10** Prove theorems about triangles measures of interior angles of a triangle have a sum of 180.
* Chapter 3 Quiz
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| 6 | * 3.7 Slope and Equations of Lines in the Coordinate Plane
	+ I can graph and write linear equations
	+ **G-GPE.B.5** Prove the slope criteria for parallel and perpendicular lines.
* 3.8 Slopes of Parallel and Perpendicular Lines
	+ I can relate slope to parallel and perpendicular lines
	+ **G-GPE.B.5** Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems.
* Chapter 3 Test
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| 7 | * 4.1 Congruent Figures
	+ To recognize congruent figures and their corresponding parts
	+ **G-SRT.B.5** Use congruence criteria for triangles to solve problems and prove relationships in geometric figures.
* 4.2 Triangle Congruence by SSS and SA
	+ I can prove two triangles congruent using the SSS and SAS Postulates\
	+ **G-SRT.B.5** Use congruence criteria for triangles to solve problems and prove relationships in geometric figures.
* 4.3 Triangle Congruence by ASA and AAS
	+ I can prove triangles congruent using ASA Postulate and the AAS Theorem
	+ **G-SRT.B.5** Use congruence criteria for triangles to solve problems and prove relationships in geometric figures.
* Chapter 4 Quiz
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| 8 | * 4.4 Using Corresponding Parts of Congruent Triangles
	+ I can use triangles congruence and corresponding parts of congruent triangles to prove that parts of two triangles are congruent.
	+ **G-SRT.B.5** Use congruence criteria for triangles to solve problems and prove relationships in geometric figures.
* 4.5 Isosceles and Equilateral Triangles
	+ I can use and apply properties of isosceles and equilateral triangles
	+ **G-CO.C.10** Prove theorems and triangles based angles of isosceles triangles are congruent.
* 4.6 Congruence in Right Triangles
	+ I can prove right triangles congruent using the Hypotenuse-Leg Theorem
	+ **G-SRT.B.5** Use congruence criteria to solve problems and prove relationships in geometric figures.
* 4.7 Congruence in Overlapping Triangles
	+ To identify congruent overlapping triangles and prove two triangles congruent using other congruent triangles.
	+ **G-SRT.B.5** Use congruence criteria to solve problems and prove relationships in geometric figures.
* Chapter 4 Test
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| 9 | * Quarter Review
* Quarterly Assessment
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| Quarter 2 | Week | Major Concepts/Topics |
|  | 1 | * 5.1 Midsegments of Triangles
	+ I can use properties of midsegments to solve problems
	+ **G-CO.C.10** Prove theorems about triangles and the segments joining the midpoints of two sides of a triangle is parallel to the third side and half the length.
* 5.2 Perpendicular and Angle Bisectors
	+ I can use properties of perpendicular bisectors and angle bisectors
	+ **G-CO.C.9** Prove theorems about lines and angles points on a perpendicular bisector of a line segment are exactly those equidistant from the segment’s endpoints
* 5.3 Bisector in Triangles
	+ I can identify properties of perpendicular bisectors and angle bisectors
	+ **G-C.A.3** Construct the inscribed and circumscribed circles of a triangle.
* Chapter 5 Quiz
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| 2 | * 5.5 Indirect Proofs
	+ I can use indirect reasoning to write proofs
	+ **G-CO.C.10** Prove theorems about triangles.
* 5.6 Inequalities in One Triangle
	+ I can use inequalities involving angles and side of triangles.
	+ **G-CO.C.10** Prove theorems about triangles.
* 5.7 Inequalities in Two Triangles
	+ I can apply inequalities in two triangles
	+ **G-CO.C.10** Prove theorems about triangles.
* Chapter 5 Test
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| 3 | * 6.1 Polygon Angle-Sum Theorems
	+ I can find the sum of the measures of the interior angles of a polygon and find the sum of the measure of the exterior angles of a polygon.
	+ **G-SRT.B.5** Use congruence criteria to solve problems and prove relationship in geometric figures.
* 6.2 Properties of Parallelograms
	+ I can use relationships among sides and angles of parallelograms and use relationships among diagonals of parallelograms.
	+ **G-CO.C.11** Prove theorems about parallelograms. Theorems include: opposite sides are congruent, opposite angles are congruent, the diagonals of a parallelogram bisect each other.
* 6.3 Proving that a Quadrilateral is a Parallelogram
	+ I can determine whether a quadrilateral is a parallelogram
	+ **G-CO.C.11** Prove theorems about parallelograms the diagonals of a parallelograms bisect each other and its converse.
* Chapter 6 Quiz
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| 4 | * 6.4 Properties of Rhombuses, Rectangles and Squares
	+ I can define and classify special types of parallelograms to use properties of diagonals of rhombuses and rectangles.
	+ **G-CO.C.11** Prove theorems about parallelograms rectangles are parallelograms with congruent diagonals.
* 6.5 Conditions for Rhombuses, Rectangles, and Squares
	+ I can determine whether a parallelogram is a rhombus or rectangle.
	+ **G-CO.C.11** Prove theorems about parallelograms, rectangles are parallelograms with congruent diagonals.
* 6.6 Trapezoids and Kites
	+ I can verify and use properties of trapezoids and kites
	+ **G-SRT.B.5** Use congruence criteria to solve problems and prove relationships in geometric figures.
* Chapter 6 Test
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| 5 | * 7.1 Ratios and Proportions
	+ I can write ratios and solve proportions
	+ **G-SRT.B.5** Use similarity criteria for triangles to solve problems and prove relationships in geometric figures.
* 7.2 Similar Polygons
	+ I can identify and apply similar polygons
	+ **G-SRT.B.5** I can use similarity criteria for triangles to solve problems and prove relationships in geometric figures.
* 7.3 Proving Triangles Similar
	+ I can use AA~ Postulate and the SAS ~ and the SSS~ Theorem to use similarity to find indirect measurements
	+ **G-SRT.B.5** Use similarity criteria for triangles to solve problems and to prove relationships in geometric figures.
* Chapter 7 Quiz
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| 6 | * 7.4 Similarity in Right Triangles
	+ I can find and use relationships in similar right triangles
	+ **G-SRT.C.8** Use similarity criteria for triangles to solve problems and to prove relationships in geometric figures
* 7.5 Proportions in Triangles
	+ I can use the Side-Splitter Theorem and the Triangle-Angle-Bisector Theorem
	+ **G-SRT.B.4** Prove theorems about triangles a line parallel to one side of a triangle divides the other two proportionally.
* Chapter 7 Test
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| 7 | * 8.1 The Pythagorean Theorem
	+ I can use the Pythagorean Theorem and its converse
	+ **G-SRT.C.8**  Use the Pythagorean Theorem to solve right triangles in applied problems.
* 8.2 Special Right Triangles
	+ I can use properties of 45-45-90 and 30-60-90 triangles
	+ **G-SRT.C.8**  Use the Pythagorean Theorem to solve right triangles in applied problems.
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| 8 | * 8.3 Trigonometry
	+ I use the sine, cosine, and tangent ratios to determine side lengths and angle measurements in right triangle.
	+ **G-SRT.C.8** Use the Pythagorean Theorem to solve right triangles in applied problems.
* Chapter 8 Quiz
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| 9 | * 8.4 Law of Sines
	+ I can use angles of elevation and depression to solve problems
	+ **G-SRT.C.8** Use the Pythagorean Theorem to solve right triangles in applied problems.
* 8.5 Law of Cosines
	+ I can apply the Law of Sines
	+ **G-SRT.D.11** Understand and apply the Law of Sines to find unknown measurements in right and non-right triangles.
* Chapter 8 Test
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| Quarter 3 | Week | Major Concepts/Topics |
| 1 | * 9.1 Translations
	+ I can identify rigid motions and find translations images of figures.
	+ **G-CO.A.2** Represent transformations in the plane…describe transformations as functions that take points in the plane as inputs and give other points as outputs.
* 9.2 Reflections
	+ I can find reflection images of figures
	+ **G-CO.A.5** Given a geometric figure and a rotation, reflection, or translation, draw the transformed figures.
 |
| 2 | * 9.3 Rotations
	+ I can draw and identify rotation images of figures
	+ **G-CO.A.4** Develop definitions of rotations…in terms of angle, circles, perpendicular lines, parallel lines, and line segments.
* 9.4 Compositions of Isometries
	+ I can find compositions of isometries, including glide reflections and to classify isometries
	+ **G-CO.B.6** Use geometric descriptions of rigid motions to transform figures and to predict the effect of given rigid motion on a given figure.
* Chapter 9 Quiz
 |
| 3 | * 9.5 Congruence Transformation
	+ I can identify congruence transformations and to prove triangles congruence using isometries.
	+ **G-CO.B.7** Use the definition of congruence in terms of rigid motions to show that two triangles are congruent…
* 9.6 Dilations
	+ I can understand dilation images of figures
	+ **G-SRT.A.1a** A dilation takes a line not passing through the center of the dilation to a parallel line…
 |
| 4 | * 9.7 Similarity Transformations
	+ I can identify similarity transformations and verify properties of similarity
	+ **G-SRT.A.2** Given two figures, use the definition of similarity in terms of similarity transformations to decide if they are similar…
* Chapter 9 Test
 |
| 5 | * 10.1 Areas of Parallelograms and Triangles
	+ I can find the area of parallelograms and triangles
	+ **G-MG.A.1** Use geometric shapes, their measures, and their properties to describe objects
	+ **G-GPE.B.7**  Use coordinates to compute perimeters of polygons and areas of triangles and rectangles.
* 10.2 Areas of Trapezoids, Rhombuses, and Kites
	+ I can find the area of a trapezoid, rhombus, or kite
	+ **G-MA.A.1** Use geometric shapes, their measures, and their properties to describe objects.
 |
| 6 | * 10.3 Areas of Regular Polygons
	+ I can find the area of a regular polygon
	+ **G-MG.A.1** Use geometric shapes, their measures, and their properties to describe objects.
* 10.4 Perimeters and Areas of Similar Figures
	+ I can find the perimeters and areas of similar polygons
	+ **G-GMD.A.3** Use volume formulas for cylinders, pyramids, cones, and spheres to solve problems.
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| 7 | * Chapter 10 Quiz
* 10.5 Trigonometry and Area
	+ I can find areas of regular polygons and triangles using trigonometry
	+ **G-SRT.D.9** Derive the formula A=1/2 ab sin(c) for the area of a triangle by drawing an auxiliary line from a vertex perpendicular to the opposite side.
 |
| 8 | * 10.6 Circles and Arcs
	+ To find the measure of central angles and arcs and to find the circumference and arc length.
	+ **G-CO.A.1** Know precise definitions of …circles…
	+ **G-C.A.1**Prove that all circles are similar.
* 10.7 Areas of Circles and Sectors
	+ I can find the areas of circles, sectors, and segments of circles.
	+ **G-C.B.5** Derive…the formula for the area of a sector.
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| 9 | * 10.8 Geometric Probability
* Chapter 10 Test
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| Quarter 4 | Week | Major Concepts/Topics |
| 1 | * 11.1 Space Figures and Cross Sections
	+ I can recognize polyhedrons and their parts to visualize cross sections of space figures.
	+ **G-GMD.B.4** Identify the shapes of two-dimensional cross-sections of three-dimensional objects, and identify three-dimensional objects generated by rotations of two-dimensional objects.
* 11.2 Surface Areas of Prisms and Cylinders
	+ I can find the surface area of a prism and a cylinder
	+ **G-MG.A.1** Use geometric shapes, their measures, and their properties to describe objects.
* 11.3 Surface Areas of Pyramids and Cones
	+ I can find the surface area of a pyramid and a cone.
	+ **G-MG.A.1** Use geometric shapes, their measures, and their properties to describe objects.
 |
| 2 | * Chapter 11 Quiz
* 11.4 Volume of Prisms and Cylinders
	+ I can find the volume of a prism and the volume of a cylinder
	+ **G-GMD.A.1** Give an informal argument for the formulas for …volume of a cylinder…Use…Cavalieri’s principle
* 11.5 Volume of Pyramids and Cones
	+ I can find the volume of a pyramid and of a cone
	+ **G-GMD.A.1** Use geometric shapes, their measures, and their properties to describe objects
 |
| 3 | * 11.6 Surface Areas and Volumes of Spheres
	+ I can find the surface area and volume of a sphere
	+ **G-GMD.A.1** Use geometric shapes, their measures, and their properties to describe objects
	+ **G-GMD.A.3** Use volume formulas for… spheres to solve problems.
* 11.7 Areas and Volumes of Similar Solids
	+ I can compare and find the areas and volumes of similar solids.
	+ **G-GMD.A.1** Use geometric shapes, their measures, and their properties to describe objects
	+ **G-GMD.A.2** Apply concepts of density based on area and volume in modeling situations
* Chapter 11 Test
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| 4 | * 12.1 Tangent Lines
	+ I can use properties of a tangent to a circle.
	+ **G-C.A.2** Identify and describe relationships among inscribed angles, radii, and chords…the radius of a circle is perpendicular to the tangent where the radius intersects the circle.
* 12.2 Chords and Arcs
	+ I can use congruent chords, arcs, and central angles to use perpendicular bisector to chords.
	+ **G-C.A.2** Identify and describe relationships among inscribed angles, radii, and chords
* 12.3 Inscribed Angles
	+ I can find the measure of an inscribed angle and find the measure of an angle formed by a tangent and a chord.
	+ **G-C.A.2** Identify and describe relationships among inscribed angles, radii, and chords…the radius of a circle is perpendicular to the tangent where the radius intersects the circle.
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| 5 | * Chapter 12 Quiz
* 12.4 Angle Measures and Segment Lengths
	+ I can find measures of angles formed by chords, secants, and tangents to find the length of segments associated with circles.
	+ **G-C.A.2** Identify and describe relationships among inscribed angles, radii, and chords
* 12.5 Circles in the Coordinate Plane
	+ I can write the equations of a circle to find the center and radius of a circle.
 |
| 6 | * 12.6 Sets of Points
	+ I can draw and describe a locus
	+ **G-GMD.B.4** …Identify three-dimensional objects generated by rotations of two-dimensional objects.
* Chapter 12 Test
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| 7 | * 13.1 Experimental and Theoretical Probability
	+ I can calculate experimental and theoretical probability
	+ **S-CP.A.1** Describe events as subsets of a sample space using characteristics of the outcomes, or as unions, intersections, or complements of other events.
* 13.2 Probability Distribution and Frequency
	+ I can make and use frequency tables and probability distributions.
	+ **S-CP.A.4** Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified.
* 13.3 Permutations and Combinations
	+ I can use permutations and combinations to solve problems
	+ **S-CP.B.9** Use permutations and combinations to compute probabilities of compound events and solve problems.
 |
| 8 | * Chapter 13 Quiz
* 13.4 Compound Probability
	+ I can identify independent and dependent events to find compound probabilities.
	+ **S-CP.B.7** Apply the Addition rule
* 13.5 Probability Models
	+ I can construct and use probability models.
	+ **S-CP.A.4** Construct and interpret two-way frequency tables of data… Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities.
 |
| 9 | * 13.6 Conditional Probability
	+ I can understand and calculate conditional probabilities
	+ **S-CP.A.5** Recognize and explain the concepts of conditional probability and independence in every day language and everyday situation
* 13.7 Modeling Randomness
	+ I can understand random numbers and use probabilities in decision-making
	+ **S-MD.B.6** Use probabilities to make fair decisions.
* Chapter 13 Test
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