Geometry Scope and Sequence

#	Unit Title	Essential Question(s)	Priority Standards	Secondary Standards	Skills/Knowledge addressed	Chapters in text
1	*Basics of Geometry*	- How can you represent a 3 dimensional figure with a 2 dimensional drawing? - What are the building blocks of geometry? - How can you describe the attributes of a segment or angle?	CC.2.3.HS.A.1 CC.2.3.HS.A.3 CC.2.3.HS.A.14	CC.2.1.HS.F.2 CC.2.2.HS.D.9 CC.2.1.HS.F.4 CC.2.1.HS.F.5	- Identifying points, lines, planes, angles. - Measure line segments and angles.	1
2	*Logic and Reasoning*	- How can you make a conjecture and prove that it is true?	CC.2.3.HS.A.1 CC.2.3.HS.A.3 CC.2.3.HS.A.14	CC.2.1.HS.F.2 CC.2.4.HS.B.5	- Writing conjectures, converses, inverses, and contrapositives - Determining truth value - Providing counter examples for false statements	2
3	*Triangles*	- How do you identify corresponding parts of congruent triangles? - How do you show that 2 triangles are congruent?	CC.2.3.HS.A.2 CC.2.3.HS.A.3 CC.2.3.HS.A.14	CC.2.1.HS.F.2 CC.2.2.HS.D.9	- Write formal and informal proofs to prove 2 triangles are congruent	4, 5
4	*Polygons and Quadrilaterals*	- How can you find the sum of the measures of polygon angles? - How can you classify quadrilaterals?	CC.2.3.HS.A.3 CC.2.3.HS.A.14	CC.2.1.HS.F.2 CC.2.3.HS.D.9	- Properties - Polygon angle-sum theorem - Coordinate geometry	6
5	*Similarity and Transformations*	- How do you use proportions to find side lengths in similar polygons? - How do you show two triangles are similar?	CC.2.3.HS.A.2 CC.2.3.HS.A.14 CC.2.3.HS.A.5 CC.2.3.HS.A.9	CC.2.2.HS.C.4 CC.2.1.HS.F.2 CC.2.2.HS.D.9	- Ratios/proportions - Proving triangles/polygons similar - Rotations, reflections,	7, 9

		- How do you identify corresponding parts of similar triangles? - How can you represent a transformation in the coordinate plane?			translations	
6	*Area/Surface Area/Volume*	- How do perimeters and areas of similar polygons compare? - How do the surface areas and volumes of similar solids compare?	CC.2.3.HS.A.14 CC.2.3.HS.A.12	CC.2.1.HS.F.2 CC.2.3.HS.D.9 CC.2.1.HS.F.4 CC.2.1.HS.F.5	- Find the area and perimeter of 2 dimensional figures - Find the surface area and volume of solids	10, 11
7	*Parallel and Perpendicular Lines*	- What is the sum of the measures of the angles in a triangle? - How do you write the equation of a line?	CC.2.3.HS.A.14	CC.2.1.HS.F.2 CC.2.2.HS.D.9	- Identify parallel and perpendicular lines - Write the equation of a line that is parallel/perpendicular to a given line.	3
8	*Probability*	- What is the difference between experimental and theoretical probability? - What does it mean for an event to be random?	CC.2.3.HS.A.14 CC.2.4.HS.B.1 CC.2.4.HS.B.3 CC.2.4.HS.B.5 CC.2.4.HS.B.7	CC.2.4.HS.B.2 CC.2.1.HS.F.2	- Find the probability of simple events - Find the probability of compound events	13
9	*Right Triangles and Circles*	- How do you find a side length or angle measure in a right triangle? - How do trigonometric ratios relate to similar right triangles? - How can you prove relationships between angles and arcs in a circle?	CC.2.3.HS.A.3 CC.2.3.HS.A.7	CC.2.2.HS.C.9	- Use sine, cosine, and tangent to find the measures of angles or the lengths of sides - Apply the Pythagorean theorem - Identify parts of a circle	8, 12