

## Geometry Pacing Guide – Revised for Fall 2020

Unit 1 (Curriculum) – Congruence and Constructions				
Traditional	Integrated	<b>Unit 1 – Essentials of Geometry</b>		
Days 1-10	Days 1-20	<b>Module 1 – Geometry in the Plane</b>		
		1.1	Points, Lines, and Planes	CC.9-12.G.CO.1
		1.2	Define and Measure Angles	CC.9-12.G.CO.1
		1.3	Polygons and Other Figures in the Plane	CC.9-12.G.MG.1
		1.4	Apply the Distance Formula	CC.9-12.G.GPE.7
		<b>Module 2 – Tools for Reasoning and Proof</b>		
		2.1	Write Conditional Statements	CC.9-12.SMP.3
		2.2	Use Inductive and Deductive Reasoning	CC.9-12.SMP.3
		2.3	Write Proofs about Segments	CC.9-12.G.CO.9
		2.4	Write Proofs about Angles	CC.9-12.G.CO.9
<b>Unit 2 – Parallel and Perpendicular Lines</b>				
Days 11-18	Days 21-36	<b>Module 3 – Lines and Transversals</b>		
		3.1	Parallel Lines Crossed by a Transversal	CC.9-12.G.CO.9
		3.2	Prove Lines are Parallel	CC.9-12.G.CO.9
		3.3	Prove Lines are Perpendicular	CC.9-12.G.CO.9
		<b>Module 4 – Lines on the Coordinate Plane</b>		
		4.1	Slope and Equations of Parallel Lines	CC.9-12.G.GPE.5
		4.2	Slope and Equations of Perpendicular Lines	CC.9-12.G.GPE.5
4.3	Write a Coordinate Proof	CC.9-12.G.GPE.4		
<b>Unit 3- Transformations</b>				
Days 19-26	Days 37-52	<b>Module 5 – Transformations that Preserve Size and Shape</b>		
		5.1	Define and Apply Transformations	CC.9-12.G.CO.5
		5.2	Define and Apply Rotations	CC.9-12.G.CO.5
		5.3	Define and Apply Reflections	CC.9-12.G.CO.5
		5.4	Define and Apply Symmetry	CC.9-12.G.CO.3
		<b>Module 6- Transformations that Change Size and Shape</b>		
		6.1	Define and Apply Dilations, Stretches, and Compressions	CC.9-12.G.SRT.1
6.2	Apply Sequences of Transformations	CC.9-12.G.CO.5		
<b>Unit 4 – Triangle Congruence</b>				
Days 27-34	Days 53-68	<b>Module 7 – Congruent Triangles and Polygons</b>		
		7.1	Understand Congruent Figures	CC.9-12.G.CO.7
		7.2	Corresponding Parts of Congruent Figures	CC.9-12.G.CO.10
		7.3	Use Rigid Motions to Prove Figures are Congruent	CC.9-12.G.CO.6
		<b>Module 8 – Triangle Congruence Criteria</b>		
		8.1	Develop ASA Triangle Congruence	CC.9-12.G.CO.8
		8.2	Develop SAS Triangle Congruence	CC.9-12.G.CO.8
		8.3	Develop SSS Triangle Congruence	CC.9-12.G.CO.8
8.4	Develop AAS & HL Triangle Congruence	CC.9-12.G.CO.8		
Unit 2 (Curriculum) – Congruence, Similarity, & Proof				
<b>Unit 5 – Relationships Within Triangles</b>				
Days 35-43	Days 69-86	<b>Module 9 – Properties of Triangles</b>		
		9.1	Angle Relationships in Triangles	CC.9-12.G.GPE.4
		9.2	Perpendicular Bisectors in Triangles	CC.9-12.G.CO.9
		9.3	Angle Bisectors in Triangles	CC.9-12.G.C.3
		9.4	Medians and Altitudes in Triangles	CC.9-12.G.CO.10
		9.5	The Triangle Midsegment Theorem	CC.9-12.G.GPE.4
		<b>Module 10 – Triangle Inequalities</b>		
		10.1	Inequalities Within a Triangle	CC.9-12.G.CO.10
10.2	Inequalities Between Two Triangles	CC.9-12.G.CO.10		

<b>Unit 6 – Quadrilaterals, Polygons, and Triangle Similarity</b>				
Days 44-53	Days 87-106	<b>Module 11 – Quadrilaterals and Polygons</b>		
		11.1	Properties of Parallelograms	CC.9-12.G.CO.11
		11.2	Conditions for Parallelograms	CC.9-12.G.CO.11
		11.3	Properties of Rectangles, Rhombuses, and Squares	CC.9-12.G.CO.11
		11.4	Conditions for Rectangles, Rhombuses, and Squares	CC.9-12.G.CO.11
		11.5	Properties and Conditions for Trapezoids and Kites	CC.9-12.G.SRT.5
		<b>Module 12 – Similarity</b>		
		12.1	Use Transformations to Prove Figures are Similar	CC.9-12.G.CO.2
		12.2	Develop AA Triangle Similarity	CC.9-12.G.SRT.3
		12.3	Develop and Prove Triangle Proportionality	CC.9-12.G.SRT.4
12.4	Apply Similarity in Right Triangles	CC.9-12.G.SRT.5		
<b>Unit 3 (Curriculum) – Trigonometric Ratios &amp; Geometric Equations</b>				
<b>Unit 7 – Right Triangle Trigonometry</b>				
Days 54-59	Days 107-118	<b>Module 13 – Trigonometry with Right Triangles</b>		
		13.1	Tangent Ratio	CC.9-12.G.SRT.8
		13.2	Sine and Cosine Ratios	CC.9-12.G.SRT.8
		13.3	Special Right Triangles	CC.9-12.G.SRT.8
		13.4	Solve Problems Using Trigonometry	CC.9-12.G.SRT.8
		<b>Module 14 – Trigonometry with All Triangles (this mod is optional in the geometry course)</b>		
		14.1	Law of Sines	CC.9-12.G.SRT.8
14.2	Law of Cosines	CC.9-12.G.SRT.8		
<b>Unit 8 – Properties of Circles</b>				
Days 60-69	Days 119-138	<b>Module 15 – Angles and Segments in Circles</b>		
		15.1	Central and Inscribed Angles	CC.9-12.G.CO.1
		15.2	Angles in Inscribed Quadrilaterals	CC.9-12.G.C.3
		15.3	Tangents and Circumscribed Angles	CC.9-12.G.CO.1
		15.4	Circles on the Coordinate Plane	CC.9-12.G.GPE.1
		<b>Module 16 – Relationships in Circles</b>		
		16.1	Segment Relationships in Circles	CC.9-12.G.C.2
		16.2	Angle Relationships in Circles	CC.9-12.G.C.2
		<b>Module 17 – Circumference and Area of a Circle</b>		
		17.1	Measure Circumference of a Circle	CC.9-12.G.C.5
17.2	Measure Arc Length and Use Radians	CC.9-12.G.C.5		
17.3	Measure Sector Area	CC.9-12.G.C.5		
<b>Unit 4 (Curriculum) – Geometric Modeling</b>				
<b>Unit 9 – Surface Area and Volume</b>				
Days 70-77	Days 139-154	<b>Module 18 – Surface Area</b>		
		18.1	Three Dimensional Figures	CC.9-12.G.GMD.4
		18.2	Surface Areas of Prisms and Cylinders	CC.9-12.G.GMD.3
		18.3	Surface Areas of Pyramids and Cones	CC.9-12.G.GMD.3
		18.4	Surface Areas of Spheres	CC.9-12.G.GMD.3
		<b>Module 19 – Volume</b>		
		19.1	Volumes of Prisms and Cylinders	CC.9-12.G.GMD.3
19.2	Volumes of Pyramids and Cones	CC.9-12.G.GMD.3		
19.3	Volumes of Spheres	CC.9-12.G.GMD.3		