

Pacing Guide for 7-12 Curriculum

Course Title: _____ Saxon Geometry _____

Length of Course: 49 min year long pacing _____

Week Number	Chapter & Lesson	ACOS/ CCSS	Objectives
Week 1	Lessons 1-4 lab 1	1,12, 40/ G-CO1, G-CO12, G-MG1	Name and identify points, lines, planes, and segments, angles, identify properties of congruent segments, use Segment Addition Postulate, Ruler Postulate, and measure and classify angles. Use construction to copy congruent segments and angles. Understand theorems related to points lines and planes
Week 2	Lessons 5-8 lab 2 and 3	1,12,/ G-CO1, G-CO12	Identify complementary, supplementary, adjacent, linear and vertical angle pairs. Use angle relationships to determine measure. Construct a perpendicular line through a point on a line. To construct a perpendicular bisector and an angle bisector. Apply inductive reasoning to problems. To apply formulas including perimeter, area of a rectangle, Pythagorean theorem
Week 3	Lessons 9-11 Cum test 1, & Investigation 1	34 /G-CO12, G-GPE7 33/ G-GPE6 9/G-CO9	To use the distance formula. To learn the language of conditional statements and their converse. Determine the truth value of a statement To investigate angle pairs when parallel lines are intersected by a transversal. Learn postulates and theorems about these angle pairs To determine the midpoint of a segment on a number line and on the coordinate plane.
Week 4	Lesson 12-15 lab 4	12, /C-CO12 9, /G-CO9	To prove parallel lines To construct a parallel line through a point Classify triangles, calculate area and perimeter of triangles Use a counterexample to show a conjecture is false To learn properties of polygons and classify them.
Week 5	Cum test 2 Performance task 1 Lesson 16-18		To determine the slope of a line, write an equation of a line in slope intercept form Examine the converse, inverse and contra positive of a conditional statement, Develop the Angle Sum Theorem, and its corollaries, including the exterior angle theorem.
Week 6	Lesson 19-21 Omit (truth tables) Cum test 3 Investigation 2	10,40/GCO10, G-MG1	Classify quadrilaterals. Analyzing conditional statements and determining their truth value. To use modeling to prove the Pythagorean theorem. Develop reasoning processes using the Laws of detachment and Syllogism
Week 7	Lessons 22-25 Cum test 4	26, 40 / G-C2, G-MG1 7 /GCO7	Use formulas to calculate the area of quadrilaterals. Identify parts of a circle and calculate area and circumference. Write algebraic proofs. Identify the Corresponding parts of Congruent triangles Explore SSS Triangle Congruence Postulate

Week 8	Perf Task 2 Lesson 26-28*	7 /GCO7 10/G-CO10	Identify and determine the measures of central angles and arcs. To write a proof in 2 column format..
Week 9 3DAYS	9-weeks review	End of 1 st Quarter	Review
Week 10	Lesson 28- 30 Lab 5	10/G-CO10 8/G-CO8 6/G-CO6 21/G-SRT8	, Use SAS, ASA, and AAS to show triangle congruence. To use the Pythagorean theorem solve problems
Week 11	Cum Test 5 Investigation 3 Lesson 31-32	10 / G-CO10 17/G-SRT 4	To investigate the interior and exterior angles of a polygon. To read and write flowchart proofs To apply the properties of altitudes and medians of triangles
<u>Week 12</u>	Lesson 33-35 Cum test 6	11/ G-CO11 17/G-SRT 4 21/G-SRT8 29/ GC5	To apply the converse of the Pythagorean theorem and the Pythagorean inequality Theorem. Prove theorems about Parallelograms. To determine the arc length and area of a sector.
Week 13	Perf task 4 Lesson 36-38*	10/G-CO10 17/G-SRT 4 32/GGPE5	To learn four right triangle congruence theorems and apply them in proofs. Write equations of Parallel and perpendicular lines. are related to inscribed and circumscribed circles.
Week 14	Lesson 38-40 Lab 6 Cum test 7	27/G-C3 10/G-CO 10	To learn about the angle bisectors and perpendicular bisectors of triangles. To apply the triangle inequality theorem and other inequality theorems for triangles. To find the areas of composite figures. Construct a circle through 3 noncollinear points, i.e. a circumscribed circle.
Week 15	Inv 4 Lessons 41-42 Lab 7 On Core 5-3	40/GMG1 15/ GSRT 2 17/G-SRT 4 12./ GCO 12 25/G-C1	To explore the Hinge theorem. To use the definition of similarity to determine if similar. To use coordinate geometry to determine the distance form a point to a line. To construct a perpendicular through a point not on a line. Prove all circles are similar
Week 16	Lessons 43-45 Cum Test 8 Perf task 6	26/GC2 15/GSRT2 31/G-GPE4	Learn properties of chords, secants and tangents. To apply similarity to polygons To write coordinate proofs

Week 17	Lessons 46-50 Omit Lesson 48	15/ GSRT 2 16/GSRT3 17/G-SRT 4 18/GSRT5 27/G-C3	To use AA, SSS, and SAS to prove triangles similarity. To learn theorems related to the measures of inscribed angles and arcs. Use Properties of angles in a quadrilateral in a circle. Classify Solids use Euler's formula To calculate Geometric mean and apply that to right triangles
Week 18 3 days End of 2 nd 9 weeks	Review / Midterm Cum test 9 Inv 5	18/GSRT5	To investigate and draw nets of polyhedra.
Week 19	Lesson 51-55 Omit lesson 54	10/GCO10 11/CGO11 17/G-SRT 4 21-G-SRT8	To understand and apply the properties of isosceles triangles, rectangles, rhombi and squares in proofs. To apply the special properties of a 45 45 90 triangle. To apply the triangle Midsegment Theorem
Week 20	Review Cum test 10 Perf task 8 Lesson 56-57	19/GSRT6 21-G-SRT8 31/GGPE4	To know the ratios of 30-60-90 triangles. To find area and perimeter of polygons on a coordinate plane.
Week 21	Lesson 58-60 Lab 8/review Cum test 11	26/G-C2 10/GCO10 28/G-C4 17/GSRT4 19/GSRT6	Explore the relationships between tangent lines and radii of circles To construct a tangent line to a circle. To find the surface area and Volume of a Prism. To use and apply the Triangle Proportionality Theorem and related theorems.
Week 22	Probability Unit On Core Unit 11 Lessons 1-5	43/SCP3 44/SCP4 45/SCP5 46 SCP6 47/SCP7 48 SCP8 50/SMD6	To calculate theoretical probabilities and use probabilities to make fair decisions To use permutations and combinations to calculate probabilities
Week 23	Probability Unit On Core Unit 11 Lessons 6-10	50/SMD6 49/SCP9 51/SMD7	To calculate conditional probabilities of mutually exclusive and overlapping events. To calculate the probability of independent and dependent events How to use probability of independent and dependent events to make fair decisions and analyze decisions.
Week 24	Investigation 6 Probability Unit Test Lesson 61-62 (extend using les 92 info)	11/G- CO 11 46/S –CP6 37/G-GMD3	Calculate Geometric probability theoretically and experimentally. Determine if a Quadrilateral is a parallelogram Find surface area and volumes of cylinders.
Week 25	Omit 63/review Lesson 64-65 Cum test 12 Perf Task 11	26/GC2 11/G-CO11	Determine the measure of angles formed when tangents and chords intersect in/on a circle Proving parallelograms are rectangle , rhombi or squares
Week 26 (40 days	Lesson 66-68 Lab 9	35,34/GGPE7 4GCO4 5/GCO5	Find perimeters and area of regular polygons. Perform translations, reflections, and rotations.

completed)	On Core 7-2, 7-3,7-6	19/GSRT6 13/GCO13 27/G-C3	Introduce sine cosine and tangent ratios and use these to find side lengths. To construct a regular hexagon and pentagon, and inscribed polygons in a circle. To construct inscribed and circumscribed circles.
Week 27	Lesson 69-70 Review Cum test 13 Inv 7	37/GGMD3 19 /GSRT6 20/GSRT-7	To apply properties of Trapezoids and kites. To calculate the lateral area, surface area and volume of a pyramid. To investigate the trig ratios.
Week 28	Lesson 71-74	2/GCO2 4/GCO4 21/GSRT8	To perform translations as a function. Solve problems with tangents and circles. Solving angle of elevation and depression problems. To perform reflections as a function
Week 29	Lesson 75 Cum test 14 Perf task 13 Lesson 76-77	30/GGPE1 3/GCO3 37/GGMD3	Write the equation of a circle. Identify symmetry. Find lateral area, surface area and volume of a cone.
Week 30	Lesson 78-80 Lab 10 Review	2/GCO2 4GCO4 5/GCO5 37/GGMD3	To perform rotations as a function. To use Geometry Software to perform transformations. To compute the measures of and exterior angle of a circle. To find the surface area and volume of a sphere.
Week 31	Cum test 15 Inv 8 Lesson 81-82 Omit 83 OnCore 6-5(part 2 and 3 only) 6-6	5/G-CO5 21/GSRT8 22/G-SRT9 23/Gsrt10 24/g-SRT11	To investigate patterns created through transformations. TO solve systems of linear equations graphically and algebraically. Use inverse trig functions to solve problems. To derive the area formula of a triangle using Sine. To apply the Law of Sines
Week 32	On- Core 6-7 Lesson 84-85 Cum test 16 Perf task 14	23/GSRT10 24/G-SRT11 2GCO2 14/GSRT1 36/GGMD1 39/G-GMD4	To perform dilations. To identify shapes of two dimensional cross-sections of 3-d objects. Investigate Cavalier's principal.
Week 33	Lesson 86-87 Lab 11 (Supplement from Lesson 96, 99 for ACOS # 38)	26/GC2 38	To apply and prove if two chords intersect in a circle then the product of the segments are equal. Using Geometry Software to explore chords and tangents. Determine the relationships between scale factor, perimeter and area and Volumes of similar figures.
Week 34 (80 days completed)	Omit 88-89 Lesson 90 Review Cum test 17	5/G-CO5	To perform composite transformations
Week 35	Review for End of		

(7 days left in semester)	Course Test (EOCT)		
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