Pacing Guide 2010-2011 Subject Geometry (revised 5-10) Grade Level <u>8-12</u>

Grading Period 1st quarter

Approximate Time for	Standard	Core Instructional	Strategic Supplementary Materials	Assessment	
Teaching Standards	Stundard	Materials		Mat'ls	District
August 5 – 27 Weeks 1, 2, 3	1.0 Students demonstrate understanding by indentifying and giving examples of undefined terms, (axioms, theorems, and inductive and deductive reasoning) 16.0 Students perform basic constructions with a straightedge and compass, such as angle bisectors, perpendicular bisectors, (and the line parallel to a given line through a point off the line.) 8.0 Student know, derive, solve problems involving the perimeter, circumference, area, (volume, lateral area, and surface area of common geometric figures.) 17.0 Students prove theorems by using coordinate geometry, including midpoint of a line segment, the distance formula, and various forms of equations of lines and circles. (Just finding and using midpoint and distance formulas) 15.0 Students use the Pythagorean Theorem to determine distance (and	Holt Geometry Chapter 1: Section 1 - Understanding Points, Lines, and Planes Section 2 - Measuring and Constructing Segments Section 3 - Measuring and Constructing Angles Section 4 - Pairs of Angles Section 5 - Using Formulas in Geometry Section 6 - Midpoint and Distance in the Coordinate Plane Section 7 - Transformation in the Coordinate Plane	Holt Chapter 1 Resource File Practice workbook Review for Mastery workbook Geometry software Compass, Straightedge Ruler, protractor	Assessment Resources Chapter 1 Quizzes and Tests Test and practice generator	

Approximate Time for	Standard	Core Instructional Materials Strategic Supplementary		Assess	sment
Teaching Standards		Materials	Materials	Mat'ls	District
	triangles)				
	22.0 Students know the effect of rigid motions on figures in the coordinate plane and space, including rotations, translations, and reflections.				
Aug. 30– Sept. 17	1.0 Student demonstrate understanding by identifying and giving examples of undefined terms, axioms , theorems ,	Holt Geometry Chapter 2: Section 1- Using Inductive	Holt Chapter 2 Resource File Practice workbook	Assessment Resources Chapter 2	
Weeks 4, 5, 6	and inductive and deductive reasoning.	Reasoning to Make Conjectures	Review for Mastery workbook	Quizzes and Tests	
	3.0 Students construct and judge the validity of a logical argument and give counterexamples to disprove a	Section 2 – Conditional Statements	Geometry software Compass, Straightedge	Test and practice generator	

Approximate Time for		Standard Core Instructional	Strategic Supplementary	Assessment		
		Materials	Materials	Mat'ls	District	
	statement. 2.0 Student write geometric proofs , (including proofs by contradiction). 13.0 Students prove relationships between angles in polygons by using properties of complementary, supplementary, vertical, and exterior angles	Section 3 - Using Deductive Reasoning to Verify Conjectures Section 4- Bi-conditional Statements and Definitions Section 5 - Algebraic Proof Section 6 - Geometric Proof {Skip Section 7 -Flowchart and Paragraph Proof}	Ruler, protractor			

Approximate Time for Teaching	Standard	Core Instructional Materials	Strategic Supplementary Materials	Assessment	
Standards		Tracer ruis		Mat'ls	District
Sept. 20– Oct. 4 Weeks 7, 8, 9	1.0 Student demonstrate understanding by identifying and giving examples of undefined terms, axioms, theorems, and inductive and deductive reasoning. 2.0 Student write geometric proofs, (including proofs by contradiction.) 7.0 Students prove and use theorems involving the properties of parallel lines cut by a transversal, (the properties of quadrilaterals, and the properties of circles) 16.0 Students perform basic constructions with a straightedge and compass, such as angle bisectors, perpendicular bisectors, and the line parallel to a given line through a point off the line. Review Standards 1.0, 2.0, 3.0, 7.0,8.0, 15.0, 16.0, 22.0	Holt Geometry Chapter 3 Section 1 – Lines and Angles Section 2 – Angles Formed by Parallel Lines and Transversals Section 3 – Proving Lines Parallel Section 4 – Perpendicular Lines Section 5 - Slopes of Lines (optional) Section 6 - Lines in the Coordinate Plane (optional)	Holt Chapter 3 Resource File Practice workbook Review for Mastery workbook Geometry software Compass, Straightedge Ruler, protractor Patty paper	Assessment Resources Chapter 3 Quizzes and Tests Test and practice generator	1 st Quarter Benchmark Test

Pacing Guide 2009-2010 Subject Geometry(revised 6-09) Grade Level <u>8-12</u>

Grading Period 2nd quarter

Approximate Time for Teaching	Standard	Core Instructional Materials	Strategic Supplementary Materials	Asses	sment
Standards			Materials	Mat'ls	District

Approximate Time for Teaching Standards	Standard	Core Instructional Materials	Strategic Supplementary Materials	Assess Mat'ls	sment District
	12.0 Students find and use measures of	Halt Coometing	Holt	Assessment	District
Oct 12 - 28	sides and of interior and exterior angles	Holt Geometry Chapter 4	Chapter 4 Resource File	Resources	
Weeks 10, 11, 12	of triangles (and polygons) to classify	Chapter 4	Practice workbook	Chapter 4	
W CCRS 10 , 11, 12	figures and solve problems.	Section 1 – Classifying	Review for Mastery	Quizzes and	
	figures and solve problems.	Triangles	workbook	Tests	
	2.0 Student write geometric proofs,	Triangles	WOIRDOOK	1 0313	
	(including proofs bycontradiction).	Section 2 - Angle		Test and	
	(meraams proofs by contradiction).	Relationship in Triangles	Geometry software	practice	
	4.0* Students prove basic theorems	Transfer in Triangles	geometry soloware	generator	
	involving congruence and similarity.	Section 3 - Congruent	Compass, Straightedge	8	
		Triangles	Ruler, protractor		
	13.0 Students prove relationships		Patty paper		
	between angles in polygons by using	Section 4 – Triangle			
	properties of complementary,	Congruence: SSS and SAS			
	supplementary, vertical, and exterior				
	angles.	Section 5 – Triangle			
		Congruence: ASA, AAS, and			
	5.0 Student prove that triangles are	HL			
	congruent (or similar), and they are				
	able to use the concept of	Section 6 – Triangle			
	corresponding parts of congruent	Congruence: CPCTC			
	triangles				
	16064 1 4 6 1 :	Section 7 – Introduction to			
	16.0 Student perform basic	Coordinate Proof			
	constructions with a straightedge and compass, such as angle bisectors,	Section 8 – Isosceles and			
	perpendicular bisectors, and the line				
	parallel to a given line through a point	Equilateral Triangles			
	off the line.				

Approximate Time for Teaching	Standard	Core Instructional Materials	Strategic Supplementary Materials		sment
Nov. 1 – 19 Weeks 13 – 14 – 15	1.0 Student demonstrate understanding by identifying and giving examples of undefined terms, axioms, theorems, and inductive and deductive reasoning 2.0 Students write geometric proofs, including proofs by contradiction. 6.0 Students know and are able to use the triangle inequality theorem. 16.0 Student perform basic constructions with a straightedge and compass, such as angle bisectors, perpendicular bisectors, and the line parallel to a given line through a point off the line. 17.0 Students prove theorems by using coordinate geometry, including the midpoint of a line segment, the distance formula, and various forms of equations of lines and circles. 12.0 Students find and use measures of sides and of interior and exterior anglesof triangles and polygons to classify figures and solve problems.	Holt Geometry Chapter 5: Section 1 – Perpendicular and Angle Bisectors Section 2 – Bisectors of Triangles Section 3 – Medians and Altitudes of Triangles Section 4 – The Triangle Midsegment Theorem Section 5 – Indirect Proof and Inequalities in One Triangle Section 6 – Inequalities in Two Triangles [Move Section 7 – The Pythagorean Theorem to chapter 8] [Move Section 8 – Applying Special Right Triangles to chapter 8]	Holt Chapter 5 Resource File Practice workbook Review for Mastery workbook Geometry software Compass, Straightedge Ruler, protractor Patty paper	Assessment Resources Chapter 5 Quizzes and Tests Test and practice generator	District

Approximate Time for Teaching	Standard	Core Instructional Materials	Strategic Supplementary	Assess	sment
	16.0 Student perform basic constructions with a straightedge and compass, such as angle bisectors, perpendicular bisectors, and the line parallel to a given line through a point off the line. 12.0 Students find and use measures of sides and of interior and exterior anglesof triangles and polygons to classify figures and solve problems. 7.0 Students prove and use theorems involving the properties of parallel lines cut by a transversal, the properties of quadrilaterals, and the properties of circles. 17.0 Students prove theorems by using coordinate geometry, including the midpoint of a line segment, the distance formula, and various forms of equations of lines and circles.\ 1.0 Student demonstrate understanding by identifying and giving examples of undefined terms, axioms, theorems, and inductive and deductive reasoning 2.0 Students write geometric proofs, including proofs by contradiction.			Mat'ls Assessment Resources Chapter 6 Quizzes and Tests Test and practice generator	District
Dec. 13 – 17				Final Exams	District Benchmark Test

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Grading Period 3rd Quarter

Approximate Time Teaching	Standard	Core Instructional Materials	Strategic Supplementary	Assess	sment
Standards		Water fais	Materials	Mat'ls	District
Jan. 6 – 21 Weeks 19, 20	5.0 Students prove that triangles are congruent or similar, and they are able to use the concept of corresponding parts of congruent triangles. 12.0 Students find and use measures of sides and of interior and exterior angles of triangles and polygons to classify figures and solve problems. 1.0 Student demonstrate understanding by identifying and giving examples of undefined terms, axioms, theorems, and inductive and deductive reasoning 7.0 Students prove and use theorems involving the properties of parallel lines cut by a transversal, the properties of quadrilaterals, and the properties of circles. 16.0 Students perform basic constructions with a straightedge and compass, such as angle bisectors, perpendicular bisectors, and the line parallel to a given line through a point off the line. 8.0 Students know, derive, and solve problems involving the perimeter, circumference, area, volume, lateral area, and surface area of common geometric figures. 11.0 Students determine how changes in dimensions affect the perimeter area and volume of common geometric solids.	Holt Geometry Chapter 7 Section 1- Ratio and Proportion Section 2 - Ratios in Similar Polygons Section 3 - Triangle Similarity: AAA, SSS, SAS Section 4 - Applying Properties of Similar Triangles Section 5 - Using Proportional Relationships (Optional Section 6 - Dilations and similarity in the coordinate plane)	Holt Chapter 7 Resource File Practice workbook Review for Mastery workbook Geometry software Compass, Straightedge Ruler, protractor Patty paper	Assessment Resources Chapter 7 Quizzes and Tests Test and practice generator	

Approximate Time Teaching	Standard	Core Instructional Materials	Strategic Supplementary	Asses	sment
Standards			Materials	Mat'ls	District
	20.0 Students know and are able to use angle and side relationships in problems with special right triangles, such as 30, 60, and 90 triangles and 45, 45, and 90 triangles 4.0 Students prove basic theorems involving congruence and similarity. 18.0 Students know the definitions of the basic trigonometric functions defined by the angles of a right triangle. They also know and are able to use elementary relationships between them. For example, $\tan(x) = \sin(x)/\cos(x)$, $(\sin(x))^2 + (\cos(x))^2 = 1$ 19.0 Students use trigonometric functions to solve for an unknown length of a side of a right triangle, given an angle and a length of a side. 14.0 Students prove Pythagorean Theorem. 15.0 Students use the Pythagorean Theorem to determine distance and find missing lengths of sides of right triangles.	Holt Geometry Chapter 8: Section 1- Similarity in Right Triangles Holt Geometry Chapter 5: Section 7 – The Pythagorean Theorem Section 8-Special Right Triangles Holt Geometry Chapter 8: Section 2 – Trigonometric Ratios Section 3 – Solving Right Triangles Section 4 – Angles of Elevation and Depression Skip Section 5 – Law of Sines and Law of Cosines}	1 2 2	Mat'ls Assessment Resources Chapter 8 Quizzes and Tests Test and practice generator	District
		{Skip Section 6 – Vectors}			

Approximate Time Teaching	Standard	Core Instructional Materials	Strategic Supplementary	Asses	sment
Standards			Materials	Mat'ls	District
Feb. 14 – Mar. 4	7.0 Students prove and use theorems involving the properties of parallel lines cut by a transversal, the properties of	Holt Geometry Chapter 11:	Holt Chapter 11 Resource File Practice workbook	Assessment Resources Chapter 11	
Weeks 24, 25, 26	quadrilaterals, and the properties of circles. 16.0 Students perform basic constructions	Section 1 – Lines That Intersect Circles	Review for Mastery workbook	Quizzes and Tests	
	with a straightedge and compass, such as angle bisectors, perpendicular bisectors, and the line parallel to a given line through a point off the line. 21.0 Students prove and solve problems regarding relationships among chords, secants, tangents, inscribed angles, inscribed and circumscribed polygons of circles.	Section 2 – Arcs and Chords [Move Section 3 – Sector Area and Arc Length to chapter 9] Section 4 – Inscribed Angles Section 5 – Angle Relationships in Circles Section 6 – Segment Relationships in Circles Section 7 – Circles in the Coordinate Plane	Geometry software Compass, Straightedge Ruler, protractor	Test and practice generator	
District benchmark tests March 7 – 11					Benchmark Exam

Pacing Guide 2009-2010 Subject Geometry(revised 06-09) Grade Level <u>8-12</u>

Grading Period 4th quarter

Approximate Time for Teaching	Standard	Core Instructional Materials	Strategic Supplementary Materials	Asses	sment
Standards	Standards		waterials	Mat'ls	District

Approximate Time for Teaching Standards	Standard	Core Instructional Materials	Strategic Supplementary Materials	Assessment	
				Mat'ls	District
March 21 – April 8 Weeks 28-29-30	12.0 Students find and use measures of sides and of interior and exterior angles of triangles and polygons to classify figures and solve problems. 15.0 Students use the Pythagorean Theorem to determine distance and find missing lengths of sides of right triangles 8.0 Students know, derive, and solve problems involving the perimeter, circumference, area, volume, lateral area, and surface area of common geometric figures. 10.0 Students compute areas of polygons, including rectangles, scalene triangles, equilateral triangles, rhombi, parallelograms, and trapezoids. 1.0 Student demonstrate understanding by identifying and giving examples of undefined terms, axioms, theorems, and inductive and deductive reasoning 11.0 Students determine how changes in dimensions affect the perimeter area and volume of common geometric solids	Holt Geometry Chapter 9: Section 1 – Developing Formulas for Triangles and Quadrilaterals Section 2 – Developing Formulas for Circles and Regular Polygon Section 3 - Composite Figures Section 4 – Perimeter and Area in the Coordinate Plane Chapter 11: Section 3 – Sector Area and Arc Length Chapter 9: Section 5 - Effects of Changing Dimensions Proportionality {Skip Section 6 – Geometric Probability}	Holt Chapter 9 Resource File Practice workbook Review for Mastery workbook Geometry software Compass, Straightedge Ruler, protractor	Assessment Resources Chapter 9 Quizzes and Tests Test and practice generator	

Approximate Time for Teaching Standards	Standard	Core Instructional Materials	Strategic Supplementary Materials	Assessment	
				Mat'ls	District
April 11 - 29 Weeks 31,32,33	8.0 Students know, derive, and solve problems involving the perimeter, circumference, area, volume, lateral area, and surface area of common geometric figures. 9.0 Students compute the volumes and surface areas of prisms, pyramids, cylinders, cones, and spheres; and students commit to memory the formulas for prisms, pyramids, and cylinders. 11.0 Students determine how changes in dimensions affect the perimeter, area, and volume of common geometric figures.	Holt Geometry Chapter 10: Section 1 – Solid Geometry {Skip Section 2 – Representations of Three- Dimensional Figures} Section 3 – Formulas in Three Dimensions Section 4 – Surface Area of Prisms and Cylinders Section 5 – Surface Area of Pyramids and Cones Section 6 – Volume of Prisms and Cylinders Section 7 – Volume of Pyramids and Cones Section 8 – Spheres	Holt Chapter 10 Resource File Practice workbook Review for Mastery workbook Geometry software Compass, Straightedge Ruler, protractor Patty paper	Assessment Resources Chapter 10 Quizzes and Tests Test and practice generator	

Approximate Time for Teaching	Standard	Core Instructional Materials	Strategic Supplementary Materials	Assessment	
Standards			Iviatel lais	Mat'ls	District
May 2 – May 20 Weeks 33, 34, 35 May 23 – May 26 Week 36	22.0 Students know the effect of rigid motions on figures in the coordinate plane and space, including rotations, translations, and reflections. 8.0 Students know, derive, and solve problems involving the perimeter, circumference, area, volume, lateral area, and surface area of common geometric figures. 11.0 Students determine how changes in dimensions affect the perimeter, area, and volume of common geometric figures. 16.0 Students perform basic constructions with a straightedge and compass, such as angle bisectors, perpendicular bisectors, and the line parallel to a given line through a point off the line.	Holt Geometry Chapter 12 (optional) : Section 1 – Reflections Section 2 – Translations Section 3 – Rotations Section 4 – Compositions of Transformations Section 5 – Symmetry Section 6 – Tessellations Section 7 - Dilations	Holt Chapter 12 Resource File Practice workbook Review for Mastery workbook Geometry software Compass, Straightedge Ruler, protractor	Assessment Resources Chapter 12 Quizzes and Tests Test and practice generator	
WCCK 30	Review all standards			Final Exams	

Note: Teachers will need to review for the CST's and students will take them. This will take at least a week.

Note: Teachers may chose to substitute a cumulative project in place of chapter 12, as long as it is appropriate for this level of student.