Month	Standards	Student Learning Objective	Key Vocabulary	Instructional Resources
August-September	CC.2.1.7.E.1 CC.2.3.HS.A.1-4, 6, 11, 14	Add, subtract, multiply and divide fractions.  Identify and apply properties of rays, parallel lines, planes, and points.  Apply midpoint formula.  Measure segments.  Measure angles using a protractor.  Determine distance with the distance formula plot on a coordinate grid.  Find area, perimeter and circumference.  Construct perpendicular bisectors, angle bisectors, parallel lines and congruent triangles.	conjecture counter example point space line plane postulate axiom Congruence coordinate plane quadrants midpoint Perimeter circumference area coordinate skew lines construction compass straight edge Bisector Protractor	Book - Prentice Hall Mathematics Geometry and worksheet masters Tests/Quizzes

Month	Standards	Student Learning Objective	Key Vocabulary	Instructional Resources
October- November	CC.2.3.HS.A.3, 5,	Identify parts of a statement.	adjacent angles biconditional	Book - Prentice Hall Mathematics Geometry and
Novombor		Determine truth value of a statement.	complementary angles	worksheet masters Tests/Quizzes
		Write the converse of a statement.	conclusion	100tol Quilleo
		Write a biconditional.	converse deductive reasoning	
		Apply deductive reasoning.	hypothesis reflexive property	
		Fill in missing steps in a proof.	symmetric property theorem	
		Apply properties of parallel lines.	transitive property truth value	
		Prove lines parallel.	vertical angles triangle types	
		Apply triangle angle sum theorem.	polygon polygon names	
		Identify types of triangles.	exterior angle regular polygon	
		Identify polygons up to 10 sides.	same-side interior alternate interior	
		Calculate interior angle sum for a polygon.	corresponding angles slope	
		Identify parallel and perpendicular lines.	transversal concave	
		Identify the slope of a line.	convex standard form	
			equation point slope form	
			equation slope-intercept form	
			equation	

Month	Standards	Student Learning Objective	Key Vocabulary	Instructional Resources
December	CC.2.3.HS.A.1-3, 14	Identify congruent triangles using HL, SSS, AAS, ASA, and SAS.  Identify corresponding parts of congruent figures (CPCTC).	CPCTC hypotenuse leg base angles vertex angles	Book - Prentice Hall Mathematics <i>Geometry</i> and worksheet masters Tests/Quizzes
January	CC.2.3.HS.A.2,3,8,	Apply properties of midsegments of triangles.  Apply properties of bisectors in triangles.  Apply properties of medians and altitudes.  Apply side and angle relationships in triangles.  Write an inverse and contrapositive.  Inscribe a triangle.  Circumscribe a triangle.	altitude centroid circumcenter contrapositive incenter inscribe inverse median midsegment negation orthocenter	
February	CC.2.3.HS.A.2,14	Classify quadrilaterals.  Identify quadrilaterals given properties of a figure.  Apply properties of quadrilaterals.	base angles of trapezoid midsegment of trapezoid parallelogram rhombus rectangle square kite Trapezoid	

Month	Standards	Student Learning Objective	Key Vocabulary	Instructional Resources
March	CC.2.3.HS.A.3,9,14	Apply Pythagorean theorem.	arcs apothem	Book - Prentice Hall Mathematics Geometry and worksheet masters Tests/Quizzes
		Calculate area of triangles and quadrilaterals.	central angle geometric probability	
		Calculate area of regular figures.	pythagorean triple	
		Calculate area of circles and sectors of circles.	sector of a circle semicircle	
		Apply properties of special right triangles.		
		Calculate geometric probability.		
April	CC.2.3.HS.A.3,6,14	Apply proportions to similar figures.	geometric mean indirect measurement	
		Identify similar figures.	proportion scale drawing	
		Prove triangles similar with SSS, SAS, ASA, AA.	ratio	
		Apply proportions to indirectly measure.		
		Compare perimeter and area of similar figures.		

## **Upper Dauphin Area School District**

Month	Standards	Student Learning Objective	Key Vocabulary	Instructional Resources
May-June CC.2.3.HS.A.3,7, 10,12-14		Use the sine, cosine, and tangent functions to find missing angles and sides of a right triangle.  Describe vectors by coordinates.	vector sine cosine tangent surface area	Book - Prentice Hall Mathematics Geometry and worksheet masters Tests/Quizzes
	Calculate the magnitude and direction of a vector.	volume		
		Make a net of a 3d figure.		
		Calculate surface area of selected 3d figures.		
		Calculate volume of selected figures		

Course: Geometry