REDBANK VALLEY SCHOOL DISTRICT
MATHEMATICS CURRICULUM MAP

GEOMETRY

CHAPTER									
TOPICS	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY
ACADEMIC GEOMETRY	Basic Geometry Terms; Basic Constructions; Inductive & Deductive Reasoning	Investigate Basic Geometric Figures; Classify Geometric Figures	Transformations of Geometric Figures; Symmetry of Geometric Figures Using Logical Reasoning; Preparing for Proof	Properties of Triangles; Informal Proofs Involving Triangles	Calculating Perimeters of Polygons & Circles; Area of Polygons & Circles	Surface Area of 3-D Figures; Volume of 3-D Figures; Geometric Probability	Exploring Parallel Lines & Related Angles; Constructing Parallel & Perpendicular Lines; Perspective Drawing; Explore Spherical Geometry; Prove Triangles Congruent	Quadrilaterals and their Properties; Coordinate Proofs	Proving Triangles Similar; Perimeter & Area of Similar Figures; Area & Volume of Similar Solids
APPLIED GEOMETRY	Polygons & How Parts are Related; Properties of Polygons; Tilings; Symmetries in Polygons; Parallel Lines & Angle Relationship	Parallel Lines and Angle Relationship; Perimeters of Polygons and Irregular Shapes; Areas of Polygons and Irregular Shapes; Relationship Between Perimeters and Areas in Rectangles	Circumference and Areas of Circles; Finding the Center of Circles; Tangents to Circles; Central Angles, Ares, and Chords; Inscribed Angles; Parallel Lines through a Circle; Cyclic Quadrilaterals	Enlarging and Shrinking Plane Figures; Identifying Corresponding Parts of Similar Figures; Describing and Producing Transformations of Plane Figures; Analyzing Scale Factors Between Figures; Applying Properties of Similar Figures	Conditions of Congruent Triangles; Proving Triangles Congruent Using S-S-S, A-A-A; S-A-S, A-S-A; S-A-A, S-S-A; Calculating Distance Between 2 Points in a Plane; Square Roots as Lengths; Understanding Pythagorean Theorem, How it Relates to the Areas of the Squares on the Sides of a Right Triangle	Using the Pythagorean Theorem to Solve Problems; Investigating Rational & Irrational Numbers as Decimals; Slope Relationships of Perpendicular Lines & Parallel Lines	Reflectional, Rotational, & Transformational Symmetry; Looking for Patterns that can be used to Predict Attributes of Designs; Tiling with Non-regular Polygons	Exploring Relationships Between 2-D & 3-D Objects; Maximal & Minimal Buildings	Exploring Symmetric Properties of 2-D; Orthogonal Views of 3-D Buildings; Interpreting and Creating Isometric Views of 3-D Objects