Unit	Essential Questions
Name: Basics of Geometry Quarter: 1 Length (Days): 7	 The undefined in terms in Geometry Naming basic geometric figures Postulates related to points, lines and planes Intersects of lines and planes Measuring Segments The segment addition postulate Measuring and classifying angles The Angle addition postulate
Name: Segments and Angles Quarter: 1 Length (Days): 11	 Define segment bisector, midpoint and other related terms. Use the midpoint formula to find the coordinates of the midpoint of a segment. Define angle bisector. Use the concept of angle bisectors to find the measures of bisected angles. Define complementary and supplementary angles. Find the complements and supplements of angles. Define vertical angles and linear pairs. Find the measures of angles formed y intersecting lines. Use If-Then statements and apply the laws of logic to them. use the properties of equality and congruence.
Name: Parallel and Perpendicular Lines Quarter: 1st Length (Days): 16 days	 Define and apply the definitions of parallel and perpendicular lines. Apply theorems related to perpendicular lines. Define and identify angles formed by transversals. Define the relationships between angles formed wen parallel lines are cut by transversals. Prove lines are parallel Apply properties of parallel and perpendicular lines. Identify and Use Translations
Name: Triangle Relationships Quarter: 2 Length (Days): 18	 Classify triangles by their sides. Classify triangles by their angles. Find angle measures in triangles Learn and apply properties of isosceles and equilateral triangles. Learn and apply the Pythagorean theorem and the distance formula. Learn the converse of the Pythagorean theorem and use it to classify triangles Identify medians in triangles. Learn and apply theorems related to medians of triangles. Use triangle inequality theorems to list the sides and angles of a triangle in order from least to greatest.
Name: Congruent Triangles Quarter: 2 Length (Days): 17	 Identify congruent triangles and corresponding parts Show triangles are congruent using SSS, SAS, ASA, AAS, and HL. Show corresponding parts of congruent triangles are congruent. Define and apply the definition of angle bisectors and perpendicular bisectors. Identify and use reflections and lines of symmetry.

Name: Quadrilaterals Quarter: 3 Length (Days): 17	 Identify and classify polygons. Find angle measures of quadrilaterals Apply properties of parallelograms Show that a quadrilateral is a parallelogram. Use properties of rectangles, rhombi, and squares. Use properties of trapezoids. Use properties of the mid-segment of a trapezoid. Identify special quadrilaterals based on limited information.
Name: Similarity Quarter: 3 Length (Days): 18	 Use ratios and proportions Identify similar polygons. Use the properties of similar polygons. Show that triangles are similar using the AA Similarity Postulate. Show that triangles are similar using the SSS and SAS Similarity Theorems Use the Triangle Proportionality Theorem and its converse. Identify dram and use the properties of dilations.
Name: Polygons and Area Quarter: 3 Length (Days): 10	 Describe polygons. Find the measures of the interior and exterior angles of a polygon. Find the areas of squares and rectangles. Find the area of triangles. Find the area of parallelograms. Find the area of trapezoids. Find the area and circumference of circles.
Name: Right Triangles and Trigonometry Quarter: 4 Length (Days): 18	 Simplifying square roots. Find the side lengths of a 45, 45, 90 degree right triangle. Find the side lengths of a 30, 460, 90 degree right triangle. Find the tangent of an acute angle and use it to find the length of a side of a triangle. Find the sine and cosine of an acute angle and use it to find the length of a side of a right triangle. Solve right triangles.
Name: Circles Quarter: 4 Length (Days): 17	 Identify segments and lines related to a circle. Use the properties of a tangent to a circle. Use the properties of arcs of a circle. Use the properties of chords of circles. Use properties of inscribed angles. Use properties of chords in a circle.