# FOUNDATIONS OF GEOMETRY – Units/Lessons

#### **Unit 1: Angle Relationships**

- 1-1 Basic Geometric Terms
- 1-2 Angle Relationships
- 1-3 Parallel Lines and Transversals
- 1-4 Parallel Lines and Transversal (Day 2)
- 1-5 Measuring Angles
- 1-6 Drawing Angles
- 1-7 Parts and Types of Triangles
- 1-8 Triangle Sum Theorem
- 1-9 Exterior Angle Theorem
- 1-10 Attributes of Polygons
- 1-11 Polygons (Day 2)

## Unit 2: Triangle Congruence and Properties of Parallelograms

- 2-1 Triangle Congruence
- 2-2 Triangle Congruence (Day 2)
- 2-3 Congruent Shapes and Reasoning
- 2-4
- 2-5 Properties of Parallelograms Diagrams
- 2-6 Properties of Quadrilaterals (Rectangles)
- 2-7 Properties of Quadrilaterals (Rhombus)
- 2-8 More Properties of Quadrilaterals
- 2-9 Parallelogram Practice
- 2-10 Basic Constructions
- 2-11 Advanced Constructions
- 2-12 Construction Work

### **Unit 3: Transformations**

- 3-1 Rigid Motions 1
- 3-2 Rigid Motions 2
- 3-3 Rotations
- 3-4 Reflections (Day 1)
- 3-5 Reflections (Day 2)
- 3-6 Reflections (Day 3)
- 3-7 Composition of Transformations
- 3-8 All Transformations

### **Unit 4: Coordinate Geometry**

- 4-1 Simplifying Radicals/Pythagorean Review
  4-2 Slope
  4-3 Slope and Lengths of Segments
  4-4 The Distance Formula
  4-5 Midpoint Formula
  4-6 Linear Relationships
  4-7 Point-Slope Equation of a Line
  4-8 Parallel and Perpendicular Lines
  4-9 Coordinate Proofs
  4-10 Coordinate Proofs (Day 2)
- 4-11 Equations of a Circle

### Unit 5: Dilations and Similarity

- 5-1 Similarities and Dilations
- 5-2 Similarities and Dilations (Day 2)

### Unit 6: Circles

- 6-1 Parts of Circles
- 6-2 Segment Relationships in Circles
- 6-3 Arcs, Central and Inscribed Angles in Circles