

Geometry Honors Pacing Guide  
Updated August 2024

Marking Period 1

**Unit 1: Basics of Geometry**

- 1.1 Points, Lines, and Planes
- 1.2 Measuring and constructing segments
- 1.3 Using midpoint and distance formula
- 1.4 Perimeter and Area in the Coordinate Plane
- 1.5 Measuring and constructing angles
- 1.6 Describing pairs of angles

**Unit 2: Reasoning and proofs**

- 2.3 postulates and diagrams
- 2.4 Algebraic Reasoning
- 2.5 Proving statements about segments and angles
- 2.6 Proving geometric relationships

**Unit 3: Parallel and Perpendicular Lines**

- 3.1 Pairs of lines and angles
- 3.2 Parallel lines and transversals
- 3.3 Proofs with parallel lines
- 3.4 Proofs with Perpendicular Lines
- 3.5 equations of parallel and perpendicular lines

**Unit 5: Congruent Triangles**

- 5.1 Angles of triangles
- 5.2 Congruent Polygons
- 5.3 Proving Triangle congruence by SAS
- 5.4 Equilateral and Isosceles Triangles
- 5.5 Proving Triangle congruence by SSS
- 5.6 Proving Triangle congruence by ASA and AAS
- 5.7 Using Congruent Triangles

Marking Period 2

**Unit 6: Relationships within triangles**

- 6.1 Perpendicular and Angles Bisector
- 6.2 Bisectors of Triangles
- 6.3 Medians and Altitudes of Triangles
- 6.4 The Triangle Midsegment Theorem
- 6.5 Indirect Proof and Inequalities in one triangle

**Unit 8: Similarity**

- 8.1 Similar Polygons
- 8.2 Proving Triangles Similarity by AA
- 8.3 Proving Triangle Similarity by SSS and SAS
- 8.4 Proportionality Theorems

**Unit 9: Right Triangle and Trigonometry**

- 9.1 The Pythagorean Theorem
- 9.2 Special Right Triangles

- 9.3 Similar Right Triangle
- 9.4 The Tangent Ratio
- 9.5 The Sine and Cosine Ratios
- 9.6 Solving Right Triangles
- 9.7 Law of Sines and Law of cosines

### Marking Period 3

#### **Unit 4: Transformations**

- 4.1 Translations
- 4.2 Reflections
- 4.3 Rotations
- 4.4 Congruence and Transformations
- 4.5 Dilations
- 4.6 Similarity and Transformations
- \* Rotations and Dilations not about the origin

#### **Unit 10: Circles**

- 10.1 Lines and Segments that intersect circles
- 10.2 Finding Arc Measures
- 10.3 Using chords
- 10.4 Inscribed Angles and Polygons
- 10.5 Angle Relationships in Circles
- 10.6 Segment Relationships in Circles
- 10.7 Circles in the coordinate plane
- \*Complete the Square

#### **Unit 7: Quadrilaterals and Other Polygons**

- 7.1 Angles of Polygons
- 7.2 Properties of Parallelogram
- 7.3 Proving that a Quadrilateral is a Parallelogram
- 7.4 Properties of Special Parallelograms
- 7.5 Properties of Trapezoids and Kites

### Marking Period 4

#### **Unit 11: Circumference and Area**

- 11.1 Circumference and Arc Length
- 11.2 Areas and Circles and Sectors
- 11.3 Areas of Polygons
- 11.4 Modeling with Area

#### **Unit 12: Surface Area and Volume**

- 12.1 Cross Sections of Solids
- 12.2 Volumes of Prisms and Cylinders
- 12.3 Volumes of Pyramids
- 12.4 Surface Areas and Volumes of cones
- 12.5 Surface Areas and Volumes of Spheres
- 12.6 Modeling with Surfaces Area and Volume

#### **Unit 13: Probability**

- 13.1 Sample Spaces and Probability
- 13.2 Two-Way Tables and Probability
- 13.3 Conditional Probability

- 13.4 Independent and Dependent Events
- 13.5 Probability of Disjoint and Overlapping Events
- 13.6 Permutations and Combinations
- 13.7 Binomial Distribution