

**Geometry**

**SCOPE AND SEQUENCE**

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| **UNIT NAME** | **TOPICS** | **SUB-TOPICS** | **STUDENT EXPECATIONS** |
| **1** | **Geometry Basics** | **1.1 Points, Lines, & Planes** |  |
| **1.2 Segments and Distance** | **G 1B; G 1D; G 2B** |
| **1.3 Angles & Measurement** | **G 1C; G 1F;G 5A** |
| **1.4 Midpoints and Bisectors** | **G 1D; G 1F; G 2A; G 5A; G 5B** |
| **1.5 Angle Pairs** | **G 1B; G 1D;** **G 5A; G 5B; G 6A** |
| **1.6 Classifying Polygons** | **G 1A; G 1G; G5A** |
| **2** | **Reasoning and Proofs** | **2.1 Inductive Reasoning** | **G 1C; G 1D; G4C** |
| **2.2 Conditional Statements** | **G 1F; G 1G; G 4B** |
| **2.3 Deductive Reasoning** | **G 1A; G 1G; G 4B; G 4C** |
| **2.4 Algebraic & Congruence Properties** | **G 1B; G 6A** |
| **2.5 Proofs about Angle Pairs and Segments** | **G 1G; G 6A** |
| **3** | **Parallel and Perpendicular Lines** | **3.1 Lines and Angles** | **G 4D; G 5A; G 5B** |
| **3.2 Properties of Parallel Lines** | **G 1B; G 1F; G 5A;**  **G 6A** |
| **3.3 Proving Lines are Parallel** | **G 1D; G 4B; G 5A; G 5B** |
| **3.4 Properties of Perpendicular Lines** | **G 1D; G 5A; G 5B** |
| **3.5 Parallel & Perpendicular Lines** | **G 1D; G 2B; G 2C** |
| **3.6 The Distance Formula** | **G 1A; G 2B; G 2C** |
| **4** | **Triangles and Congruence** | **4.1 Triangle Sums** | **G 1D; G 4D;** **G 5A; G 6D** |
| **4.2 Congruent Figures** | **G 1A; G 5A; G 6C** |
| **4.3 Triangle Congruence using SSS & SAS** | **G 1D; G 4C; G 5A; G 5C; G 6B** |
| **4.4 Triangle Congruence**  **using ASA, AAS, & HL** | **G 1D; G 4C; G 5A; G 5C; G 6B** |
| **4.5 Isosceles & Equilateral Triangles** | **G 1D; G 5A; G 6B; G 6C** |
| **5** | **Relationships with Triangles** | **5.1 Midsegments** | **G 1B; G 2B; G 5A; G 6D** |
| **5.2 Perpendicular Bisectors & Angle Bisectors in Triangles** | **G 1D; G 2B; G 5B; G 5C; G 6A** |
| **5.3 Medians & Altitudes in Triangles** | **G 1B; G 5A; G 5B; G 6D** |
| **5.4 Inequalities in Triangles** | **G 1G; G 5D** |
| **5.5 Indirect Proofs** | **G 1B; G 4B** |
| **6** | **Similarity** | **6.1 Ratios and Proportions** | **G 1A** |
| **6.2 Similar Polygons** | **G 1F; G 7A** |
| **6.3 Similarity** | **G 1D; G 7A; G 7B** |
| **6.4 Similarity by SSS & SAS** | **G 1C; G 5C; G 7A** |
| **6.5 Proportionality Relationships** | **G 1D; G 8A** |
| **6.6 Similarity Transformations** | **G 1C; G 3A; G 7A** |
| **6.7 Self-Similarity** | **G 1B; G 1F** |
| **7** | **Polygons and Quadrilaterals** | **7.1 Angles in Polygons** | **G 1F; G 5A; G 6D** |
| **7.2 Properties of Parallelograms** | **G 1F; G 2C; G 5A** |
| **7.3 Proving Quadrilaterals are Parallelograms** | **G 1D; G 4B; G 6E** |
| **7.4 Rectangles, Rhombuses & Squares** | **G 1F; G 2B; G 4B; G 5A; G 6E** |
| **7.5 Trapezoids & Kites** | **G 1F; G 2B** |
| **8** | **Right Triangle Trigonometry** | **8.1 The Pythagorean Theorem** | **G 1B; G 6D; G 9B** |
| **8.2 Converse of the Pythagorean Theorem** | **G 1E; G 4B;**  **G 6D; G 9B** |
| **8.3 Using Similar Right Triangles** | **G 1G; G 5A; G 7A; G 8A; G 8B** |
| **8.4 Special Right Triangles** | **G 1F; G 6D; G 9B** |
| **8.5 Sine, Cosine & Tangent** | **G 1A; G 9A; G 9B** |
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| **9.2 Trapezoids, Rhombi, & Kites** | **G 1G; G 11B** |
| **9.3 Area of Regular Polygons** | **G 1B; G 11A** |
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| **9.7 Area of Composite Shapes** | **G 1A;  G  11B** |
| **10** | **Surface Area and Volume** | **10.1 Exploring Solids** | **G 1G; G 6A; G 10A; G 11B** |
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| **10.3 Surface Area of Pyramids & Cones** | **G 1D; G 11B; G 11C** |
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| **11.6 Tessellating Polygons** | **G 5A** |
| **12** | **Circles** | **12.1 Parts of Circles & Tangent Lines** | **G 1D; G 5A; G 12A** |
| **12.2 Properties of Arcs** | **G 1F; G 5A** |
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| **13.4 Understanding Conditional Probability** | **G 1A; G 13C; G 13D** |