

Geometry Topics Curriculum

2009-2010

Chapter 1: Basics of Geometry (September)

- Point, line, plane, collinear points, endpoints
- Line segments, ray
- Distance between points
- Angles, acute, right, obtuse, straight

Chapter 2: Segments and Angles (September - October)

- Midpoint formula
- Algebra with angle measures
- Complementary and supplementary angles
- Vertical angles

Chapter 3: Parallel and Perpendicular Lines (October - November)

- Parallel and perpendicular lines, transversals
- Corresponding angles, alternate interior angles, alternate exterior angles, same side interior angles, consecutive angles
- Algebra with angles formed by parallel lines

Chapter 4: Triangle Relationships (November - December)

- Classifying triangles by sides and by angles
- Angle measures of triangles
- Isosceles and equilateral triangles
- Pythagorean theorem and its converse
- Triangle inequality

Chapter 6: Quadrilaterals (December - January)

- Classifying polygons
- Finding angle measures of quadrilaterals
- Properties of parallelograms
- Properties of rhombuses, rectangles, and squares
- Properties of trapezoids
- Review of slope
- Coordinate geometry proofs

Chapter 7: Similarity (January)

- Ratio and proportions
- Similar proportions
- Similar triangles
- Proportions and similar triangles

Chapter 8: Polygons and Area (February)

- Angles in polygons (interior, exterior, sum of interior and sum of exterior)
- Area of squares and rectangles
- Area of triangles
- Area of parallelograms
- Area of trapezoids
- Circumference and area of circles

Chapter 9: Surface Area and Volume (February - March)

- Types of solids (prisms, pyramids, cylinders)
- Surface area of prisms and cylinders
- Surface area of pyramids and cones
- Volume of prisms and cylinders
- Volume of pyramids and cones
- Surface area and volume of spheres

Chapter 10: Right Triangles and Trigonometry (March)

- Simplifying square roots
- SOHCAHTOA
- Solving right triangles

Chapter 11: Circles (April)

- Parts of a circle
- Arcs, central angles, inscribed angles
- Angles formed by two chords
- Angles formed by two tangents, a tangent and secant, two secants
- Segments of chords
- Segments of two tangents, a tangent and secant, two secants
- Equations of circles
- Graphing a circle

Review for Geometry Final (April - June)