

Geometry Timeline for High School Macon County 2017-2018

1st Quarter

Standard	Learning Target	Resources	T	M
G.CO.A.1	I can describe and name the undefined terms of points, lines, and planes. (K)			
G.CO.A.1	I can identify angles, circles, perpendicular lines, parallel lines, rays, and line segments. (K)			
G.CO.A.1	I can define angles, circles, perpendicular lines, parallel lines, rays, and line segments. (K)			
G.CO.A.2	I can draw transformations of reflections, rotations, translations, and combinations of these using graph paper, transparencies, and patty paper, both on and off the coordinate plane. (S)			
G.CO.A.2	I can determine the coordinates for the image of a figure when a transformation rule is applied to the pre-image. (S)			
G.CO.A.2	I can explain rigid motion as motion that preserves distance and angle measure. (R)			
G.CO.A.2	I can distinguish between transformations that maintain shape and size (reflections, rotations, translations) and those that do not (dilations). (R)			
G.CO.C.9	I can prove vertical angles are congruent. (S)			
G.CO.C.9	I can prove and apply theorems about the angles formed by parallel lines and a transversal (corresponding, alternate interior, same-side interior). (S)			
G.CO.C.9	I can prove points on a perpendicular bisector of a line segment are equidistant from the segment's endpoint. (S)			

G.CO.A.4	I can define and describe transformations in terms of angles, lines, and line segments (i.e. reflecting a figure over a line or parallel lines, rotating a figure 180°). (K)			
G.CO.A.4	I can use a rule to define reflections, rotations, and translations on the coordinate plane. (S)			
G.CO.A.3	I can determine if a figure has rotational symmetry (maps onto itself), and if so, determine the angle of rotation. (S)			
G.CO.A.3	I can determine if a figure has line symmetry and if so, find all the lines of symmetry. (S)			
G.CO.A.5	I can predict and construct the sequence of transformations that will map a figure onto another. (S) (P)			
G.CO.B.6	I can determine if two figures are congruent and which transformation(s) have been applied. (S)			
G.CO.B.7	I can determine if two figures are congruent by determining if rigid motions will turn one figure onto the other (preserving distance and angle measure). (S)			
G.CO.B.7	I can explain and prove that in a pair of congruent figures corresponding sides are congruent and corresponding angles are congruent. (R) (S)			
G.GPE.B.3	I can use slope to prove lines are parallel and perpendicular. (S)			
G.GPE.B.3	I can write the equation of a line parallel or perpendicular to a given line that passes through a given point. (P)			

2nd Quarter

Standard	Learning Target	Resources	T	M

G.CO.B.8	I can determine if two angles are congruent by using SSS, SAS, and ASA. (S)			
G.CO.D.1 2	I can use a variety of tools to perform the following constructions: Bisect a segment Bisect an angle Construct perpendicular lines including the perpendicular bisector a segment, construct a line segment parallel to a given line through a point not on the line. (P)			
G.SRT.B.5	I can use triangle congruence and triangle similarity to solve problems and prove relationships in geometric figures. (S) (R)			
G.CO.C.1 0	I can prove the sum of the measures of the interior angles of a triangle is equal to 180° . (S)			
G.CO.C.1 0	I can prove the base angles of an isosceles triangle are congruent. (S)			
G.CO.C.1 0	I can prove the segment joining the midpoints of two sides of a triangle (mid-segment) is parallel to and half the length of the 3 rd side. (S)			
G.C.A.3	I can construct the incenter and circumcenter of a triangle and use their properties to solve problems in context.			
G.CO.C.1 1	I can define and describe the following quadrilaterals: all parallelograms, all trapezoids, and kites. (K)			
G.CO.C.1 1	I can prove the opposite sides of a parallelogram are congruent. (S)			
G.CO.C.1 1	I can prove the opposite angles of a parallelogram are congruent. (S)			
G.CO.C.1 1	I can prove the diagonals of the parallelogram bisect each other. (S)			

G.CO.C.1 1	I can prove rectangles are parallelograms with congruent diagonals. (S)			
G.GPE.B. 2	I can label the vertices of a figure in the coordinate plane using variables. (K)			
G.GPE.B. 2	I can write coordinate proofs. (P)			
G.GOE.B. 2	I can prove or disprove geometric or definition using slope, distance and midpoint formulas. (S)			
G.GPE.B. 5	I can use coordinate geometry and the distance formula to find the area and perimeters of polygons on the coordinate plane. (S)			

3rd Quarter

Standard	Learning Target	Resources	T	M
G.SRT.A.1	I can define a dilation. (K)			
G.SRT.A.1	I can perform a dilation with a given center and scale factor on a figure in the coordinate plane. (P)			
G.SRT.A.1	I can verify that when a side passes through the center of a dilation, the pre-image and image coincide. (R)			
G.SRT.A.1	I can verify that corresponding sides of the pre-image and images are parallel and proportional. (R)			
G.SRT.A.2	I can define similarity using transformations. (K)			
G.SRT.A.2	I can identify corresponding sides and corresponding angles of similar triangles. (K)			

G.SRT.A.2	I can determine scale factor between two similar figures and use the scale factor to solve problems. (S)			
G.SRT.A.2	I can demonstrate that corresponding angles are congruent and corresponding sides are proportional in a pair of similar triangles. (S)			
G.SRT.A.3	I can determine that two figures are similar by verifying that angle measure is preserved and corresponding sides are proportional. (S)			
G.SRT.A.3	I can show and explain that when two angle measures (AA) are known, the third angle measure is also known. (P)			
G.SRT.A.3	I can use triangle similarity theorems such as AA, SSS, SAS to prove 2 triangles are similar. (S)			
G.SRT.B.4	I can prove a line parallel to one side of a triangle divides the other two proportionally. (S)			
G.SRT.B.4	I can prove if a line divides two sides of a triangle proportionally, then it is parallel to the third side. (S)			
G.GPE.B.4	I can calculate the point on a line segment, given two end points, that divides the segment into a given ratio. (S)			
G.SRT.C.6	I can use properties of similar right triangles to form the definitions of trigonometric ratios for acute angles. (S)			
G.SRT.C.7	I can calculate sine and cosine ratios for acute angles in a right triangle when two side lengths are given. (S)			
G.SRT.C.7 (extra 13.2)	I can explain and use the relationship between the sine of an acute angle and the cosine of its complement. (R)			

G.SRT.C.8	I can use the Pythagorean Theorem to solve for unknown side length of a right triangle. (S)
G.SRT.C.8	I can solve application problems involving right triangles, including angle of elevation and depression, using the Pythagorean Theorem and trigonometry. (S)
G.SRT.C.8	I can use the Law of Sines and Law of Cosines to solve problems in real life situations.
G.C.A.2	I can identify central angles, inscribed angles, circumscribed angles, diameters, radii, chords, and tangents. (K)
G.C.A.2	I can describe the relationship between a central or inscribed angle. (R)
G.MG.A.1	I can use geometric shapes, their measures and their properties to describe objects. (S)
G.C.A.1	I can recognize that all circles are similar. (S)
G.C.B.4	I can find the area of a sector of a circle in a real-world concept. (S)
G.GPE.A.1	I can write the equation of a circle given its center and radius. (S)
G.GPE.A.1	I can complete the square to find the center and radius of a circle when given an equation of a circle. (S)

4th Quarter

Standard	Learning Target	Resources	T	M
G.GMD.A.1	I can define π as the ratio of a circle's circumference to its diameter. (K)			
G.GMD.A.1	I can develop formulas to calculate the volumes of 3-D figures including spheres, cones, prisms, and pyramids. (P)			

G.GMD.A.2	I can use volume and surface area formulas for cylinders, cones, prisms, pyramids, and spheres to solve problems.(S)			
G.MG.A.2	I can apply the concept of density when referring to situations involving area and volume. (S)			
G.MG.A.2	I can use the probability of a shaded region to solve real-world problems.			

