

GEOMETRY

GRADE	CONTENT	SKILLS	LESSON CORRELATION
Essential Question: How does learning about shapes and their parts help us appreciate God's creation?		Big Idea: Shapes and their parts help us appreciate the beauty and order in everything God has designed.	
K	Shapes	<p>K.GEO.1 Identify, describe, analyze, and compare two- and three-dimensional shapes (regardless of size or orientation) by size, color, and shape; describe relative positions of objects (e.g., above, beside, behind, nearer, farther) (K.G.1.2,3,4)</p> <p>A. Solve problems by identifying two-dimensional shapes (regardless of size or orientation) by size B. Solve problems by identifying two-dimensional shapes (regardless of size or orientation) by color C. Solve problems by identifying two-dimensional shapes (regardless of size or orientation) by shape D. Solve problems by describing two-dimensional shapes (regardless of size or orientation) by size E. Solve problems by describing two-dimensional shapes (regardless of size or orientation) by color F. Solve problems by describing two-dimensional shapes (regardless of size or orientation) by shape G. Solve problems by comparing two-dimensional shapes (regardless of size or orientation) by size H. Solve problems by comparing two-dimensional shapes (regardless of size or orientation) by color I. Solve problems by comparing two-dimensional shapes (regardless of size or orientation) by shape J. Solve problems by identifying three-dimensional shapes (regardless of size or orientation) by size K. Solve problems by identifying three-dimensional shapes (regardless of size or orientation) by color L. Solve problems by identifying three-dimensional shapes (regardless of size or orientation) by shape M. Solve problems by describing three-dimensional shapes (regardless of size or orientation) by size N. Solve problems by describing three-dimensional shapes (regardless of size or orientation) by color O. Solve problems by describing three-dimensional shapes (regardless of size or orientation) by shape P. Solve problems by comparing three-dimensional shapes (regardless of size or orientation) by size Q. Solve problems by comparing three-dimensional shapes (regardless of size or orientation) by color R. Solve problems by comparing three-dimensional shapes (regardless of size or orientation) by shape S. Solve problems by describing relative positions of objects (e.g., above, beside, behind, nearer, farther)</p> <p>3.0 Items include ALL of the following:</p> <ul style="list-style-type: none"> • Solve problems by identifying two-dimensional shapes (regardless of size or orientation) by size • Solve problems by identifying two-dimensional shapes (regardless of size or orientation) by color • Solve problems by identifying two-dimensional shapes (regardless of size or orientation) by shape • Solve problems by describing two-dimensional shapes (regardless of size or orientation) by size • Solve problems by describing two-dimensional shapes (regardless of size or orientation) by color • Solve problems by describing two-dimensional shapes (regardless of size or orientation) by shape • Solve problems by comparing two-dimensional shapes (regardless of size or orientation) by size • Solve problems by comparing two-dimensional shapes (regardless of size or orientation) by color • Solve problems by comparing two-dimensional shapes (regardless of size or orientation) by shape • Solve problems by identifying three-dimensional shapes (regardless of size or orientation) by size • Solve problems by identifying three-dimensional shapes (regardless of size or orientation) by color • Solve problems by identifying three-dimensional shapes (regardless of size or orientation) by shape • Solve problems by describing three-dimensional shapes (regardless of size or orientation) by size • Solve problems by describing three-dimensional shapes (regardless of size or orientation) by color • Solve problems by describing three-dimensional shapes (regardless of size or orientation) by shape • Solve problems by comparing three-dimensional shapes (regardless of size or orientation) by size • Solve problems by comparing three-dimensional shapes (regardless of size or orientation) by color • Solve problems by comparing three-dimensional shapes (regardless of size or orientation) by shape • Solve problems by describing relative positions of objects (e.g., above, beside, behind, nearer, farther) <p>2.0 items include at least one of the following:</p> <ul style="list-style-type: none"> • Solve problems by identifying two-dimensional shapes (regardless of size or orientation) by size • Solve problems by identifying two-dimensional shapes (regardless of size or orientation) by color • Solve problems by identifying two-dimensional shapes (regardless of size or orientation) by shape • Solve problems by describing two-dimensional shapes (regardless of size or orientation) by size • Solve problems by describing two-dimensional shapes (regardless of size or orientation) by color • Solve problems by describing two-dimensional shapes (regardless of size or orientation) by shape • Solve problems by comparing two-dimensional shapes (regardless of size or orientation) by size • Solve problems by comparing two-dimensional shapes (regardless of size or orientation) by color • Solve problems by comparing two-dimensional shapes (regardless of size or orientation) by shape • Solve problems by identifying three-dimensional shapes (regardless of size or orientation) by size • Solve problems by identifying three-dimensional shapes (regardless of size or orientation) by color • Solve problems by identifying three-dimensional shapes (regardless of size or orientation) by shape • Solve problems by describing three-dimensional shapes (regardless of size or orientation) by size • Solve problems by describing three-dimensional shapes (regardless of size or orientation) by color • Solve problems by describing three-dimensional shapes (regardless of size or orientation) by shape • Solve problems by comparing three-dimensional shapes (regardless of size or orientation) by size • Solve problems by comparing three-dimensional shapes (regardless of size or orientation) by color • Solve problems by comparing three-dimensional shapes (regardless of size or orientation) by shape • Solve problems by describing relative positions of objects (e.g., above, beside, behind, nearer, farther) • Solve problems by sorting two-dimensional shapes by size, color, and shape • Solve problems by sorting three-dimensional shapes by size, color, and shape 	<p>11.2, 11.3, 11.4, 11.5, 12.2, 13.3, 12.4, 12.5, 12.6</p>

		<p>K.GEO.2 Create two- and three-dimensional shapes by building or drawing; compose simple shapes to form larger shapes (K.G.5,6)</p> <p>A. Solve problems by creating two-dimensional shapes through building</p> <p>B. Solve problems by creating two-dimensional shapes through drawing</p> <p>C. Solve problems by creating three-dimensional shapes through building</p> <p>D. Solve problems by creating three-dimensional shapes through drawing</p> <p>E. Solve problems by composing simple shapes to form larger shapes</p> <p>3.0 Items include ALL of the following:</p> <ul style="list-style-type: none"> Solve problems by creating two-dimensional shapes through building Solve problems by creating two-dimensional shapes through drawing Solve problems by creating three-dimensional shapes through building Solve problems by creating three-dimensional shapes through drawing Solve problems by composing simple shapes to form larger shapes <p>2.0 items include at least one of the following:</p> <ul style="list-style-type: none"> Solve problems by creating two-dimensional shapes through building Solve problems by creating two-dimensional shapes through drawing Solve problems by creating three-dimensional shapes through building Solve problems by creating three-dimensional shapes through drawing Solve problems by composing simple shapes to form larger shapes Solve problems by identifying two-dimensional shapes Solve problems by identifying three-dimensional shapes 	<p>11.2, 11.3, 11.4, 11.5, 11.6, 11.7, 12.1, 12.2, 12.3, 12.4, 12.5</p>
1	Shapes	<p>1.GEO.1 Describe, build, and draw shapes with defining attributes (1.G.1)</p> <p>A. Solve problems by describing shapes with defining attributes</p> <p>B. Solve problems by building shapes with defining attributes</p> <p>C. Solve problems by drawing shapes with defining attributes</p> <p>3.0 Items include ALL of the following:</p> <ul style="list-style-type: none"> Solve problems by describing shapes with defining attributes Solve problems by building shapes with defining attributes Solve problems by drawing shapes with defining attributes <p>2.0 items include at least one of the following:</p> <ul style="list-style-type: none"> Solve problems by describing shapes with defining attributes Solve problems by building shapes with defining attributes Solve problems by drawing shapes with defining attributes Solve problems by sorting shapes with defining attributes <p>1.GEO.2 Compose two- and three- dimensional shapes to form composite or new shapes (1.G.2)</p> <p>A. Solve problems by composing two-dimensional shapes to form composite (or new) shapes</p> <p>B. Solve problems by composing three-dimensional shapes to form composite (or new) shapes</p> <p>3.0 Items include ALL of the following:</p> <ul style="list-style-type: none"> Solve problems by composing two-dimensional shapes to form composite (or new) shapes Solve problems by composing three-dimensional shapes to form composite (or new) shapes <p>2.0 items include at least one of the following:</p> <ul style="list-style-type: none"> Solve problems by composing two-dimensional shapes to form composite (or new) shapes Solve problems by composing three-dimensional shapes to form composite (or new) shapes Solve problems by duplicating a two-dimensional shape Solve problems by duplicating a three-dimensional shape 	<p>13.1, 13.2, 13.6, 13.7</p> <p>13.3, 13.4, 13.5, 13.7, 13.8, 13.9</p>
	Fractions	<p>1.GEO.3 Partition circles and rectangles into two and four equal parts; describe the whole and its parts using the words halves, fourths, quarters, half of, quarter of and third of (1.G.3)</p> <p>A. Solve problems by partitioning circles into two equal parts</p> <p>B. Solve problems by partitioning circles into four equal parts</p> <p>C. Solve problems by partitioning rectangles into two equal parts</p> <p>D. Solve problems by partitioning rectangles into four equal parts</p> <p>E. Solve problems by describing the whole and its parts using the words half and half of</p> <p>F. Solve problems by describing the whole and its parts using the words fourth and fourth of</p> <p>G. Solve problems by describing the whole and its parts using the words quarter and quarter of</p> <p>H. Solve problems by describing the whole and its parts using the words third and third of</p> <p>3.0 Items include ALL of the following:</p> <ul style="list-style-type: none"> Solve problems by partitioning circles into two equal parts Solve problems by partitioning circles into four equal parts Solve problems by partitioning rectangles into two equal parts Solve problems by partitioning rectangles into four equal parts Solve problems by describing the whole and its parts using the words half and half of Solve problems by describing the whole and its parts using the words fourth and fourth of Solve problems by describing the whole and its parts using the words quarter and quarter of Solve problems by describing the whole and its parts using the words third and third of <p>2.0 items include at least one of the following:</p> <ul style="list-style-type: none"> Solve problems by partitioning circles into two equal parts Solve problems by partitioning circles into four equal parts Solve problems by partitioning rectangles into two equal parts 	<p>14.1, 14.2, 14.3</p>

		<ul style="list-style-type: none"> Solve problems by partitioning rectangles into four equal parts Solve problems by describing the whole and its parts using the words half and half of Solve problems by describing the whole and its parts using the words fourth and fourth of Solve problems by describing the whole and its parts using the words quarter and quarter of Solve problems by describing the whole and its parts using the words third and third of Solve problems by partitioning two-dimensional shapes into parts 	
2	Shapes	<p>2.GEO.1 Recognize and draw two- and three- dimensional shapes having specified attributes (2.G.1)</p> <p>A. Solve problems by recognizing two-dimensional shapes having specified attributes</p> <p>B. Solve problems by recognizing three-dimensional shapes having specified attributes</p> <p>C. Solve problems by drawing two-dimensional shapes having specified attributes</p> <p>D. Solve problems by drawing three-dimensional shapes having specified attributes</p> <p>3.0 Items include ALL of the following:</p> <ul style="list-style-type: none"> Solve problems by recognizing two-dimensional shapes having specified attributes Solve problems by recognizing three-dimensional shapes having specified attributes Solve problems by drawing two-dimensional shapes having specified attributes Solve problems by drawing three-dimensional shapes having specified attributes <p>2.0 items include at least one of the following:</p> <ul style="list-style-type: none"> Solve problems by recognizing two-dimensional shapes having specified attributes Solve problems by recognizing three-dimensional shapes having specified attributes Solve problems by drawing two-dimensional shapes having specified attributes Solve problems by drawing three-dimensional shapes having specified attributes Solve problems by identifying defining attributes of two-dimensional shapes Solve problems by identifying defining attributes of three-dimensional shapes 	15.1, 15.2, 15.3, 15.4
	Area	<p>2.GEO.2 Partition a rectangle into rows and columns of same-size squares and count to find the total number of squares (2.G.2)</p> <p>A. Solve problems by partitioning a rectangle into rows and columns of same-size squares and counting to find the total number of squares</p> <p>3.0 Items include ALL of the following:</p> <ul style="list-style-type: none"> Solve problems by partitioning a rectangle into rows and columns of same-size squares and counting to find the total number of squares <p>2.0 items include at least one of the following:</p> <ul style="list-style-type: none"> Solve problems by partitioning a rectangle into rows and columns of same-size squares and counting to find the total number of squares Solve problems by partitioning a rectangle into same size squares 	15.5
	Fractions	<p>2.GEO.3 Partition circles and rectangles into two, three, and four equal parts; describe the whole and its parts using the words halves, thirds, half of, third of, etc.; understand that equal parts need not have the same shape (2.G.3)</p> <p>A. Solve problems by partitioning circles into two equal parts</p> <p>B. Solve problems by partitioning circles into three equal parts</p> <p>C. Solve problems by partitioning circles into four equal parts</p> <p>D. Solve problems by partitioning rectangles into two equal parts</p> <p>E. Solve problems by partitioning rectangles into three equal parts</p> <p>F. Solve problems by partitioning rectangles into four equal parts</p> <p>G. Solve problems by describing the whole and its parts using the words half and half of</p> <p>H. Solve problems by describing the whole and its parts using the words third or third of, etc.</p> <p>I. Solve problems by comparing equal parts that do not have the same shape</p> <p>3.0 Items include ALL of the following:</p> <ul style="list-style-type: none"> Solve problems by partitioning circles into two equal parts Solve problems by partitioning circles into three equal parts Solve problems by partitioning circles into four equal parts Solve problems by partitioning rectangles into two equal parts Solve problems by partitioning rectangles into three equal parts Solve problems by partitioning rectangles into four equal parts Solve problems by describing the whole and its parts using the words half and half of Solve problems by describing the whole and its parts using the words third or third of, etc. Solve problems by comparing equal parts that do not have the same shape <p>2.0 items include at least one of the following:</p> <ul style="list-style-type: none"> Solve problems by partitioning circles into two equal parts Solve problems by partitioning circles into three equal parts Solve problems by partitioning circles into four equal parts Solve problems by partitioning rectangles into two equal parts Solve problems by partitioning rectangles into three equal parts Solve problems by partitioning rectangles into four equal parts Solve problems by describing the whole and its parts using the words half and half of Solve problems by describing the whole and its parts using the words third or third of, etc. Solve problems by comparing equal parts that do not have the same shape Solve problems by partitioning circles into equal parts Solve problems by partitioning rectangles into equal parts 	15.6, 15.7, 15.8

		<ul style="list-style-type: none"> Solve problems by comparing equal parts that do have the same shape 	
Assessments		Math Interviews; Checklists; Models and Drawings; Written Assessments; Art Projects	
Essential Question: What does geometry reveal about God?		Big Idea: God is revealed as the Master Designer when geometry is used as a means of describing the attributes of the physical world.	
3	Shapes	<p>3.GEO.1 Sort and classify shapes to compare and contrast attributes (3.G.1,2)</p> <p>A. Solve problems by sorting shapes</p> <p>B. Solve problems by classifying shapes</p> <p>C. Solve problems by comparing and contrasting the attributes of shapes</p> <p>3.0 Items include ALL of the following:</p> <ul style="list-style-type: none"> Solve problems by sorting shapes Solve problems by classifying shapes Solve problems by comparing and contrasting the attributes of shapes <p>2.0 items include at least one of the following:</p> <ul style="list-style-type: none"> Solve problems by sorting shapes Solve problems by classifying shapes Solve problems by comparing and contrasting the attributes of shapes Solve problems by recognizing two- and three- dimensional shapes 	13.1, 13.2, 13.3, 13.4
	Fractions	<p>3.GEO.2 Partition shapes into equal areas and express as a fraction (3.G.2)</p> <p>A. Solve problems by dividing shapes into equal areas and express as fractions</p> <p>3.0 Items include ALL of the following:</p> <ul style="list-style-type: none"> Solve problems by dividing shapes into equal areas and expressing as fractions Solve problems by dividing shapes into equal areas and expressing as fractions Solve problems by dividing circles and rectangles into two equal parts and expressing as halves Solve problems by dividing circles and rectangles into three equal parts and expressing as thirds 	10.1, 10.2, 10.3
4	Lines/Angles	<p>4.GEO.1 Draw and identify points, lines, line segments, rays, angles, and perpendicular and parallel lines (4.G.1)</p> <p>A. Solve problems by drawing and identifying points, lines, and line segments</p> <p>B. Solve problems by drawing and identifying rays and angles</p> <p>C. Solve problems by drawing and identifying perpendicular and parallel lines</p> <p>3.0 Items include ALL of the following:</p> <ul style="list-style-type: none"> Solve problems by drawing and identifying points, lines, and line segments Solve problems by drawing and identifying rays and angles Solve problems by drawing and identifying perpendicular and parallel lines <p>2.0 items include at least one of the following:</p> <ul style="list-style-type: none"> Solve problems by drawing and identifying points, lines, and line segments Solve problems by drawing and identifying rays and angles Solve problems by drawing and identifying perpendicular and parallel lines Solve problems by identifying points, lines, line segments, rays, and angles 	13.1, 13.2, 13.3
		<p>4.GEO.2 Classify figures with perpendicular and parallel lines, and angles of a specified size (4.G.2)</p> <p>A. Solve problems by classifying figures with perpendicular lines</p> <p>B. Solve problems by classifying figures with parallel lines</p> <p>C. Solve problems by classifying figures with angles of a specified size</p> <p>3.0 Items include ALL of the following:</p> <ul style="list-style-type: none"> Solve problems by classifying figures with perpendicular lines Solve problems by classifying figures with parallel lines Solve problems by classifying figures with angles of a specified size <p>2.0 items include at least one of the following:</p> <ul style="list-style-type: none"> Solve problems by classifying figures with perpendicular lines Solve problems by classifying figures with parallel lines Solve problems by classifying figures with angles of a specified size Solve problems by identifying perpendicular lines, parallel lines, and angles 	14.3, 14.4, 14.5
		<p>4.GEO.3 Recognize and draw lines of symmetry with two-dimensional figures (4.G.3)</p> <p>A. Solve problems by recognizing and drawing lines of symmetry with two-dimensional figures</p> <p>3.0 Items include ALL of the following:</p> <ul style="list-style-type: none"> Solve problems by recognizing and drawing lines of symmetry with two-dimensional figures <p>2.0 items include at least one of the following:</p> <ul style="list-style-type: none"> Solve problems by recognizing and drawing lines of symmetry with two-dimensional figures Solve problems by identifying a line of symmetry 	14.1, 14.2
5	Graphs	<p>5.GEO.1 Graph points in the first quadrant of the coordinate plane to solve real-world and mathematical problems (5.G.1,2)</p> <p>A. Solve problems by graphing points in the first quadrant of the coordinate plane</p> <p>3.0 Items include ALL of the following:</p> <ul style="list-style-type: none"> Solve problems by graphing points in the first quadrant of the coordinate plane <p>2.0 items include at least one of the following:</p> <ul style="list-style-type: none"> Solve problems by graphing points in the first quadrant of the coordinate plane Solve problems by naming points in the first quadrant of the coordinate plane 	12.1, 12.2, 12.3, 12.4, 12.5, 12.6, 12.7

	Sides/Angles	<p>5.GEO.2 Classify two-dimensional figures into categories based on their properties of sides and angles (5.G.3,4)</p> <p>A. Solve problems by classifying two-dimensional figures into categories based on their properties of sides</p> <p>B. Solve problems by classifying two-dimensional figures into categories based on their properties of angles</p> <p>3.0 Items include ALL of the following:</p> <ul style="list-style-type: none"> Solve problems by classifying two-dimensional figures into categories based on their properties of sides Solve problems by classifying two-dimensional figures into categories based on their properties of angles <p>2.0 items include at least one of the following:</p> <ul style="list-style-type: none"> Solve problems by classifying two-dimensional figures into categories based on their properties of sides Solve problems by classifying two-dimensional figures into categories based on their properties of angles Solve problems by identifying two-dimensional figures (e.g., hexagon, decagon) 	14.1, 14.2, 14.3
Assessments		Written Assessments; Journal Entries; Class Discussions; Open-ended Projects and Problems; Visual and Virtual Models	
Essential Question: How does the study of geometrical principles help us to better understand God's creation?		Big Idea: The complexity of God's creation is revealed in the attributes and relationships of geometric objects and principles when applied to the real-world.	
6	Area/Volume	<p>6.GEO.1 Solve real-world and mathematical problems involving area, surface area, and volume (6.G.1,2,3,4)</p> <p>A. Solve problems involving area</p> <p>B. Solve problems involving surface area</p> <p>C. Solve problems involving volume</p> <p>3.0 items include ALL of the following:</p> <ul style="list-style-type: none"> Solve problems involving area Solve problems involving surface area Solve problems involving volume <p>2.0 items include at least one of the following:</p> <ul style="list-style-type: none"> Solve problems involving area Solve problems involving surface area Solve problems involving volume Solve problems by knowing and applying formulas for area and volume 	7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 8.6
7	Figures	<p>7.GEO.1 Draw, construct, and describe geometrical figures and identify the relationships between them (7.G.1,2,3)</p> <p>A. Solve problems by drawing and constructing geometric figures</p> <p>B. Solve problems by describing and identifying relationships between geometric figures</p> <p>3.0 items include ALL of the following:</p> <ul style="list-style-type: none"> Solve problems by drawing and constructing geometric figures Solve problems by describing and identifying relationships between geometric figures <p>2.0 items include at least one of the following:</p> <ul style="list-style-type: none"> Solve problems by drawing and constructing geometric figures Solve problems by describing and identifying relationships between geometric figures Solve problems by identifying solid shapes and their faces 	9.1, 9.2, 9.3, 9.4, 9.5, 10.1, 10.2, 10.3, 10.4, 10.5, 10.6
	Geometrical Measurements	<p>7.GEO.2 Solve real-world and mathematical problems involving angle measure, perimeter, area, surface area, and volume (7.G.4,5,6)</p> <p>A. Solve problems involving angle measurements</p> <p>B. Solve problems involving perimeter measurements</p> <p>C. Solve problems involving area measurements</p> <p>D. Solve problems involving surface area measurements</p> <p>E. Solve problems involving volume measurements</p> <p>3.0 items include ALL of the following:</p> <ul style="list-style-type: none"> Solve problems involving angle measurements Solve problems involving perimeter measurements Solve problems involving area measurements Solve problems involving surface area measurements Solve problems involving volume measurements <p>2.0 items include at least one of the following:</p> <ul style="list-style-type: none"> Solve problems involving angle measurements Solve problems involving perimeter measurements Solve problems involving area measurements Solve problems involving surface area measurements Solve problems involving volume measurements Solve problems by following given formulas Solve problems by identifying solid shapes and their faces 	9.1, 9.2, 9.3, 9.4, 9.5, 10.1, 10.2, 10.3, 10.4, 10.5
8	Figures	<p>8.GEO.1 Understand congruence and similarity using various mediums including geometric software (8.G.1,2,3,4,5)</p> <p>A. Solve problems showing congruence and similarity through various mediums</p> <p>3.0 items include ALL of the following:</p> <ul style="list-style-type: none"> Solve problems showing congruence and similarity through various mediums <p>2.0 items include at least one of the following:</p>	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 3.2, 3.4

		<ul style="list-style-type: none"> • Solve problems showing congruence and similarity through various mediums • Solve problems by measuring angles and lengths of figures to check for congruence • Solve problems by measuring angles and lengths of figures to check for similarity • Solve problems by determining if numbers are proportional <p>8.GEO.2 Understand and apply the Pythagorean Theorem (8.G.6,7,8) A. Solve problems using the Pythagorean Theorem 3.0 items include ALL of the following:</p> <ul style="list-style-type: none"> • Solve problems using the Pythagorean Theorem <p>2.0 items include at least one of the following:</p> <ul style="list-style-type: none"> • Solve problems using the Pythagorean Theorem • Solve problems containing integer exponents • Solve problems using radicals 	9.2, 9.5, 9.6
	Volume	<p>8.GEO.3 Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres (8.G.9) A. Solve problems involving volume of cylinders B. Solve problems involving volume of cones C. Solve problems involving volume of spheres 3.0 items include ALL of the following:</p> <ul style="list-style-type: none"> • Solve problems involving volume of cylinders • Solve problems involving volume of cones • Solve problems involving volume of spheres <p>2.0 items include at least one of the following:</p> <ul style="list-style-type: none"> • Solve problems involving volume of cylinders • Solve problems involving volume of cones • Solve problems involving volume of spheres • Solve problems by knowing the formulas for volume 	10.1, 10.2, 10.3, 10.4
Assessments		Open-ended Projects and Problems; Written Assessments; Journal Entries; Class Discussions; Oral Reports; Visual and Virtual Models	