




Geometry


Updated: September 2020


Content	Skills	Learning Targets	Assessment	Standards Reference	Resources & Technology
<p>NOTE: The topics covered in Geometry and in Advanced Geometry are basically the same. However, the Advanced Geometry course will cover topics with greater depth and assignments/assessments will include more difficult problems.</p> <p>CEQ:</p> <ul style="list-style-type: none"> • What are the properties of the basic elements of geometry? • What are the properties of 2-dimensional shapes? 	<p>A: The Tools of Geometry</p> <p>A1: Identify the basic building blocks of Geometry (Point-Line-Plane)</p> <p>A2: Identify and name the basic objects used in plane geometry (segments, angles, etc.)</p> <p>A3: Apply the properties of parallel and perpendicular lines to determine angle measures.</p> <p>A4: Apply the properties of special angle pairs to determine angle measures.</p> <p>A5: Extend the symbols for</p>	<p>A: The Tools of Geometry</p> <p>LT1 I can understand basic terms of geometry.</p> <p>LT2 I can identify segments and rays.</p> <p>LT3 I can recognize parallel lines.</p> <p>LT4 I can find lengths of segments.</p> <p>LT5 I can find measures of angles.</p> <p>LT6 I can identify special angles pairs.</p> <p>LT7 I can find the distance between two points in a coordinate plane.</p> <p>LT8 I can find the coordinates of the midpoints of a segment in the coordinate plane.</p>	<p>A: The Tools of Geometry</p> <p>CSA: Chapter 1 Test</p> <p>CFA: Chapter 1 QUIZ</p> <p>B. Reasoning and Proof</p> <p>CSA: Chapter 2 Test</p> <p>CFA: Chapter 2 QUIZ</p> <p>C: Parallel and Perpendicular Lines</p> <p>CSA: Chapter 3 Test</p> <p>CFA: Chapter 3 QUIZ</p> <p>D. Congruent Triangles</p>	<p>Chapter 1:</p> <p>MN State Standard 9.3.2.1</p> <p>MN State Standard 9.3.3.2</p> <p>Chapter 2:</p> <p>MN State Standard 9.2.3.7</p> <p>MN State Standard 9.3.2.1</p> <p>MN State Standard 9.3.2.2</p> <p>MN State Standard 9.3.2.3</p> <p>MN State Standard 9.3.2.4</p>	<p>Prentice Hall Geometry</p> <p>Chp 1: Lessons 1-2, 1-3, 1-4, 1-5, 1-6 (vocab only), 1-7</p> <p>Chp 2: Lessons 2-2, 2-3, 2-4, 2-5</p> <p>Chp 3: Lessons 3-1, 3-2, 3-3, 3-5, 3-7, 3-8</p> <p>Chp 4: Lessons 4-1, 4-2, 4-3, 4-4, 4-5, 4-6, 4-7</p> <p>Chp 5: Lessons 5-1, 5-2, 5-3, 5-4, 5-6</p> <p>Chp 6: Lessons 6-1, 6-2, 6-3, 6-4, 6-5, 6-6, 6-7, 6-8, 6-9, supplement between 6-1 & 6-2 with all quadrilateral vocabulary</p> <p>Chp 7: Lessons 7-1, 7-2, 7-3, 7-4, 7-5</p> <p>Chp 8: Lessons 8-1, 8-2, 8-3, 8-4</p> <p>Chp 10: Lessons 10-1, 10-2, 10-3, 10-4, 10-5,</p>

<ul style="list-style-type: none"> ● What are the properties of 3-dimensional shapes? ● What is mathematical proof and how is it used in geometry?  <p><i>UEQ: (1)</i></p> <p><i>What are the building blocks of geometry and their properties?</i></p> <p><i>What are the tools of geometry and their uses?</i></p> <p><i>What do the different mathematical symbols mean?</i></p> <p><i>What prior knowledge should students possess about geometry?</i></p> <p>A: The Tools of</p>	<p>congruent, parallel and perpendicular to describe geometric objects</p> <p>A6: Determine the length of segments using ruler and number line.</p> <p>A7: Determine the size of angles using a protractor.</p> <p>A8: Review coordinates of points.</p> <p>A9: Compare the length of segments using the distance formula.</p> <p>A10: Determine the coordinates of the midpoint of a segment.</p> <p>B. Reasoning and Proof</p> <p>B1. Recognize conditional statements and their parts</p> <p>B2. Write conditional statements and their converses</p> <p>B3. Write biconditionals</p>	<p>B. Reasoning and Proof</p> <p>LT1 I can recognize conditional statements and its parts.</p> <p>LT2 I can write converses of conditional statements.</p> <p>LT3 I can write biconditionals.</p> <p>LT4. I can write inverses and contrapositives.</p> <p>LT5 I can identify the truth value of a statement and use a counterexample to prove a statement is false when appropriate</p> <p>LT6 I can use the Law of Detachment.</p> <p>LT7 I can use the Law of Syllogism.</p> <p>LT8 I can connect reasoning in algebra and geometry.</p>	<p>CSA: Chapter 4 Test</p> <p>CFA: Chapter 4 QUIZ</p> <p>E: Triangles and Proof</p> <p>CSA: Chapter 5 Test</p> <p>CFA: Chapter 5 QUIZ</p> <p>F. Quadrilaterals</p> <p>CSA: Chapter 6 Test</p> <p>CFA: Chapter 6 QUIZ</p> <p>G. Constructions - if time allows</p> <p>CSA: Construction Test - if time allows</p> <p>CFA: Constructions Review Worksheet - if time allows</p> <p>A-G.</p> <p>CSA: Cumulative Final Exam</p>	<p>MN State Standard 9.3.3.2</p> <p>Chapter 3:</p> <p>MN State Standard 9.3.2.4</p> <p>MN State Standard 9.3.3.1</p> <p>MN State Standard 9.3.3.2</p> <p>MN State Standard 9.3.4.4</p> <p>Chapter 4:</p> <p>MN State Standard 9.3.2.4</p> <p>MN State Standard 9.3.3.3</p> <p>Chapter 5:</p>	<p>10-6, 10-7</p> <p>Chp 11: Lessons 1-1 (nets only), 11-1 (cross-sections only), 11-2, 11-3, 11-4, 11-5, 11-6, 11-7</p> <p>Chp 12: Lessons 12-1, 12-2, 12-3, 12-4, 12-5</p> <p>Chp 9: Lessons 9-1, 9-2, 9-3, 9-4, 9-5</p> <p>Geometer's' Sketchpad (Optional)</p>
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<p>Geometry A1: Basic elements of geometry and their properties. A2: Geometric symbols and their meaning. A3: Physical tools of geometry and their uses. A4: Prior mathematical knowledge necessary for the study of geometry.</p>  <p><i>UEQ: (2.1-2.5)</i></p> <ul style="list-style-type: none"> · <i>What are conditional statements?</i> · <i>How do we write converses of conditional statements and biconditionals?</i> · <i>What are "good" definitions?</i> 	<p>B4. Recognize and evaluate good definitions B5. Write inverse and contrapositive statements B6. Apply deductive reasoning using the laws of detachment and syllogism B7. Connect reasoning in algebra and geometry B8. Justify steps in a logical argument B9. Prove and apply theorems about angles</p> <p>C: Parallel and Perpendicular Lines</p> <p>C1: Differentiate the types of relationships of pairs of angles formed by a transversal and parallel lines. C2: Apply conjectures to prove that two lines are parallel based on information about the pairs of angles. C3: Define parallel and/or perpendicular lines. C4: Prove that the sum of the measures of the angles of any triangle is 180 degrees, using parallel lines conjectures.</p>	<p>LT9 I can prove and apply theorems about angles.</p> <p>C: Parallel and Perpendicular Lines</p> <p>LT1 I can identify angles formed by two lines and a transversal. LT2 I can prove and use properties of parallel lines. LT3 I can use a transversal in proving lines parallel. LT4 I can classify triangles and find the measures of their angles. LT5 I can use exterior angles of triangles. LT6 I can name and classify polygons. LT7 I can graph lines given their equations. LT8 I can write equations of lines.</p>	<p>H. Similarity</p> <p>CSA: Chapter 7 Test CFA: Chapter 7 QUIZ</p> <p>I: Side/Angle Relationships in Right Triangles</p> <p>CSA: Chapter 8 Test CFA: Chapter 8 QUIZ</p> <p>J: Area</p> <p>CSA: Chapter 10 Test CFA: Chapter 10 QUIZ</p> <p>K. Space Figures</p> <p>CSA: Chapter 11 Test CFA: Chapter 11 QUIZ</p> <p>L. Circles</p>	<p>MN State Standard 9.3.2.4 MN State Standard 9.3.2.5 MN State Standard 9.3.3.3 Chapter 6: MN State Standards 9.3.2.5 MN State Standards 9.3.3.7 MN State Standards 9.3.4.4 Construcitons Unit: MN State Standards 9.3.2.5 Chapter 7:</p>	
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<p>· <i>How do we connect reasoning in algebra and geometry?</i></p> <p>· <i>How do we prove and apply theorems about angles?</i></p> <p>B. Reasoning and Proof</p> <p>B1. Conditional statements</p> <p>B2. Biconditionals and definitions</p> <p>B3. Inverses and Contrapositives</p> <p>B4. Deductive reasoning</p> <p>B5. Reasoning in algebra</p> <p>B6. Proving angles congruent</p>  <p>UEQ- (3)</p> <p><i>What are the names and properties of the pairs of angles formed when a transversal intersects 2 lines or 2 parallel lines?</i></p> <p><i>How do the slopes of parallel and perpendicular lines</i></p>	<p>C5: Discover and develop the formula for finding polygon angle-measure sums, using the triangle-sum conjecture.</p> <p>C6: Apply the Triangle-Sum conjecture and the Polygon-Sum conjecture to solve problems.</p> <p>C7: Examine equations of lines on the coordinate plane.</p> <p>C8: Examine the relationships of slopes of parallel and perpendicular lines.</p> <p>D. Congruent Triangles</p> <p>D1. Recognize congruent figures and their corresponding parts</p> <p>D2. Prove two triangles are congruent using the SSS and SAS Postulates</p> <p>D3. Prove two triangles congruent using the ASA Postulate and the AAS Theorem</p> <p>D4. Use triangle congruence and CPCTC to prove that parts of two triangles are congruent</p> <p>D5. Use and apply</p>	<p>LT9 I can relate slope and parallel and perpendicular lines.</p> <p>D. Congruent Triangles</p> <p>LT1 I can recognize congruent figures and their corresponding parts.</p> <p>LT2 I can prove two triangles congruent using the SSS and SAS Postulates.</p> <p>LT3 I can prove two triangles congruent using the ASA Postulate and the AAS Theorem.</p> <p>LT4 I can use triangle congruence and CPCTC to prove that parts of two triangles are congruent.</p> <p>LT5 I can use and apply properties of isosceles triangles.</p> <p>LT6 I can prove triangles congruent using the HL Theorem</p>	<p>CSA: Chapter 12 Test</p> <p>CFA: Chapter 12 QUIZ</p> <p>M. Transformations</p> <p>CSA: Chapter 9 Test</p> <p>CFA: Chapter 9 QUIZ</p> <p>H-M.</p> <p>CSA: Cumulative Final Exam</p>	<p>MN State Standards 9.3.3.6</p> <p>MN State Standards 9.3.4.7</p> <p>Chapter 8:</p> <p>MN State Standard 9.3.3.4</p> <p>MN State Standard 9.3.3.5</p> <p>MN State Standard 9.3.4.1</p> <p>MN State Standard 9.3.4.2</p> <p>MN State Standard 9.3.4.3</p> <p>MN State Standard 9.3.4.7</p> <p>Chapter 10:</p> <p>MN State Standard 9.3.1.2</p>	
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<p><i>relate?</i></p> <p><i>How do you classify and what are the properties of various special polygons?</i></p> <p>C: Parallel and Perpendicular Lines</p> <p>C1: Properties of Parallel Lines C2: Proving lines parallel C3: Parallel and perpendicular lines C4: Parallel lines and triangle-sum theorem C5: The Polygon Angle-Sum Theorem C6: Lines in the Coordinate Plane C7: Slopes of Parallel and Perpendicular Lines</p>  <p>UEQ: (4.1-4.7)</p> <p><i>How do we identify congruent figures and</i></p>	<p>properties of isosceles triangles D6. Prove triangles congruent using the HL Theorem D7. Identify congruent overlapping triangles D8. Prove two triangles congruent by first proving two other triangles congruent</p> <p>E: Triangles and Proof</p> <p>E1: Build triangle midsegments and determine their properties. E2: Examine the properties of perpendicular bisectors including the distance from a point to a line. E3: Examine the properties of angle bisectors. E4: Distinguish between altitudes and medians. E5: Examine the different points of</p>	<p>LT7 I can prove two triangles congruent by first proving two other triangles are congruent.</p> <p>E: Triangles and Proof</p> <p>LT1 I can identify and use properties of midsegments to solve problems. LT2 I can identify and use properties of perpendicular bisectors and angle bisectors. LT3 I can identify and use properties of perpendicular bisectors/circumcenters and angles bisectors/incenters. LT4 I can identify properties of medians/centroids and altitudes/orthocenters of a triangle.</p>		<p>MN State Standard 9.3.1.3</p> <p>MN State Standard 9.3.1.4</p> <p>MN State Standard 9.3.1.5</p> <p>Chapter 11:</p> <p>MN State Standard 9.3.1.1</p> <p>MN State Standard 9.3.1.2</p> <p>MN State Standard 9.3.1.3</p> <p>MN State Standard 9.3.1.4</p> <p>MN State Standard 9.3.1.5</p> <p>Chapter 12:</p> <p>MN State Standard 9.3.3.8</p>	
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<p><i>their corresponding parts?</i></p> <ul style="list-style-type: none"> · <i>How do we prove two triangles are congruent using triangle congruence postulates?</i> · <i>What is CPCTC and how do we use it to prove that parts of two triangles are congruent?</i> · <i>How do we use and apply properties of isosceles triangles?</i> <p>D. Congruent Triangles</p> <p>D1. Congruent Figures D2. Triangle Congruence by SSS and SAS D3. Triangle Congruence by ASA and AAS D4. Using Congruent Triangles: CPCTC D5. Isosceles and Equilateral Triangles D6. Congruence in Right Triangles D7. Using Corresponding Parts of Congruent Triangles</p> 	<p>concurrency in a triangle including circumcenter, incenter, centroid and orthocenter and determine any special properties they may have.</p> <p>E6: Analyze the relationships between the size of an angle and the size of the side opposite that angle.</p> <p>F. Quadrilaterals</p> <p>F1: Investigate the definitions of different polygons to aid in classifying them. F2: Examine properties of parallelograms. F3: Apply the properties of parallelograms to solve problems and to complete proofs. F4: Apply properties of a parallelogram to prove that certain quadrilaterals are parallelograms. F5: Examine the properties of special quadrilaterals. F6: Apply the properties of special quadrilaterals in proving conjectures.</p>	<p>LT5 I can use inequalities involving angles of triangles. LT6 I can use inequalities involving sides of triangles.</p> <p>F. Quadrilaterals</p> <p>LT1 I can define and classify special types of quadrilaterals. LT2 I can find the sums of the measures of the interior and exterior angles of polygons. LT3 I can use relationships among sides and among angles of parallelograms. LT4 I can use relationships involving diagonals of parallelograms or transversals. LT5 I can determine whether a quadrilateral is a parallelogram. LT6 I can use properties of diagonals of rhombuses and rectangles.</p>		<p>MN State Standard 9.3.4.5</p> <p>Chapter 9:</p> <p>MN State Standard 9.3.4.6</p>	
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<p><i>UEQ: (5)</i></p> <p><i>What relationships exist between the sides and angles of a triangle?</i></p> <p><i>What are the properties of segments within triangles?</i></p> <p><i>What is indirect reasoning and how can it be applied to geometrical proofs?</i></p> <p>E: Triangles and Proof E1: Special Segments in triangles. E2: Side and Angle Relationships in Triangles.</p> <p><i>UEQ- (6)</i> <i>What are the properties of parallelograms and other special quadrilaterals?</i></p> <p><i>How are quadrilaterals classified?</i></p>	<p>F7: Examine and apply the properties of kites and rhombi. F8: Place plane figures on the coordinate plane to aid in proving properties of quadrilaterals. F9: Solve proofs utilizing coordinate geometry.</p> <p>G: Constructions - if time allows</p> <p>G1: Construct duplicate segments and angles using a compass and straightedge. G2: Construct perpendicular bisectors. G3: Construct angle bisectors G4: Construct parallel and perpendicular lines.</p> <p>H. Similarity</p> <p>H1. Write ratios and solve proportions H2. Identify similar polygons H3. Apply properties of</p>	<p>LT7 I can determine whether a parallelogram is a rhombus or a rectangle. LT8 I can verify and use properties of trapezoids and kites. LT9 I can name coordinates of special figures by using their properties. LT10 I can prove theorems using figures in the coordinate plane.</p> <p>G: Constructions - if time allows</p> <p>LT1. I can duplicate, by construction, a given segment and angle. LT2. I can construct a perpendicular bisector and angle bisector. LT3. I can construct a line parallel or perpendicular to a given line.</p> <p>H. Similarity</p>			
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<p><i>How are quadrilaterals placed on the coordinate plane based on their properties?</i></p> <p><i>How are properties of figures verified using coordinate techniques?</i></p> <p>F. Quadrilaterals F1: Classifying Quadrilaterals F2: Properties of Parallelograms F3: Proving That a Quadrilateral is a Parallelogram F4: Special Parallelograms F5: Trapezoids and Kites F6: Placing Figures in the Coordinate Plane F7: Proofs Using Coordinate Geometry</p> <p><i>UEQ: (7.1-7.5)</i></p> <ul style="list-style-type: none"> <i>How do we write ratios and solve proportions?</i> <i>What are similar polygons and how can we apply them in real-life situations?</i> 	<p>similar polygons H4. Use and apply AA, SAS, and SSS similarity statements H5. Find and use relationships in similar right triangles H6. Use the Side-Splitter Theorem H7. Use the Triangle-Angle-Bisector Theorem</p> <p>I: Side/Angle Relationships in Right Triangles</p> <p>I1: Apply the Pythagorean Theorem and its converse to Right Triangles. I2: Classify Triangles as Acute, Right, or Obtuse using the Pythagorean Theorem I3: Determine the relationship between the sides and angles of 45-45-90 and 30-60-90 triangles. I4: Determine missing side and angle measurements by applying the 45-45-90</p>	<p>LT 1 I can recognize similar figures and their corresponding parts. LT 2 I can solve a proportion. LT 3 I can find side lengths using ratios in similar polygons. LT 4 I can prove triangles are similar. LT 5 I can write ratios in similar right triangles. LT 6 I can use the side-splitter theorem. LT 7 I can solve for side lengths or angle measures in similar triangles using proportions.</p> <p>I: Side/Angle Relationships in Right Triangles</p> <p>LT 1 I can find a side length of a triangle using the Pythagorean Theorem LT 2 I can find a side length using the relationships between</p>			
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<ul style="list-style-type: none"> · <i>How do we use and apply AA~, SAS~, and SSS~ similarity statements?</i> · <i>What relationships do similar right triangles have and how can we use them?</i> · <i>How can we use properties of split triangles to solve for missing parts?</i> <p>G. Constructions - if time allows</p> <p>G1: Physical tools of geometry and their uses. G2: Constructing perpendicular and angle bisectors. G3: Constructing parallel and perpendicular lines.</p> <p>H. Similarity</p> <p>H1. Ratios and Proportions H2. Similar Polygons H3. Proving Triangles Similar H4. Similarity in Right Triangles H5. Proportions in Triangles</p>	<p>and 30-60-90 Triangle properties.</p> <p>I5: Apply the Sine, Cosine and Tangent ratios in finding the measures of angles and sides in any right triangle.</p> <p>J: Area</p> <p>J1. Find the area of a parallelogram J2. Find the area of a triangle J3. Find the area of a trapezoid J4. Find the area of a rhombus or kite J5. Find the area of a regular polygon J6. Using the scale factor, find the perimeters and areas of similar figures. J7. Find the area of a regular polygon using trigonometry J8. Find the area of a triangle using trigonometry J9. Find the measures of central angles and</p>	<p>the sides of a 45-45-90 triangle.</p> <p>LT 3 I can find a side length using the relationships between the sides of a 30-60-90 triangle.</p> <p>LT 4 I can use Sine, Cosine, and Tangent in right triangles to find missing sides or angles.</p> <p>LT 5 I can solve word problems using angles of elevation and depression.</p> <p>J: Area</p> <p>LT 1 I can find the area of a parallelogram. LT 2 I can find the area of a triangle. LT 3 I can find the area of a rhombus, a trapezoid, and a kite. LT 4 I can find the area of a regular polygon. LT 5 I can find and use the relationships between the side</p>			
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<p><i>UEQ: (8)</i></p> <p><i>What is the Pythagorean Theorem and how can it be used to determine side lengths and types of triangles?</i></p> <p><i>What are the special Right Triangles and the relationships between their sides and angles?</i></p> <p><i>What other relationships exist between the sides and angles of all right triangles?</i></p> <p>I: Side/Angle Relationships in Right Triangles I1: Pythagorean Theorem I2: Special Right Triangles I3: Right Triangle</p>	<p>arcs J10. Find circumference and arc length J11. Find the areas of circles, sectors, and segments of circles</p> <p>K: Space Figures</p> <p>K1: Draw nets for 3-dimensional figures. K2. Identify faces, edges, vertices and cross sections of various space figures. K3: Apply the Surface Area of Prisms and Cylinders to various real-life examples. K4: Apply the Volume of Prisms and Cylinders to various real-life examples. K5: Apply the Surface Area of Pyramids and Cones to various real-life examples. K6: Apply the Volume of Pyramids</p>	<p>lengths and area of similar figures. LT 6 I can find circumference and arc length in a circle. LT 7 I can find the area of a circle and parts of a circle.</p> <p>K: Space Figures</p> <p>LT 1 I can draw nets of a 3-dimensional figure. LT 2 I can describe cross sections of a 3-dimensional figure. LT 3 I can find the surface area of a prism and cylinder. LT 4 I can find the volume of a prism and cylinder. LT 5 I can find the surface area of a pyramid and cone. LT 6 I can find the volume of a pyramid and cone. LT 7 I can find the surface area of a sphere. LT 8 I can find the volume of a sphere.</p>			
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<p>Trigonometric Ratios</p> <p><i>UEQ: (10.1-10.8)</i></p> <ul style="list-style-type: none"> · How do we find the area of different polygons? · How do we find the perimeter and area of similar figures? · How can we use trigonometry to find the area of different polygons? · How do we find the measures, lengths and areas of different parts to a circle? <p>J. Area</p> <p>J1. Areas of Parallelograms and Triangles J2. Areas of Trapezoids, Rhombuses, and Kites J3. Areas of Regular Polygons J4. Perimeters and Areas of Similar Figures J5. Trigonometry and Area J6. Circles and Arcs J7. Areas of Circles and</p>	<p>and Cones to various real-life examples.</p> <p>K7: Apply the Surface Area and Volume of Spheres to various real-life examples.</p> <p>K8: Compare the Surface Areas and Volumes of similar space figures and develop a relationship.</p> <p>K9: Using the scale factor, determine SA and Vol of space figures knowing the SA and Vol of a similar figure.</p> <p>L: Circles</p> <p>L1: Apply circle properties to solve problems. L2: Examine properties of a circle dealing with central angles and their intercepted arcs. L3: Apply properties of inscribed angles and their intercepted arcs to solve problems.</p>	<p>LT 9 I can use relationships between side lengths, areas, and volumes of similar solids.</p> <p>L: Circles</p> <p>LT 1 I can apply the relationship between a radius and tangent line to find missing information. LT 2 I can find chord lengths in circles. LT 3 I can find the measures of inscribed angles in a circle. LT 4 I can find the measure of arcs using given angles. LT 5 I can find segment lengths related to a circle. LT 6 I can write the equation of a circle.</p> <p>M. Transformations</p> <p>LT 1 I can recognize whether a figure has reflectional or rotational symmetry and draw all lines of</p>			
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<p>Sectors</p> <p><i>UEQ: (11)</i></p> <p><i>What are the defining elements of space figures?</i></p> <p><i>How are Surface Area and Volume Calculated for different space figures?</i></p> <p><i>How are the surface area and volume of similar space figures related?</i></p> <p>K: Space Figures K1: Defining Space Figures and their Cross Sections K2: SA of Prisms, Cylinders, Pyramids, Cones and Spheres K3: Volume of Prisms, Cylinders, Pyramids, Cones and Spheres K4: Areas and Volumes of Similar</p>	<p>L4: Apply properties of circles and the relationships of angle measures and segment lengths that intersect the circle. L5: Identify the center and radius of a circle, given the coordinate equation of the circle. L6: Identify the equation of a circle, given critical information of the circle.</p> <p>M. Transformations</p> <p>M1: Identify images and corresponding parts for a transformation. M2: Develop rules to describe translations. M3: Identify reflection images for a transformation. M4: Demonstrate how to draw reflection images. M5: Demonstrate how to draw a rotation image. M6: Identify a rotation image. M7: Identify lines of symmetry. M8: Identify rotational and/or point symmetry. M9: Explain how to find a scale factor. M10: Demonstrate how to graph a dilation image. M11: Recognize and</p>	<p>symmetry, and identify angles of symmetry when appropriate. LT 2 I can perform translations. LT 3 I can perform reflections. LT 4 I can perform rotations. LT 5 I can perform dilations.</p>			
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<p>Space Figures.</p> <p><i>UEQ- (12)</i> <i>What are the properties of circles and of lines and segments that intersect circles?</i></p> <p><i>How are the angles formed by intersecting lines and segments with a circle related to the intercepted arcs?</i></p> <p>L. Circles</p> <p>L1: Tangent Lines L2: Chords and Arcs L3: Inscribed Angles L4: Angle Measures and Segment Lengths L5: Circles in the Coordinate Plane <i>UEQ-Chapter 9</i> <i>How are transformations used to create a congruent image of a given shape?</i> <i>How are transformations used to relate two given congruent shapes to each other?</i> <i>What effects does applying two consecutive transformations have?</i></p>	<p>interpret the transformation being applied.</p>				
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M. Transformations

- M1: Translations
- M2: Reflections
- M3: Rotations
- M4: Symmetry
- M5: Dilations