

# Geometry

---

This course offers a thorough introduction to the basic concepts of plane (Euclidean) geometry through a series of conjectures and formal proofs. Prisms, Pyramids, cylinders, cones and spheres. Much emphasis is placed on the application of algebra skills.

---

## *Course Information:*

Frequency & Duration: Daily for 42 minutes

Text: Glencoe, McGraw-Hill Geometry – Copyright 2010

Content: Right Triangles

Duration: August/September (3 weeks)

<b>Essential Question:</b>	How do you find a side length in a right triangle?
<b>Skill:</b>	<ul style="list-style-type: none"> <li>• Use the Pythagorean Theorem and its converse.</li> <li>• Use properties of special right triangles.</li> </ul>
<b>Instructional/Engagement Activities</b>	
<b>Assessment:</b>	<ul style="list-style-type: none"> <li>• Find the hypotenuse of a right triangle given the length of its two legs.</li> <li>• Find the side of a right triangle given the length of the hypotenuse and one of its legs.</li> <li>• Given triangle side lengths of a triangle, identify the triangle as acute, right, or obtuse.</li> <li>• Use the properties of the special right triangles to find the missing lengths.</li> <li>• Homework</li> <li>• Quizzes/Tests/Common Assessment.</li> </ul>
<b>Resources:</b>	Glencoe, McGraw-Hill – Copyright 2010 (pages 541-560)
<b>Standards:</b>	<p>CC.2.2.HS.C.9-Prove the Pythagorean identity and use it to calculate trigonometric ratios.            CC.2.3.HS.A.3-Verify and apply geometric theorems as they relate to geometric figures.            CC.2.3.8.A.3-Understand and apply the Pythagorean theorem to solve problems.            CC.2.3.HS.A.11- Apply coordinate geometry to prove simple geometric theorems algebraically.            CC.2.3.HS.A.14- Apply geometric concepts to model and solve real-world problems.            G.1.3.2.1-Write, analyze, complete, or identify formal proofs.            G.1.3.2-Write formal proofs and/or use logic statements to construct or validate arguments.            G.1.2.1.1-Identify and/or use properties of triangles.            G.1.2.1.3- Identify and/or use properties of isosceles and equilateral triangles.            G.1.2.1-Recognize and/or apply properties of angles, polygons, and polyhedra.            CC.2.3.HS.A.7-Apply trigonometric ratios to solve problems involving right triangles.            G.2.1.1.1-Use the Pythagorean theorem to write and/or solve problems involving right triangles.            G.2.1.1.2-Use trigonometric ratios to write and/or solve problems involving right triangles.            G.2.1.1-Solve problems involving right triangles.            G.2.1.2.1-Calculate the distance and/or midpoint between two points on a number line or on a coordinate plane.            G.2.1.2.2-Relate slope to perpendicularity and/or parallelism.            G.2.1.2.3-Use slope, distance, and/or midpoint between two points on a coordinate plane to establish properties of a two-dimensional shape.</p>

G.2.1.2-Solve problems using analytical geometry.

Vocabulary:

Pythagorean triple- a set of three nonzero whole numbers that satisfy the Pythagorean theorem

Comments:

Content: Tools of Geometry

Duration: September/October (3 weeks)

<b>Essential Question:</b>	What are the building blocks of Geometry?
<b>Skill:</b>	<ul style="list-style-type: none"> <li>• Understand basic terms and postulates of geometry.</li> <li>• Find and compare lengths of segments and the measures of angles.</li> <li>• Identify special angle pairs and use them to find angle measures.</li> <li>• Use distance and midpoint formulas when given 2 points in the coordinate plane.</li> <li>• Find the perimeter, circumference, and/or area of basic shapes.</li> </ul>
<b>Instructional/Engagement Activities</b>	<ul style="list-style-type: none"> <li>• Using a diagram of a plane, lines, and points, name 3 collinear points, 4 coplanar points, and the intersection of a line and a plane.</li> <li>• Find the perimeter of triangle ABC with given vertices.</li> <li>• Find the area of a circle given a diameter.</li> </ul>
<b>Assessment:</b>	<ul style="list-style-type: none"> <li>• Identify the intersection of two planes.</li> <li>• Identify opposite rays.</li> <li>• Homework</li> <li>• Quizzes/Tests/Common Assessment.</li> </ul>
<b>Resources:</b>	Glencoe, McGraw-Hill – Copyright 2010 (pages 5-66)
<b>Standards:</b>	<p>CC.2.3.HS.A.11- Apply coordinate geometry to prove simple geometric theorems algebraically.</p> <p>CC.2.3.8.A.2- Understand and apply congruence, similarity, and geometric transformations using various tools.</p> <p>CC.2.3.HS.A.3-Verify and apply geometric theorems as they relate to geometric figures.</p>
<b>Vocabulary:</b>	<p>Angle bisector- is a ray that divides an angle into two congruent angles; Congruent segments- segments that have the same length; Construction- is a geometric figure made with only a straightedge and compass; Linear pair- a pair of adjacent angles whose non-common sides are opposite rays; Perpendicular bisector- is a line, segment, or ray that is perpendicular to the segment at its midpoint; Postulate- is an accepted statement of fact; Supplementary angles- two angles whose sum is 180 degrees; Segment bisector- a line, segment, ray, or plane that intersects a segment at its midpoint; Vertical angles- two angles whose sides form two pairs of opposite rays</p>
<b>Comments:</b>	

Content: Parallel and Perpendicular Lines

Duration: October (3 weeks)

<b>Essential Question:</b>	How do you prove that two lines are parallel, perpendicular, or neither?
<b>Skill:</b>	<ul style="list-style-type: none"> <li>• Identify relationships between figures in space.</li> <li>• Identify angles formed by two lines and a transversal.</li> <li>• Prove theorems about parallel lines.</li> <li>• Use properties of parallel lines to find angle measures.</li> <li>• Use parallel lines to prove a theorem about triangles.</li> <li>• Find measures of angles of triangles.</li> <li>• Construct parallel and perpendicular lines.</li> <li>• Graph and write linear equations.</li> <li>• Relate slope to parallel and perpendicular lines.</li> </ul>
<b>Instructional/Engagement Activities</b>	
<b>Assessment:</b>	<ul style="list-style-type: none"> <li>• Write the definition and draw a diagram of each: skew lines, parallel lines, and perpendicular lines.</li> <li>• Write an equation of a line that passes through two points.</li> <li>• Find the slope of a line that is parallel or perpendicular to a given line.</li> <li>• Draw a diagram of two parallel lines cut by a transversal and then identify a pair of: alternate interior angles, alternate exterior angles, corresponding angles, and same-side interior angles.</li> <li>• Homework</li> <li>• Quizzes/Tests/Common Assessment.</li> </ul>
<b>Resources:</b>	Glencoe, McGraw-Hill – Copyright 2010 (pages 171-212)
<b>Standards:</b>	CC.2.3.HS.A.11- Apply coordinate geometry to prove simple geometric theorems algebraically.
<b>Vocabulary:</b>	Parallel lines- lines that lie in the same plane and never intersect; Skew lines- lines that do not lie in the same plane; Transversal- a line that intersects two or more lines at distinct points.
<b>Comments:</b>	

Content: Congruent Triangles

Duration: November (3 weeks)

<b>Essential Question:</b>	How do you prove that two triangles are congruent?
<b>Skill:</b>	<ul style="list-style-type: none"> <li>• Use algebra to write two-column proofs.</li> <li>• Identify and classify triangles by angle and side measures.</li> <li>• Apply the triangle angle-sum and exterior angle theorems.</li> <li>• Recognize congruent figures and their corresponding parts.</li> <li>• Use SSS, SAS, ASA, AAS, or HL to prove that triangles are congruent.</li> <li>• Use CPCTC to prove that corresponding parts of congruent triangles are congruent.</li> <li>• Use and apply properties of isosceles and equilateral triangles.</li> <li>• Identify congruent overlapping triangles.</li> </ul>
<b>Instructional/Engagement Activities</b>	
<b>Assessment:</b>	<ul style="list-style-type: none"> <li>• Prove triangles congruent using the 5 methods of triangle congruency.</li> <li>• Identify triangle correspondence.</li> <li>• Identify and use CPCTC</li> <li>• Homework</li> <li>• Quizzes/Tests/Common Assessment.</li> </ul>
<b>Resources:</b>	Glencoe, McGraw-Hill – Copyright 2010 (pages 134-141; 235-291)
<b>Standards:</b>	<p>CC.2.3.HS.A.3--Verify and apply geometric theorems as they relate to geometric figures.</p> <p>G.1.2.1-Recognize and/or apply properties of angles, polygons, and polyhedra.</p> <p>G.1.2.1.1-Identify and/or use properties of triangles.</p> <p>G.1.2.1.3-Identify and/or use properties of isosceles and equilateral triangles.</p> <p>G.1.3.1-Use properties of congruence, correspondence, and similarity in problem-solving settings involving two- and three-dimensional figures.</p> <p>G.1.3.1.1-Identify and/or use properties of congruent and similar polygons or solids.</p>
<b>Vocabulary:</b>	<p>Base angles of an Isosceles triangle- the angles opposite the legs of an isosceles triangle;</p> <p>Congruent polygons- polygons that have the same size and the same shape; Corollary- a theorem that can be proved easily using another theorem; Hypotenuse- in a right triangle, the side that is opposite the right angle; Vertex angle of an Isosceles triangle- the angle that is opposite the base of an isosceles triangle</p>
<b>Comments:</b>	

Content: Relationships Within Triangles

Duration: December (3 weeks)

<b>Essential Question:</b>	How do you solve problems that involve measurements of triangles and how do you use coordinate geometry to find relationships within triangles?
<b>Skill:</b>	<ul style="list-style-type: none"> <li>• Use properties of mid-segments to solve problems.</li> <li>• Use properties of perpendicular bisectors and angle bisectors.</li> <li>• Identify properties of perpendicular bisectors and angle bisectors.</li> <li>• Identify properties of medians and altitudes of a triangle.</li> <li>• Use inequalities involving angles and sides of triangles.</li> </ul>
<b>Instructional/Engagement Activities</b>	
<b>Assessment:</b>	<ul style="list-style-type: none"> <li>• Identify and use the circumcenter of a triangle.</li> <li>• Identify and use the orthocenter of a triangle.</li> <li>• Identify and use the incenter of a triangle.</li> <li>• Identify and use the centroid of a triangle.</li> <li>• List the angles and sides of a triangle in a given order.</li> <li>• Homework</li> <li>• Quizzes/Tests/Common Assessment.</li> </ul>
<b>Resources:</b>	Glencoe, McGraw-Hill – Copyright 2010 (pages 322-349;360-366)
<b>Standards:</b>	<p>CC.2.3.HS.A.11- Apply coordinate geometry to prove simple geometric theorems algebraically</p> <p>G.1.2.1-Recognize and/or apply properties of angles, polygons, and polyhedra.</p> <p>G.1.2.1.1-Identify and/or use properties of triangles.</p> <p>G.1.2.1.3-Identify and/or use properties of isosceles and equilateral triangles.</p> <p>CC.2.3.HS.A.3--Verify and apply geometric theorems as they relate to geometric figures.</p> <p>G.1.3.2-Write formal proofs and/or use logic statements to construct or validate arguments.</p> <p>G.1.3.2.1-Write, analyze, complete, or identify formal proofs.</p> <p>G.2.1.2-Solve problems using analytical geometry.</p> <p>G.2.1.2.1-Calculate the distance and/or midpoint between two points on a number line or on a coordinate plane.</p> <p>G.2.1.2.2-Relate slope to perpendicularity and/or parallelism.</p> <p>G.2.1.2.3-Use slope, distance, and/or midpoint between two points on a coordinate plane to establish properties of a two-dimensional shape.</p> <p>G.2.2.1-Use and/or compare measurements of angles.</p> <p>G.2.2.1.2-Use properties of angles formed when two parallel lines are cut by a transversal to find the measures of missing angles.</p>

Vocabulary:

Altitude of a triangle- is the perpendicular segment from a vertex to the line containing the side opposite that vertex; Centroid of a triangle- is the point of concurrency of the medians of the triangle; Circumcenter of a triangle- is the point of concurrency of the perpendicular bisectors of the sides of the triangle; Concurrent lines- three or more lines that meet in one point; Distance from a point to a line- the length of the perpendicular segment from the point to the line

Comments:



Content: Polygons and Quadrilaterals

Duration: January (3 weeks)

<b>Essential Question:</b>	How can you classify quadrilaterals and how do you find the sum of the measures of polygon angles?
<b>Skill:</b>	<ul style="list-style-type: none"> <li>• Find the sum of the measures of the interior angles of a polygon.</li> <li>• Find the sum of the measures of the exterior angles of a polygon.</li> <li>• Use relationships among sides and angles of parallelograms.</li> <li>• Use relationships among diagonals of parallelograms.</li> <li>• Determine whether a quadrilateral is a parallelogram.</li> <li>• Define and classify special types of parallelograms.</li> <li>• Use properties of diagonals of rhombuses and rectangles.</li> <li>• Determine whether a parallelogram is a rhombus or rectangle.</li> <li>• Verify and use properties of trapezoids and kites.</li> <li>• Classify polygons in the coordinate plane.</li> <li>• Prove theorems using figures in the coordinate plane.</li> </ul>
<b>Instructional/Engagement Activities</b>	
<b>Assessment:</b>	<ul style="list-style-type: none"> <li>• Identify the sum of the measure of the interior angle of polygons given their number of sides.</li> <li>• Identify the measure on an interior and exterior angle of a regular polygon given their number of sides.</li> <li>• Determine the most precise name of quadrilateral given their coordinates.</li> <li>• Homework</li> <li>• Quizzes/Tests/Common Assessment.</li> </ul>
<b>Resources:</b>	Glencoe, McGraw-Hill – Copyright 2010 (pages 389-444)
<b>Standards:</b>	<p>CC.2.3.HS.A.11- Apply coordinate geometry to prove simple geometric theorems algebraically.</p> <p>G.1.2.1-Recognize and/or apply properties of angles, polygons, and polyhedra.</p> <p>G.1.2.1.2-Identify and/or use properties of quadrilaterals.</p> <p>G.1.2.1.4-Identify and/or use properties of regular polygons.</p> <p>CC.2.3.HS.A.3--Verify and apply geometric theorems as they relate to geometric figures.</p> <p>G.1.3.2-Write formal proofs and/or use logic statements to construct or validate arguments.</p> <p>G.1.3.2.1-Write, analyze, complete, or identify formal proofs.</p> <p>G.2.1.2-Solve problems using analytical geometry.</p> <p>G.2.1.2.1-Calculate the distance and/or midpoint between two points on a number line or on a coordinate plane.</p> <p>G.2.1.2.2-Relate slope to perpendicularity and/or parallelism.</p> <p>G.2.1.2.3-Use slope, distance, and/or midpoint between two points on a coordinate plane to establish properties of a two-dimensional shape.</p>

Vocabulary:

Equiangular polygon- polygon with all of its angles congruent; Equilateral polygon- polygon with all of its sides congruent; Isosceles trapezoid- trapezoid with its legs congruent; Kite- quadrilateral with two pairs of consecutive sides congruent; Parallelogram- quadrilateral with opposite sides parallel; Rectangle- parallelogram with four right angles; Regular polygon- polygon that is both equilateral and equiangular; Rhombus- parallelogram with four congruent sides; Square- parallelogram with four right angles and four congruent sides; Trapezoid- quadrilateral with exactly one pair of parallel sides

Comments:

Content: Similarity

Duration: February (3 weeks)

<b>Essential Question:</b>	How do you use proportions to find side lengths in similar polygons and how do you show two triangles are similar?
<b>Skill:</b>	<ul style="list-style-type: none"> <li>• Write ratios and solve proportions.</li> <li>• Identify and apply similar polygons.</li> <li>• Use AA, SAS, and SSS to prove that triangles are similar.</li> <li>• Use similarity to find indirect measurements.</li> <li>• Find and use relationships in similar right triangles.</li> <li>• Use the Mid-Segment Theorem and the Triangle-Angle-Bisector Theorem.</li> <li>• Interpret scale models and use scale factor.</li> </ul>
<b>Instructional/Engagement Activities</b>	<ul style="list-style-type: none"> <li>• Identify similar figures.</li> <li>• Solve ratios and proportions.</li> <li>• Use the three tests of triangle similarity.</li> <li>• Use scale factor.</li> <li>• Homework</li> <li>• Quizzes/Tests/Common Assessment.</li> </ul>
<b>Assessment:</b>	<ul style="list-style-type: none"> <li>• Identify similar figures.</li> <li>• Solve ratios and proportions.</li> <li>• Use the three tests of triangle similarity.</li> <li>• Use scale factor.</li> <li>• Homework</li> <li>• Quizzes/Tests/Common Assessment.</li> </ul>
<b>Resources:</b>	Glencoe, McGraw-Hill – Copyright 2010 (pages 457-483; 512-517)
<b>Standards:</b>	<p>CC.2.3.HS.A.6-Verify and apply theorems involving similarity as they relate to plane figures.</p> <p>CC.2.3.HS.A.3--Verify and apply geometric theorems as they relate to geometric figures.</p> <p>CC.2.3.HS.A.11- Apply coordinate geometry to prove simple geometric theorems algebraically.</p> <p>CC.2.3.HS.A.14-Apply geometric concepts to model and solve real-world problems.G.1.3.1-Use properties of congruence, correspondence, and similarity in problem-solving settings involving two- and three-dimensional figures.</p> <p>G.1.3.1.1-Identify and/or use properties of congruent and similar polygons or solids.</p> <p>G.1.3.1.2-Identify and/or use proportional relationships in similar figures.</p> <p>G.1.2.1-Recognize and/or apply properties of angles, polygons, and polyhedra.</p> <p>G.1.2.1.1-Identify and/or use properties of triangles.</p> <p>G.1.2.1.2-Identify and/or use properties of quadrilaterals.</p> <p>G.1.2.1.3- Identify and/or use properties of isosceles and equilateral triangles.</p>
<b>Vocabulary:</b>	<p>Extended proportion- when three or more ratios are equal; Extended ratio- compares three or more numbers; Extremes- the first and last numbers in a proportion; Means- the middle numbers in a proportion; Proportion- two ratios that equal each other; Ratio- a comparison of two quantities by division; Scale factor- the ratio of corresponding linear measurements of two similar figures; Similar polygons- polygons with corresponding angles congruent and corresponding sides in proportion</p>

Content: Area

Duration: March (3 weeks)

<b>Essential Question:</b>	How do you find the area of a polygon or find the circumference and area of a circle?
<b>Skill:</b>	<ul style="list-style-type: none"> <li>• Find the area of parallelograms, triangles, trapezoids, rhombi, kites, and regular polygons.</li> <li>• Find the circumference.</li> <li>• Find the areas of circles and sectors.</li> <li>• Find the perimeter of polygons and triangles.</li> </ul>
<b>Instructional/Engagement Activities</b>	
<b>Assessment:</b>	<ul style="list-style-type: none"> <li>• Find the area of parallelograms, triangles, trapezoids, rhombi, kites, circles, and sectors of circles.</li> <li>• Find the perimeter or circumference of given figures.</li> <li>• Homework</li> <li>• Quizzes/Tests/Common Assessment.</li> </ul>
<b>Resources:</b>	Glencoe, McGraw-Hill – Copyright 2010 (pages 683-691; 763-788)
<b>Standards:</b>	<p>CC.2.3.HS.A.8-Apply geometric theorems to verify properties of circles.            CC.2.3.HS.A.9-Extend the concept of similarity to determine arc lengths and areas of sectors of circles.            CC.2.3.HS.A.13-Analyze relationships between two-dimensional and three-dimensional objects.            CC.2.3.HS.A.3--Verify and apply geometric theorems as they relate to geometric figures.            G.1.1.1.1-Identify, determine, and/or use the radius, diameter, segment, and/or tangent of a circle.            G.1.1.1.2-Identify, determine, and/or use the arcs, semicircles, sectors, and/or angles of a circle.            G.1.2.1-Recognize and/or apply properties of angles, polygons, and polyhedra.            G.2.2.2.1-Estimate area, perimeter, or circumference of an irregular figure.            G.2.2.2.2-Find the measurement of a missing length, given the perimeter, circumference, or area.            G.2.2.2.5-Find the area of a sector of a circle.            G.2.2.2-Use and/or develop procedures to determine or describe measures of perimeter, circumference, and/or area.            G.2.2.3.1-Describe how a change in the linear dimension of a figure affects its perimeter, circumference, and area.            G.2.2.3-Describe how a change in one dimension of a two-dimension figure affects other measurements of that figure.</p>

G.2.2.4.1-Use area models to find probabilities.  
G.2.2.4-Apply probability to practical situations.  
G.1.1.1.3  
G.1.1.1

**Vocabulary:**

Adjacent arcs- are arcs of the same circle that have one point in common; Apothem-is the perpendicular distance from the center to a side of a regular polygon; Arc length-is a fraction of the circumference; Central angle-an angle whose vertex is at the center of a circle; Circumference-the distance around a circle; Concentric circles-coplanar circles that have the same center; Diameter-a segment that contains the center of a circle and has its endpoints on the circle; Major arc-an arc that measures greater than 180 degrees but less than 360 degrees; Minor arc-an arc that measures greater than zero degrees but less than 180 degrees; Radius-a segment from the center of a circle to a point on the circle; Sector of a circle-a region bounded by an arc of the circle and the two radii to the arc's endpoints; Segment of a circle-a part of a circle bounded by an arc and the segment joining its endpoints.

**Comments:**

Content: Surface Area and Volume

Duration: April (3 weeks)

<p><b>Essential Question:</b></p>	<p>How do you find the surface area and volume of a solid?</p>
<p><b>Skill:</b></p>	<ul style="list-style-type: none"> <li>• Recognize polyhedral and their parts.</li> <li>• Find the surface area of a prism, a cylinder, a pyramid, and a cone.</li> <li>• Find the volume of a prism, a cylinder, a cone, and a pyramid.</li> <li>• Find the surface area and volume of a sphere.</li> </ul>
<p><b>Instructional/Engagement Activities</b></p>	
<p><b>Assessment:</b></p>	<ul style="list-style-type: none"> <li>• Identify the number of faces of a figure given their number of edges.</li> <li>• Find the surface area and volume of each: a prism, cylinder, pyramid, cone, and sphere.</li> <li>• Homework</li> <li>• Quizzes/Tests/Common Assessment.</li> </ul>
<p><b>Resources:</b></p>	<p>Glencoe, McGraw-Hill – Copyright 2010 (pages 67-75; 830-871)</p>
<p><b>Standards:</b></p>	<p>CC.2.3.HS.A.8-Apply geometric theorems to verify properties of circles.                  CC.2.3.HS.A.13-Analyze relationships between two-dimensional and three-dimensional objects.                  CC.2.3.HS.A.9-Extend the concept of similarity to determine arc lengths and areas of sectors of circles.                  CC.2.3.8.A.1-Apply the concepts of volume of cylinders, cones, and spheres to solve real-world and mathematical problems.                  CC.2.3.HS.A.12-Explain volume formulas and use them to solve problems.                  G.1.1.1.1-Identify, determine, and/or use the radius, diameter, segment, and/or tangent of a circle.                  G.1.1.1.2-Identify, determine, and/or use the arcs, semicircles, sectors, and/or angles of a circle.                  G.1.1.1.4-Identify and/or use the properties of a sphere or cylinder.                  G.1.1.1-Identify and/or use parts of circles and segments associated with circles, spheres, and cylinders.                  G.1.2.1.5-Identify and/or use properties of pyramids and prisms.                  G.2.2.2-Use and/or develop procedures to determine or describe measures of perimeter, circumference, and/or area.                  G.2.3.1.1-Calculate the surface area of prisms, cylinders, cones, pyramids, and/or spheres.                  G.2.3.1.2-Calculate the volume of prisms, cylinders, cones, pyramids, and/or spheres.                  G.2.3.1.3-Find the measurement of a missing length given the surface area or volume.                  G.2.3.1-Use and/or develop procedures to determine or describe measures of surface area</p>

and/or volume.

G.2.3.2.1-Describe how a change in the linear dimension of a figure affects its surface area or volume.

G.2.3.2-Describe how a change in one dimension of a three-dimensional figure affects other measurements of that figure.

Vocabulary:

Cross section-is the intersection of a solid and a plane; Cylinder-a solid that has two congruent parallel bases that are circles; Edge-is a segment that is formed by the intersection of two faces; Polyhedron-is a space figure whose surfaces are polygons; Prism-a polyhedron with two congruent parallel faces, called bases; Pyramid-is a polyhedron in which one face (the base) can be any polygon and the other faces are triangles that meet at a common vertex; Surface area-the sum of the area of all the surfaces of a 3 dimensional figure; Volume-is the space that a figure occupies.

Comments:

Content: Circles

Duration: May (3 weeks)

<b>Essential Question:</b>	How do you find and use arcs, tangents, inscribed angles, secants and chords of a circle?
<b>Skill:</b>	<ul style="list-style-type: none"> <li>• Use properties of a tangent to a circle.</li> <li>• Use congruent chords, arcs, and central angles.</li> <li>• Use perpendicular bisectors to chords.</li> <li>• Find the measure of an inscribed angle.</li> <li>• Find the measure of an angle formed by a tangent and a chord.</li> <li>• Find measures of angles formed by chords, secants, and tangents.</li> <li>• Find the lengths of segments associated with circles.</li> </ul>
<b>Instructional/Engagement Activities</b>	<ul style="list-style-type: none"> <li>• Identify and measure central angles, arcs, and semi-circles.</li> <li>• Identify and use relationships between arcs, cords, and diameters.</li> <li>• Find measures of inscribed angles.</li> </ul>
<b>Assessment:</b>	<ul style="list-style-type: none"> <li>• Identify and use properties of tangents.</li> <li>• Homework</li> <li>• Quizzes/Tests/Common Assessment.</li> </ul>
<b>Resources:</b>	Glencoe, McGraw-Hill – Copyright 2010 (pages 692-735)
<b>Standards:</b>	<p>CC.2.3.HS.A.8-Apply geometric theorems to verify properties of circles.</p> <p>G.1.1.1.1-Identify, determine, and/or use the radius, diameter, segment, and/or tangent of a circle.</p> <p>G.1.1.1.2-Identify, determine, and/or use the arcs, semicircles, sectors, and/or angles of a circle.</p> <p>G.1.1.1.3-Use chords, tangents, and secants to find missing arc measures or missing segment measures.</p> <p>G.1.1.1--Identify and/or use parts of circles and segments associated with circles, spheres, and cylinders.</p>
<b>Vocabulary:</b>	<p>Chord-a segment with both of its endpoints on a circle; Inscribed angle-an angle whose vertex is on the circle and whose sides are chords of the circle; Point of tangency-the point where a tangent and a circle intersect; Secant-is a line that intersects a circle at two points; Tangent to a circle-is a line in the plane of a circle that intersects the circle in exactly one point.</p>
<b>Comments:</b>	