



1 st Quarter (44 Days)			
<u>Resources:</u> Geometry, Prentice Hall			
Week	Unit/Lesson	Learning Objectives	Reporting Categories (TEKS)
1 st : Aug 8-9 (2 days)	Mathematical process standards	TSW applies mathematics to problems arising in everyday life, society, and the workplace. TSW uses a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution. TSW selects tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems.	G1, A, B, C
2 nd : Aug 12-16 (5 days)	Coordinate and Transformational Geometry	TSW determine the coordinates of a point that is a given fractional distance less than one from one end of a line segment to the other in one- and two-dimensional coordinate systems, including finding the midpoint	G.2 A
3 rd : Aug 19-23 (5 days)	Coordinate and Transformational Geometry	TSW derive and use the distance, slope, and midpoint formulas to verify geometric relationships, including congruence of segments and parallelism or perpendicularity of pairs of lines G.2(C) determine an equation of a line parallel or perpendicular to a given line that passes through a given point	G.2B
4 th : Aug 26-30 (5 days)	Coordinate and Transformational Geometry	TSW describes and performs transformations of figures in a plane using coordinate notation. TSW determine the image or pre-image of a given two-dimensional figure under a composition of rigid transformations, a composition of non-rigid transformations, and a composition of both, including dilations where the center can be any point in the plane	G.3 A G.3B
5 th : Sept 3-6 (4 days)	Monday: Labor Day Holiday Coordinate and Transformational Geometry	TSW identifies the sequence of transformations that will carry a given pre-image onto an image on and off the coordinate plane. TSW identifies and distinguishes between reflectional and rotational symmetry in a plane figure.	G.3 C G.3D
6 th : Sept 9-13 (5 days)	Coordinate and Transformational Geometry	TSW show that the equation of a circle with center at the origin and radius r is $x^2 + y^2 = r^2$ and determine the equation for the graph of a circle with radius r and center (h, k), $(x - h)^2 + (y - k)^2 = r^2$	G12.E
7 th : Sept 16-20 (5 days)	Logical Argument and Constructions	TSW distinguishes between undefined terms, definitions, postulates, conjectures, and theorems.	G4 A, B



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		TSW identifies and determines the validity of the converse, inverse, and contrapositive of a conditional statement and recognizes the connection between a biconditional statement and a true conditional statement with a true converse.	
8 th : Sept 23-26 (4 days)	Logical Argument and Constructions Friday: Professional Development	TSW verifies that a conjecture is false using a counterexample. TSW compares geometric relationships between Euclidean and spherical geometries, including parallel lines and the sum of the angles in a triangle.	G4: C, D
9 th : Sep 30 -Oct 4 (5 days)	Logical Argument and Constructions	TSW investigate patterns to make conjectures about geometric relationships, including angles formed by parallel lines cut by a transversal, criteria required for triangle congruence, special segments of triangles, diagonals of quadrilaterals, interior and exterior angles of polygons, and special segments and angles of circles choosing from a variety of tools. TSW construct congruent segments, congruent angles, a segment bisector, an angle bisector, perpendicular lines, the perpendicular bisector of a line segment, and a line parallel to a given line through a point not on a line using a compass and a straightedge.	G5: A, B
10 th : Oct 7-11 (5 days)	Logical Argument and Constructions	TSW uses the constructions of congruent segments, congruent angles, angle bisectors, and perpendicular bisectors to make conjectures about geometric relationships. TSW verifies the Triangle Inequality theorem using constructions and applies the theorem to solve problems.	G5 C, D

2nd Quarter (43 Days)

Resources:

Geometry, Prentice Hall

Week	Unit/Lesson	Learning Objectives	Reporting Categories (TEKS)
1 st : Oct 14-18 (5 days)	Logical Argument and Constructions	TSW verify theorems about angles formed by the intersection of lines and line segments, including vertical angles, and angles formed by parallel lines cut by a transversal and prove equidistant between the endpoints of a segment and points on its perpendicular bisector and apply these relationships to solve problems	G6, A



2 nd Quarter (43 Days)			
<u>Resources:</u> Geometry, Prentice Hall			
Week	Unit/Lesson	Learning Objectives	Reporting Categories (TEKS)
2 nd : Oct 21-25 (5 days)	Logical Argument and Constructions	TSW proves a quadrilateral is a parallelogram, rectangle, square, or rhombus using opposite sides, opposite angles, or diagonals and applies these relationships to solve problems. G.12(A) apply theorems about circles, including relationships among angles, radii, chords, tangents, and secants, to solve non-contextual problems	G6, E
3 rd : Oct 28- 31 (4 days)	Sep 1/Monday: Parent/Teacher Conferences Triangles and Trigonometry	TSW investigate patterns to make conjectures about geometric relationships, including angles formed by parallel lines cut by a transversal, criteria required for triangle congruence, special segments of triangles, diagonals of quadrilaterals, interior and exterior angles of polygons, and special segments and angles of circles choosing from a variety of tools TSW prove two triangles are congruent by applying the Side-Angle-Side, Angle-Side-Angle, Side-Side- Side, Angle-Angle-Side, and Hypotenuse-Leg congruence conditions	G5 A G6 B
4 th : Nov 4-8 (5 days)	Triangles and Trigonometry	TSW applies the definition of congruence, in terms of rigid transformations, to identify congruent figures and their corresponding sides and angles. TSW verify theorems about the relationships in triangles, including proof of the Pythagorean Theorem, the sum of interior angles, base angles of isosceles triangles, midsegments, and medians, and apply these relationships to solve problems.	G6: C, D
5 th : Nov 11-15 (5 days)	Triangles and Trigonometry	TSW applies the definition of similarity in terms of a dilation to identify similar figures and their proportional sides and the congruent corresponding angles. TSW applies the Angle-Angle criterion to verify similar triangles and apply the proportionality of the corresponding sides to solve problems.	G7: A, B
Nov 25-29	Thanksgiving Holiday		
7 th : Dec 2-6 (5 days)	Triangles and Trigonometry	TSW prove theorems about similar triangles, including the Triangle Proportionality theorem, and apply these theorems to solve problems	G 8: A
8 th : Dec 9-13 (5 days)	Triangles and Trigonometry	TSW determine the lengths of sides and measures of angles in a right triangle by applying the trigonometric ratios sine, cosine, and tangent to solve problems	G 9 A
9 th : Dec 16-20 (5 days)	Triangles and Trigonometry	TSW apply the relationships in special right triangles 30°-60°-90° and 45°-45°-90° and the Pythagorean theorem, including Pythagorean triples, to solve problems	G9 B
Winter Break			



3 rd Quarter (44 Days)			
<u>Resources:</u> Geometry, Prentice Hall			
Week	Unit/Lesson	Learning Objectives	Reporting Categories (TEKS)
1 st : Jan 7-10 (4 days)	Monday: Professional Development Measurement of 2D and 3D Figures	TSW identify the shapes of two-dimensional cross-sections of prisms, pyramids, cylinders, cones, and spheres and identify three-dimensional objects generated by rotations of two-dimensional shapes	G 10 A
2 nd : Jan 13-17 (5 days)	Measurement of 2D and 3D Figures	TSW determine and describe how changes in the linear dimensions of a shape affect its perimeter, area, surface area, or volume, including proportional and non-proportional dimensional change	G 10 B
3 rd : Jan 21-24 (4 days)	Monday: MLK Holiday Measurement of 2D and 3D Figures	TSW apply the formula for the area of regular polygons to solve problems using appropriate units of measure	G.11(A)
4 th : Jan 27-31 (5 days)	1/24: 100 Days of School Measurement of 2D and 3D Figures	TSW determine the area of composite two-dimensional figures comprised of a combination of triangles, parallelograms, trapezoids, kites, regular polygons, or sectors of circles to solve problems using appropriate units of measure	G.11(B)
5 th : Feb 3-7 (5 days)	Measurement of 2D and 3D Figures	apply the formulas for the total and lateral surface area of three-dimensional figures, including prisms, pyramids, cones, cylinders, spheres, and composite figures, to solve problems using appropriate units of measure TSW apply the formulas for the volume of three-dimensional figures, including prisms, pyramids, cones, cylinders, spheres, and composite figures, to solve problems using appropriate units of measure	G.11(C) G.11(D)
6 th : Feb 10-13 (4 days)	Measurement of 2D and 3D Figures Monday :District Development Day	TSW apply the proportional relationship between the measure of an arc length of a circle and the circumference of the circle to solve problems	G.12(B)
7 th : Feb 17-21 (5 days)	Measurement of 2D and 3D Figures	TSW apply the proportional relationship between the measure of the area of a sector of a circle and the area of the circle to solve problems	G.12(C)
8 th : Feb 24-28 (5 days)	Measurement of 2D and 3D Figures	TSW describe radian measure of an angle as the ratio of the length of an arc intercepted by a central angle and the radius of the circle	G.12(D)
9 th : Mar 3-7 (5 days)	Probability	TSW develops strategies to use permutations and combinations to solve contextual problems.	G.13(A)
Spring Break March 10-14			



4 th Quarter (46 Days)				
<i>Resources:</i> Geometry, Prentice Hall				
Week	Unit/Lesson	Learning Objectives	Reporting Categories (TEKS)	
1st: Mar 17-21 (5 days)	Probability	TSW apply conditional probability in contextual problems	G.13(D)	
2nd: Mar 24-31	Ramadan Break			
3rd: Apr 1 -4 (4 day)	Probability	TSW apply independence in contextual problems	G.13 E	
4th: April 7-11 (5 days)	Review and Assessment	Project based learning Review and Assessment	Review	
5th: April 14-18 (4 days)	STAAR	Project based learning Review and Assessment	Review	
6th: Apr 21-25 (5 days)	STAAR	Project based learning Review and Assessment	Review	
7th: Apr 27 -May 2 (5 days)	STAAR	Project based learning Review and Assessment	Review	
8th: May 5-9 (5 days)	STAAR	Project based learning Review and Assessment	Review	
9th: May 12-16 (5 days)	Review and Assessment	Review and Assessment	Review	
10th: May 19-23 (5 days)	Award Ceremonies / Graduation Ceremonies	Project based learning Review and Assessment	Review	