Geom - 1st Six Weeks 2023-2024

TEKS: G1A G1B G1C G1D G1E G1F G1G on going

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
8/14 **Teacher Workday Student Holiday**	8/15 **Teacher Workday Student Holiday**	8/16 **First Day of School** Syllabus Day; 100s chart; "Name the Game" Objective: What does group work look like?	8/17 Solve Two Step Equations Scavenger Hunt in groups Objective: How do we work as a team and make sure all participate?	8/18 Use google to look up vocabulary Sub in the Room Intro to Vocabulary List for Unit 1 G4A
8/21 Basic Vocabulary Match Mine Activity G4A	8/22 More Basic Vocabulary HW#1 G4A	8/23 Review all words Practice drawings at the board, introduce between and seg add post	8/24 Quiz – Basic Vocabulary and Drawing Diagrams	8/25 Segment Addition Postulate HW#2
8/29 Midpoint, Bisect HW#2	8/29 Review	8/30 Test	8/31 Distance and Midpoint Amusement Park Activity G2B	9/1 Progress Reports Distance and Midpoint Formulas Math Lib G2B
9/4 **Holiday** LABOR DAY	9/5 Distance and Midpoint Formulas HW#3 G2B	9/6 Partition a Segment Board Work G2A	9/7 Partition a Segment HW#4 G2A	9/8 Quiz – Distance Midpoint Partition And Seg Add Post
9/11 Classify and Name Angles Protractor Activity	9/12 Vocabulary and complete Protractor Activity	9/13 Angle Addition Postulate, Angle Bisector HW#5 G6A	9/14 Angle Addition Postulate, Angle Bisector HW#5 G6A	9/15 Angle Pair Relationships Board work G6A
9/18 Review	9/19 Test	9/20 Angle Pair Relationships HW#6	9/21 Quiz – Math Lib Activity over Angle Pair Relationships	9/22 Constructions G5B G5C

2nd Six Weeks 2023-2024

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9/25 Conditional Statements And Biconditional G4B G4C	9/26 Conditional Statements G4B G4C	9/27 Conditional Statements I Have Who Has G4B G4C	9/28 Early dismissal	9/29 **Ft. Bend County Fair**
10/2 Deductive Reasoning	10/3 Quiz Law of Syllogism Commercials G4A B C	10/4 Intro to Algebraic Properties and Algebraic Proof G4A B C G6A	10/5 Segment Proofs G4A B C G6A	10/6 Angle Proofs G4A B C G6A
10/9 Partial Proofs Partial Proofs Segment and Angle Scavenger Hunt G4A B C G6A	10/10 Quiz	10/11 Finish Quiz Complete Proof Puzzles	10/12 **Austin County Fair** 	10/13 **Austin County Fair**
10/16 Progress Report Parallel and Perpendicular Vocabulary G5A G6A	10/17 Parallel Lines cut by a Transversal G5A G6A	10/18 Use Algebra with parallel Lines G5A G6A	10/19 Quiz – Parallel Lines cut by a transversal	10/20 Giant Angle challenge G5A G6A
10/23 Prove Lines are Parallel with Algebra G5A G6A	10/24 Prove Lines are Parallel with Algebra G5A G6A	10/25 Review Proofs for Honors	10/26 TEST	10/27 Slope Review G2C G5A
10/30 Parallel and Perpendicular Slope G2C G5A	10/31 Write Equations in Slope Intercept form G2C G5A	11/1	11/2	11/3 Write Equations in Point Slope Form G2C G5A

3rd Six Weeks 2023-2024

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
11/6 More Practice writing equations of lines	11/7 ASVAB (11th graders) TEST	11/8 Patty Paper Transformations	11/9 Overview of All Transformations G3A, B, C, D	11/10 Translations G3A, B, C, D
11/13 Reflections G3A, B, C, D	11/14 Rotations G3A, B, C, D	11/15 Quiz Translations and Reflections	11/16 Dilations G3A, B, C, D	11/17 Sequence of Transformations G3A, B, C, D
11/20	11/21	11/22	11/23	11/24
THANKSGIVING BREAK				
11/27 Review of all Transformations G3A, B, C, D Symmetry	11/28 Review	11/29 Test	11/30 What makes a triangle math medic activity Classify Triangles G6 C D	12/1 Progress Reports Classify Triangles G6 C D
12/4 STAAR Re-testing Triangle inequality Activity– Math Medic	12/5 Triangle Inequality and Hinge Theorem G6 C D	12/6 STAAR Re-testing Triangle sum Activities – Math Medic	12/7 STAAR Re-testing (if needed) Triangle Sum Theorem with Algebra G6 C D	12/8 STAAR Re-testing Triangle Sum Theorem and Exterior Angle Theorem G6 C D
12/11 Equilateral and Isosceles Triangles G6 C D	12/12 Quiz	12/13 Congruent Triangles G6 B	12/14 Semester Review	12/15 Semester Review
12/18 Semester Review	12/19 Early Dismissal SEMESTER EXAMS	12/20 Early Dismissal SEMESTER EXAMS	12/21 Early Dismissal SEMESTER EXAMS	12/22 **SCHOOL HOLIDAY**

4th Six Weeks 2023-2024

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
1/8	1/9	1/10	1/11	1/12
Teacher Workday Student Holiday	Review all Triangles – classify, triangle sum theorem, exterior angle theorem, isosceles and equilateral	Using advanced algebra with triangles	Road Kill Café	Road Kill Café – ways to prove that triangles are congruent
1/15	1/16	1/17	1/18	1/19
MLK Day Holiday	Proving triangles congruent (5) Logical argument and constructions. The student uses constructions to validate conjectures about geometric figures. The student is expected to: (A) 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; (B) 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; (C) use the constructions of congruent segments, congruent angles, angle bisectors, and perpendicular bisectors to make conjectures about geometric relationships; and (D) verify the Triangle Inequality theorem using constructions and apply the theorem to solve problems. (6) Proof and congruence. The student uses the process skills with deductive reasoning to prove and apply theorems by using a variety of methods such as coordinate, transformational, and axiomatic and formats such as two-column, paragraph, and flow chart. The student is expected to: (A) verify theorems about angles formed by the intersection of lines and line	Cut Paste Activity for Proving Triangles congruent	Proofs with congruent triangles	Proofs with congruent triangles

	segments, including vertical angles, and angles formed by parallel lines cut by a transversal and prove equidistance between the endpoints of a segment and points on its perpendicular bisector and apply these relationships to solve problems;
	    (B) 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;
	    (C) apply the definition of congruence, in terms of rigid transformations, to identify congruent figures and their corresponding sides and angles;			

1/22	1/23	1/24	1/25	1/26
Test Part 1	Test Part 2	Midsegments	Special Segments overview – Perp Bis and Angle Bis	Circumcenter and Incenter
1/29 Progress Reports	1/30	1/31	2/1	2/2

Median and Altitude	Orthocenter and Centroid	Special Segment Quiz	Special Segments in the Coordinate Plane
			 (2) Coordinate and transformational geometry. The student uses the process skills to understand the connections between algebra and geometry and uses the one- and two-dimensional coordinate systems to verify geometric conjectures. The student is expected to:
			    (A) 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;
			    (B) 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; and
			    (C) determine an equation of a line parallel or perpendicular to a given line that passes through a given point.
			 (3) Coordinate and transformational geometry. The student uses the process skills to generate and describe rigid transformations (translation, reflection, and rotation) and non-rigid
				Review

			transformations (dilations that preserve similarity and reductions and enlargements that do not preserve similarity). The student is expected to: (A) describe and perform transformations of figures in a plane using coordinate notation; (B) 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; (C) identify the sequence of transformations that will carry a given pre-image onto an image on and off the coordinate plane; and (D) identify and distinguish between reflectional and rotational symmetry in a plane figure.	
2/5	2/6	2/7	2/8	2/9
Special Segments Test	Ratios and Proportions 7) Similarity, proof, and trigonometry. The student uses the process skills in applying similarity to solve problems. The student is expected to: (A) apply the definition of similarity in terms of a dilation to identify similar figures and their proportional sides and the congruent corresponding angles; and (B) apply the Angle-Angle criterion to verify similar triangles and apply the proportionality of the corresponding sides to solve problems. (8) Similarity, proof, and trigonometry. The student uses the process skills with deductive reasoning to prove and apply theorems by using a variety of methods such as coordinate, transformational, and axiomatic and formats such as two-column, paragraph, and flow chart. The student is expected to: (A) prove theorems about similar triangles, including the Triangle Proportionality theorem, and apply these theorems to solve problems	Extended Ratios Scavenger Hunt	Similar Triangles Math Lib	Similar Triangles
2/12	2/13	2/14	2/15	2/16

Similar Triangles Scavenger Hunt	Proving Triangles similar – AA SAS	Triangle Proportionality Theorem Parts of Similar Triangles	Similar Triangles Quiz – Relay Race Worksheet	Similarity Applications

5ᵗʰ Six Weeks 2023-2024

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
2/19	2/20	2/21	2/22	2/23

President's Day Student Holiday Teacher Workday	Similarity Applications
	
	(7) Similarity, proof, and trigonometry. The student uses the process skills in applying similarity to solve problems. The student is expected to:
	   (A) apply the definition of similarity in terms of a dilation to identify similar figures and their proportional sides and the congruent corresponding angles; and
	   (B) apply the Angle-Angle criterion to verify similar triangles and apply the proportionality of the corresponding sides to solve problems. (8) Similarity, proof, and trigonometry. The student uses the process skills with deductive reasoning to prove and apply theorems by using a variety of methods such as coordinate, transformational, and axiomatic and formats such as two-column, paragraph, and flow chart. The student is expected to:
	   (A) prove theorems about similar triangles, including the Triangle Proportionality theorem, and apply these theorems to solve problems
		TEST - Similarity	Review of Radicals	Review of Radicals

2/26	2/27	2/28	2/29	3/1

Pythagorean Theorem Notes and Math Lib
 	
(6) Proof and congruence. The student uses the process skills with deductive reasoning to prove and apply theorems by using a variety of methods such as coordinate, transformational, and axiomatic and formats such as two-column, paragraph, and flow chart. The student is expected to:
   (D) verify theorems about the relationships in triangles, including proof of the Pythagorean Theorem, the sum of interior angles, base
	Simplify Radicals Quiz	Converse of Pythagorean Theorem and Maze	Converse of Pythagorean Theorem in the coordinate plane	**Pythagorean Theorem Quiz -** Intro to Specials Find missing sides by Pythagorean Theorem Look for patterns pg 9-12
				
				(8) Similarity, proof, and trigonometry. The student uses the process skills with deductive reasoning to prove and apply theorems by using a variety of methods such as coordinate, transformational, and axiomatic and formats such as two-column, paragraph, and flow chart. The student is expected to:
				   (B) identify and apply the relationships that exist

angles of isosceles triangles, midsegments, and medians, and apply these relationships to solve problems				when an altitude is drawn to the hypotenuse of a right triangle, including the geometric mean, to solve problems.
				  (9) Similarity, proof, and trigonometry. The student uses the process skills to understand and apply relationships in right triangles. The student is expected to:
				   (B) apply the relationships in special right triangles 30°-60°-90° and 45°-45°-90° and the Pythagorean theorem, including Pythagorean triples, to solve problems

3/4	3/5	3/6	3/7	3/8 Progress Reports
Special Right Triangle Notes Mazes pgs 13-15	Work on mazes	Special Right Triangles HW#2 pg 17-18 Special Right Triangle QUIZ	Review Review Specials with Giant Puzzle	TEST
3/11	3/12	3/13	3/14	3/15
Happy spring Break! SPRING BREAK				
3/18	3/19	3/20	3/21	3/22

Geometric Mean Notes	Geometric Mean and Similar Right Triangles
	HW#3 pg 19-20
		Trig Ratios
		SOH CAH TOA
		Pg 21
		  (9) Similarity, proof, and trigonometry. The student uses the process skills to understand and apply relationships in right triangles. The student is expected to:
		   (A) 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; and
		   (B) apply the relationships in special right triangles 30°-60°-90° and 45°-45°-90° and the Pythagorean theorem, including Pythagorean triples, to solve problems
			Use SOH CAH TOA to write ratios and find lengths of sides
			Page 22
				Maze Pg 23
				
				How to find angles with inverse ratios

3/25	3/26	4/1	3/28	3/29
Review Pg 24 Find Sides and Angles HW#4 pg 25-26 Maze pg 27	Angles of Elevation and Depression Pg 31-32	Review All Trig and Angles of Elevation and Depression HW#6 pg 33-34 Trig Review pg 35--36	Angles of Elevation and Depression Pg 31-32	**Easter Holiday**
	4/2	4/3	4/4	4/5

			Angles of a Polygon	Parallelogram

Teacher Workday Student Holiday	Review	TEST – all trigonometry	Pgs 1-4
			(A) 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 equidistance between the endpoints of a segment and points on its perpendicular bisector and apply these relationships to solve problems;
			   (B) 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;
			   (C) apply the definition of congruence, in terms of rigid transformations, to identify congruent figures and their corresponding sides and angles;
			   (D) 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; and
			   (E) prove a quadrilateral is a parallelogram, rectangle, square, or rhombus using opposite sides, opposite angles, or diagonals and apply these relationships to solve problems
				Pgs 5-6; 9-10

6th Six Weeks 2023-2024

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
4/8	4/9	4/10	4/11	4/12
Proving a Quad is a Parallelogram Pg 7 and finish pg 10	Quiz – Angles of a polygon and Parallelograms	Rectangle pgs 12-15	Rhombus and Square Pgs 16-21	Review – Coloring page Review Square Page 21-22
4/15	4/16	4/17	4/18	4/19
Trapezoids	Kites	Quad in the Coordinate Plane Pgs 23-24 (2) Coordinate and transformational geometry. The student uses the process skills to understand the connections between algebra and geometry and uses the one- and two-dimensional coordinate systems to verify geometric conjectures. The student is expected to:	Review	TEST

		(A) 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; (B) 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; and (C) determine an equation of a line parallel or perpendicular to a given line that passes through a given point. (3) Coordinate and transformational geometry. The student uses the process skills to generate and describe rigid transformations (translation, reflection, and rotation) and non-rigid transformations (dilations that preserve similarity and reductions and enlargements that do not preserve similarity). The student is expected to: (A) describe and perform transformations of figures in a plane using coordinate notation; (B) 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; (C) identify the sequence of transformations that will carry a given pre-image onto an image on and off the coordinate plane; and (D) identify and distinguish between reflectional and rotational symmetry in a plane figure.		
4/22	4/23	4/24	4/25	4/26 Progress Reports
Circle Vocabulary pg 1-2; 5 Use www.mathopenref.com (12) Circles. The student uses the process skills to understand geometric relationships and apply theorems and equations about circles. The student is expected to: (A) apply theorems about circles, including relationships among angles, radii, chords,	Area and Circumference of Circles pg 7-8	Central Angles and Arc Measures pg 9-10	Arc Length Pg 11-12	Circles Quiz 1

tangents, and secants, to solve non-contextual problems;
   (B) apply the proportional relationship between the measure of an arc length of a circle and the circumference of the circle to solve problems;
   (C) 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;
   (D) 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; and
   (E) 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), $(x - h)^2 + (y - k)^2 = r^2$				

4/29	4/30	5/1	5/2	5/3

Regular – coloring sheet Area Circum and Length
Honors Congruent Chords and Arcs pg 13-14
	Inscribed Angles pg 15-16	Great Circle	Quiz	Regular –area and Perimeter
				Honors – TEST
				(11) Two-dimensional and three-dimensional figures. The student uses the process skills in the application of formulas to determine measures of two- and three-dimensional figures. The student is expected to: (A) apply the formula for the area of regular polygons to solve problems using appropriate units of measure;
				   (B) 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;
				   (C) 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; and
				   (D) 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.

5/6	5/7	5/8	5/9	5/10

Make-up STAAR Regular – equation of circle Honors – Segments pg 25-26	Regular – Review Circles Honors – Eq of Circles pg 27-30	Regular –TEST Honors - Review Test	Regular –area and Perimeter Honors – TEST	Area of Regular polygons and composite figures
5/13	5/14	5/15	5/16	5/17 Early Dismissal
SA and V of Prisms and Cylinders	Make-up STAAR SA and V of Pyramids and Cones	Surface Area and Volume of Spheres	SA and V of Prisms and Cylinders	**Graduation**
5/20	5/21 Early Dismissal	5/22 Early Dismissal	5/23 Early Dismissal	5/24
			Last Day of School	**Student Holiday Teacher Workday**