GEOMETRY
Year at a Glance (YAG)
2021-2022

First Semester		Second Semester	
1ˢᵗ Nine Weeks – 41 days (August 16ᵗʰ – October 13ᵗʰ) *(September 6ᵗʰ – Labor day – No School)* *(October 11ᵗʰ – Staff Development)*		**3ʳᵈ Nine Weeks – 43 days** (January 3ʳᵈ – March 4ᵗʰ) *(January 17ᵗʰ – MLK – No School)* *(February 21ˢᵗ – President's Day)* *(March 7ᵗʰ – 11ᵗʰ – Spring Break)*	
TEKS G.1A-G.1G G.4A, G.2B, G.5B, G.10B, G.2A, G.11C, G.11D G.1G, G.5A, G.5D, G.6A, G.6D, G.2B, G.2C	**Tools of Geometry Unit 1** (12) Students will use basic geometric concepts and properties to solve problems. Students will identify and model points, lines and planes. Students will identify intersecting lines and planes. Students will distinguish between undefined terms, definitions, postulates, conjectures and theorems. Students will identify angle relationships. **Reasoning and Proof Unit 2** (5) Students will make conjectures and find counterexamples for statements. Students will use deductive reasoning to reach valid conclusions. **Parallel and Perpendicular Lines Unit 3** (12) Students will identify and prove angle relationships that occur with parallel lines and a transversal.	TEKS G.1A-G.1G, G.5A, G.5D, G.6B, G.6C, G.6D, G.7A, G.8B, G.9A, G.9B	**Quadrilaterals Part 2 Unit 6** (12) Students will recognize and apply properties of quadrilaterals. Students will compare quadrilaterals. **Proportions and Similarity Unit 7** (8) Students will identify similar polygons and use ratios and proportions to solve problems. Students will identify similar triangles and use similar triangles to solve problems. Students will use proportional parts within triangles, and use proportional parts with parallel lines. **Right Triangles and Trigonometry Part 1 Unit 8** (5) Students will use the Pythagorean Theorem and the Converse of the Pythagorean Theorem.
	RTI Diagnostic 1 day		RTI Diagnostic 1 day Early Release 1 day

2nd Nine Weeks – 42 days	4th Nine Weeks – 51 days
(October 14th – December 17th) *(November 22nd – 26th – Thanksgiving Break)* *(December 20th – 31th – Holiday Break)*	(March 14th – May 25th) *(April 8th – Battle of Flowers – No School)* *(April 15th – Good Friday – No School)* *(May 30th – Memorial Day – No School)*

| TEKS G.1A-G.1G, G.5A,G.6D, G.6B, G.5B, G.6C, G.2B, G.5A,G.6E, G.2B, G.5C,G.5D | **Congruent Triangle Unit 4** (7) Students will apply special relationships about the interior and exterior angles of triangles. Students will identify corresponding parts of congruent triangles and prove triangles congruent. Students will learn about the special properties of isosceles and equilateral triangles.

Relationships in Triangles Unit 5 (7) Students will verify, identify and use perpendicular bisectors, angle bisectors, medians and altitudes in triangles. Students will recognize and apply properties of inequalities to the measures of the angles of a triangle, and to the relationships between the angles and sides of a triangle. Students will use the Triangle Inequality Theorem to identify possible triangles, and to prove triangle relationships.

Quadrilaterals Part 1 Unit 6 (8) Students will identify and name polygons.Students will find and use the sum of the measures of the interior angles of a polygon. Students will find and use the sum of the measures of the exterior angles of a polygon.

PSAT 1 day Early dismissal 1day Review 3 days Semester Exams 4 days | TEKS G.1A-G.1G, G.6D, G.7A, G.8B, G.9A, G.9B, G.12A, G.12B, G.12D, G.10B, G.11A, G.11B, G.12C | **Right Triangles and Trigonometry Part 2** (10) Students will apply the relationships in special right triangles 30,60, 90 and 45,45, 90 and the Pythagorean Theorem to solve problems. Students will 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. Students will determine the values of trigonometric functions at the special angles and relate them in mathematical and real-world problems. Students will solve problems involving angles of elevation and depression and find the distance between two objects.

Circles Unit 9 (10) Students will identify and use parts of circles. Students will solve problems involving circumference of circles.Students will learn the relationships between central angles, arcs, and chords in circles.

Areas of Polygons and Circles Unit 10 (10) Students will find perimeters and areas of polygons. Students will apply the formula for the area of regular polygons to solve problems using appropriate units of measure. Students will find areas of circles, and areas of sectors of circles. Students will find areas of composite figures. Students will apply area formulas to solve application problems.

RTI Diagnostic 1 Day EOC 1 Day Review 3 Days Semester Exams 4 Days |

Resources			
1st Nine Weeks	2nd Nine Weeks	3rd Nine Weeks	4th Nine Weeks
All things Geometry	All things Geometry	All things Geometry	All things Geometry

McGraw-Hill Geometry	McGraw-Hill Geometry	McGraw-Hill Geometry	McGraw-Hill Geometry