Geometry Scope and Sequence 2025-2026

TEKS Distribution among units

Process Standards

	G.1A	G.1B	G.1C	G.1D	G.1E	G.1F	G.1G
Unit 1	X	X	X	X	X	X	X
Unit 2	X	X	X	X	X	X	X
Unit 3	X	X	X	X	X	X	X
Unit 4	X	X	X	X	X	X	X
Unit 5	X	X	X	X	X	X	X
Unit 6	X	X	X	X	X	X	X
Unit 7	X	X	X	X	X	X	X
Unit 8	X	X	X	X	X	X	X
Unit 9	X	X	X	X	X	X	X
Unit 10	X	X	X	X	X	X	X

Content Standards

	G.2A	G.2B	G.2C	G.2D	G.3B	G.3C	G.3D	G.4A	G.4B	G.4C	G.4D	G.5A	G.5B	G.5C	G.5D	G.6A	G.6B	G.6C	G.6D	G.6E	G.7A	G.7B	G.8A	G.8B	G.9A	G.9B	G.10A	G.10B	G.11A	G.11B	G.11C	G.11D	G.12A	G.12B	G.12C	G.12D	G.12E	G.13A	G.13B	G.13C	G.13D	G.13E
Unit 1	X	X						X	X	X		X	X	X																												
Unit 2	X	X	X						X	X		X	X	X		X																										
Unit 3				X	X	X	X						X	X				X			X																					
Unit 4		X								X		X	X	X	X		X	X	X		X	X	X	X																	
Unit 5																			X							X	X															
Unit 6										X		X								X																						
Unit 7		X										X				X																	X	X	X	X	X					
Unit 8																									X			X	X	X					X							
Unit 9											X																X	X			X	X										
Unit 10																																						X	X	X	X	X

The standards below are color coded to the MAP categories listed below:
Coordinate and Transformational Geometry
Logic, Circles, and Probability
Proof, Congruence, Similarity, and Trigonometry
Two-Dimensional and Three-Dimensional Figures

Geometry
Scope and Sequence 2025-2026

Mathematical Process Standards: The student uses mathematical process to acquire and demonstrate mathematical understanding. The student is expected to:

G.1A Apply mathematics to problems arising in everyday life, society, and the workplace
G.1B Use 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
G.1C Select 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
G.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate
G.1E Create and use representations to organize, record, and communicate mathematical ideas
G.1F Analyze mathematical relationships to connect and communicate mathematical ideas
G.1G Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication

Grading Period 1

Unit 1: Foundations of Logical Reasoning
Estimated Date Range: Aug.12 – Sept. 11 (22 total school days)
Instructional & Re-engagement Days: 19 days

Assessments

STATE/NATIONAL ASSESSMENTS	DISTRICT ASSESSMENTS	Common Formative Assessments (CFAs)
N/A	NWEA BOY MAP (3 days) Testing Window Sept. 6 – Sept. 10	N/A

Concepts within the Unit	TEKS
Establishing a Positive Mathematics Community Suggested Days: 3	Process Standards: G.1A Apply mathematics to problems arising in everyday life, society, and the workplace G.1B Use 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 G.1C Select 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 G.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate G.1E Create and use representations to organize, record, and communicate mathematical ideas G.1F Analyze mathematical relationships to connect and communicate mathematical ideas G.1G Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication
Concept #1: Building Blocks of Geometry Suggested Days: 2	Important Standards G.4A distinguish between undefined terms, definitions, postulates, conjectures, and theorems
Concept #2: Conditional Statements and Counterexamples Suggested Days: 3	**Priority Standards** **G.4C Students will verify that a conjecture is false using a counterexample** Important Standards G.4A distinguish between undefined terms, definitions, postulates, conjectures, and theorems G.4B identify and determine the validity of the converse, inverse, and contrapositive of a conditional statement and recognize the connection between a biconditional statement and a true conditional statement with a true converse
Concept #3: Developing Logical Arguments Suggested Days: 4	**Priority Standards** **G.4C Students will verify that a conjecture is false using a counterexample** Important Standards G.4A distinguish between undefined terms, definitions, postulates, conjectures, and theorems G.4B identify and determine the validity of the converse, inverse, and contrapositive of a conditional statement and recognize the connection between a biconditional statement and a true conditional statement with a true converse

Concept #4: Exploring Segments Suggested Days: 5	**Priority Standards** **G.5C use constructions of congruent segments, congruent angles, angle bisectors, and perpendicular bisectors to make conjectures about geometric relationships** Important Standards G.2A 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. G.2B 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.5A 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 G.5B 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

Unit 2: Angular and Linear Relationships Estimated Date Range: Sept. 12 – Oct. 10 (20 total school days) Instructional & Re-engagement Days: 19 days		
Assessments		
STATE/NATIONAL ASSESSMENTS PSAT (1 day) Testing Window Oct. 2	**DISTRICT ASSESSMENTS** N/A	**Common Formative Assessments (CFAs)** N/A

Concepts within the Unit	**TEKS**
Concept #1: Exploring Angles Suggested Days: 4	**Priority Standards** **G.5C use the constructions of congruent segments, congruent angles, angle bisectors, and perpendicular bisectors to make conjectures about geometric relationships** Important Standards G.4C students will verify that a conjecture is false using a counterexample G.4B identify and determine the validity of the converse, inverse, and contrapositive of a conditional statement and recognize the connection between a biconditional statement and a true conditional statement with a true converse

	G.5B 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
Concept #2: Parallel Lines and Angle Pairs Suggested Days: 3	**Priority Standards** **G.6A 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.** Important Standards G.4C students will verify that a conjecture is false using a counterexample G.5C use constructions of congruent segments, congruent angles, angle bisectors, and perpendicular bisectors to make conjectures about geometric relationships G.4B identify and determine the validity of the converse, inverse, and contrapositive of a conditional statement and recognize the connection between a biconditional statement and a true conditional statement with a true converse G.5A 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 G.5B 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
Concept #3: Lines on the Coordinate Plane Suggested Days: 4	Important Standards G.2A 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.2B 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.2C determine an equation of a line parallel or perpendicular to a given line that passes through a given point.
Concept #4: Perpendicular Lines Suggested Days: 4	**Priority Standards** **G.6A 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.**

	Important Standards G.4C students will verify that a conjecture is false using a counterexample G.5C use constructions of congruent segments, congruent angles, angle bisectors, and perpendicular bisectors to make conjectures about geometric relationships G.4B identify and determine the validity of the converse, inverse, and contrapositive of a conditional statement and recognize the connection between a biconditional statement and a true conditional statement with a true converse G.5B 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

Grading Period 2

Unit 3: Properties of Transformations

Estimated Date Range: Oct. 21 – Nov. 7 (13 total school days)

Instructional & Re-engagement Days: 13 days

Assessments

STATE/NATIONAL ASSESSMENTS	DISTRICT ASSESSMENTS	Common Formative Assessments (CFAs)
N/A	N/A	N/A

Concepts within the Unit	TEKS
Concept #1: Rigid Transformations Suggested Days: 5	**Priority Standards** **G.3B 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.5C use the constructions of congruent segments, congruent angles, angle bisectors, and perpendicular bisectors to make conjectures about geometric relationships** Important Standards G.3A describe and perform transformations of figures in a plane using coordinate notation G.3C identify the sequence of transformations that will carry a given pre-image onto an image on and off the coordinate plane G.3D identify and distinguish between reflection and rotational symmetry in a plane figure.

	G.5B 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 G.6C apply the definition of congruence, in terms of rigid transformations, to identify congruent figures and their corresponding sides and angles;
Concept #2: Non-Rigid Transformations Suggested Days: 3	**Priority Standards** **G.3B 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.5C use the constructions of congruent segments, congruent angles, angle bisectors, and perpendicular bisectors to make conjectures about geometric relationships** Important Standards G.3A describe and perform transformations of figures in a plane using coordinate notation G.3C identify the sequence of transformations that will carry a given pre-image onto an image on and off the coordinate plane G.7A apply the definition of similarity in terms of a dilation to identify similar figures and their proportional sides and the congruent corresponding angles
Concept #3: Compositions of Transformations Suggested Days: 3	**Priority Standards** **G.3B 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;** Important Standards G.3A describe and perform transformations of figures in a plane using coordinate notation G.3C identify the sequence of transformations that will carry a given pre-image onto an image on and off the coordinate plane
Unit 4: Proofs of Triangle Congruence and Similarity Estimated Date Range: Nov. 10 – Dec. 19 (25 total school days) Instructional & Re-engagement Days: 21 days	
Assessments	

STATE/NATIONAL ASSESSMENTS N/A	**DISTRICT ASSESSMENTS** N/A	**Common Formative Assessments (CFAs)** N/A	**Semester Exams (4 days)** Testing Window Dec. 16 – Dec. 19
Concepts within the Unit	**TEKS**		
Concept #1: Similar and Congruent Triangle Theorems Suggested Days: 6	**Priority Standards** **G.8A prove theorems about similar triangles, including the Triangle Proportionality theorem, and apply these theorems to solve problems** Important Standards G.2B 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.5A 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; G.6B 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 G.6C apply the definition of congruence, in terms of rigid transformations, to identify congruent figures and their corresponding sides and angles; G.7A apply the definition of similarity in terms of a dilation to identify similar figures and their proportional sides and the congruent corresponding angles G.7B apply the Angle-Angle criterion to verify similar triangles and apply the proportionality of the corresponding sides to solve problems.		
Concept #2: Relationships in Similar and Congruent Triangles Suggested Days: 6	**Priority Standards** **G.8A prove theorems about similar triangles, including the Triangle Proportionality theorem, and apply these theorems to solve problems** Important Standards G.2B 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.6B 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		

	G.7A apply the definition of similarity in terms of a dilation to identify similar figures and their proportional sides and the congruent corresponding angles G.7B apply the Angle-Angle criterion to verify similar triangles and apply the proportionality of the corresponding sides to solve problems. G.8B identify and apply the relationships that exist when an altitude is drawn to the hypotenuse of a right triangle, including the geometric mean, to solve problems.
Concept #3: Special Segments and Triangle Proofs Suggested Days: 7	**Priority Standards** **G.5C use constructions of congruent segments, congruent angles, angle bisectors, and perpendicular bisectors to make conjectures about geometric relationships.** Important Standards G.4C verify that a conjecture is false using a counterexample G.5A 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; G.5B 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 G.5D verify the Triangle Inequality theorem using constructions to apply the theorem to solve problems G.6D 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

Grading Period 3

Unit 5: Right Triangle Relationships

Estimated Date Range: Jan. 8 – Jan. 27 (13 total school days)
Instructional & Re-engagement Days: 10 days

Assessments

STATE/NATIONAL ASSESSMENTS	DISTRICT ASSESSMENTS	Common Formative Assessments (CFAs)
N/A	NWEA MOY MAP (3 days) Testing Window Jan. 16 – Jan. 21	N/A

Concepts within the Unit	TEKS
Concept #1: Special Right Triangles Suggested Days: 4	**Priority Standards** **G.9B apply the relationships in special right triangles 30°-60°-90° and 45°-45°-90° and the Pythagorean theorem, including Pythagorean triples, to solve problems.** Important Standards G.6D 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
Concept #2: Trigonometric Relationships Suggested Days: 5	**Priority Standards** **G.9A 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;** Important Standards G.9B applies the relationships in special right triangles 30°-60°-90° and 45°-45°-90° and the Pythagorean theorem, including Pythagorean triples, to solve problems.

Unit 6: Exploration of Polygon and Quadrilateral Properties

Estimated Date Range: Jan. 28 – Feb. 18 (13 total school days)
Instructional & Re-engagement Days: 13 days

Assessments

STATE/NATIONAL ASSESSMENTS	DISTRICT ASSESSMENTS	Common Formative Assessments (CFAs)

N/A	N/A	N/A
Concepts within the Unit	**TEKS**	
Concept #1: Polygon Properties Suggested Days: 5	Important Standards G.5A 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;	
Concept #2: Quadrilateral Proofs Suggested Days: 5	**Priority Standards** **G.6E prove a quadrilateral is a parallelogram, rectangle, square, or rhombus using opposite sides, opposite angles, or diagonals and apply these relationships to solve problems.** Important Standard G.4C verify that a conjecture is false using a counterexample G.5A 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;	
Unit 7: Circle Relationships and Proofs Estimated Date Range: Feb. 19 – Mar 9 (12 total school days) Instructional & Re-engagement Days: 11 days		
Assessments		
STATE/NATIONAL ASSESSMENTS TELPAS (1 day) Testing Window Feb. 16 – Mar. 27	**DISTRICT ASSESSMENTS** N/A	**Common Formative Assessments (CFAs)** N/A
Concepts within the Unit	**TEKS**	
Concept #1: Proportional Relationships in Circles Suggested Days: 3	Important Standards **G.12B apply the proportional relationship between the measure of an arc length of a circle and the circumference of the circle** to solve problems;	

	G.12C 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.12D 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
Concept #2: Equations of Circles Suggested Days: 2	Important Standards G.12E 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), $(x - h)^2 + (y - k)^2 = r^2$. G.2B ~~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~~
Concept #3: Key Relationships in Circles Suggested Days: 4	**Priority Standards** **G.12A apply theorems about circles, including relationships among angles, radii, chords, tangents, and secants, to solve non-contextual problems** Important Standards G.5A 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; G.6A 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
Unit 8: Dimensional Analysis of 2D Figures (Continues in Grading Period 4) Estimated Date Range: Mar. 10 – April 2 (13 total school days) Instructional & Re-engagement Days: 13 days *See Grading Period 4 for Details*	
Grading Period 4	
Unit 8: Dimensional Analysis of 2D Figures (Continued) Estimated Date Range: Mar. 10 – April 2 (13 total school days) Instructional & Re-engagement Days: 13 days	
Assessments	

STATE/NATIONAL ASSESSMENTS N/A	DISTRICT ASSESSMENTS N/A	Common Formative Assessments (CFAs) N/A

Concepts within the Unit	TEKS
Concept #1: Composite Area Suggested Days: 5	**Priority Standards** **G.11B 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** Important Standards G.9A 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.11A apply the formula for the area of regular polygons to solve problems using appropriate units of measure; G.12C 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;
Concept #2: Dimensional Change Suggested Days: 6	Important Standards G.11B 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.10B 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.

Unit 9: Dimensional Analysis of 3D Figures
Estimated Date Range: April 6 – April 29 (18 total school days)
Estimated Time Frame: 18 days

Assessments

STATE/NATIONAL ASSESSMENTS N/A	DISTRICT ASSESSMENTS N/A	Common Formative Assessments (CFAs) N/A

Concepts within the Unit	TEKS
Concept #1: Cross Sections Suggested Days: 2	Important Standards G.10A 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

Concept #2: Surface Area Suggested Days: 5	**Priority Standards** **G.11C 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** Important Standards G.10B 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.
Concept #3: Volume Suggested Days: 4	**Priority Standards** **G.11D 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.** Important Standards G.10B 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.
Concept #4: Spherical Geometry Suggested Days: 2	Important Standards G.4D compare geometric relationships between Euclidean and spherical geometries, including parallel lines and the sum of the angles in a triangle.

Unit 10: Applications of Probability Estimated Date Range: April 30 – May 28 (20 total school days) Instructional & Re-engagement Days: 13 days			
Assessments			
STATE/NATIONAL ASSESSMENTS N/A	**DISTRICT ASSESSMENTS** NWEA EOY MAP (3 days) Testing Window May 8 – May 12	**Common Formative Assessments (CFAs)** N/A	**Semester Exams (4 days)** Testing Window May 22 – May 28
Concepts within the Unit	**TEKS**		

Concept #1: Area Probability Suggested Days: 2	Important Standards G.13B determine probabilities based on area to solve contextual problems
Concept #2: Permutations and Combinations Suggested Days: 2	Important Standards G.13A develop strategies to use permutations and combinations to solve contextual problems
Concept #3: Compound Probability Suggested Days: 3	Important Standards G.13C Identify whether two events are independent and compute the probability of the two events occurring together with or without replacement G.13E apply independence in contextual problems
Concept #4: Conditional Probability Suggested Days: 3	**Priority Standards** **G.13D Apply conditional probability to contextual problems** Important Standards G.13E apply independence in contextual problems