






Cornwall-Lebanon School District Curriculum Overview

CP Geometry – High School

 length of time in weeks	Concepts & Competencies	Common Assessments	PA Core Standards
Unit 1  4	<p style="text-align: center;"><u>Tools of Geometry</u></p> <p>Students will solve for missing parts of line segments. Students will find distance and midpoint on a coordinate plane. Students will identify basic geometric figures. Students will identify angles using correct vocabulary. Students will solve for an angle's measure.</p>	<ul style="list-style-type: none"> ➤ Points, lines and planes Quiz ➤ Angle Measure Quiz ➤ Unit 1 Test 	CC.2.3.HS.A.3
Unit 2  3	<p style="text-align: center;"><u>Reasoning</u></p> <p>Students will understand patterns and write equations to model patterns. Students will write two-column proofs. Students will fill-in truth tables. Students will solve problems using deductive reasoning. Students will identify and interpret conditional statements.</p>	<ul style="list-style-type: none"> ➤ Deductive Reasoning Quiz ➤ Unit 2 Test 	CC.2.3.HS.A.3
Unit 3  4	<p style="text-align: center;"><u>Parallel and Perpendicular Lines</u></p> <p>Students will identify whether lines are parallel, perpendicular, skew, or oblique. Students will write equations of parallel and perpendicular lines. Students will solve for angles formed by parallel and perpendicular lines. Students will write two-column proofs.</p>	<ul style="list-style-type: none"> ➤ Parallel Lines Quiz ➤ Marking Period 1 Exam ➤ Writing parallel and perpendicular equations and Proving lines are parallel Quiz 	CC.2.3.HS.A.3 CC.2.2.HS.D.1
Unit 4  3	<p style="text-align: center;"><u>Congruent Triangles</u></p> <p>Students will classify triangles by angles and sides. Students will solve for missing angles of a triangle. Students will solve for missing parts of congruent shapes. Students will prove that two triangles are congruent. Students will solve problems using properties of isosceles and equilateral triangles.</p>	<ul style="list-style-type: none"> ➤ Congruent Triangles Quiz ➤ Unit 4 Test 	CC.2.3.HS.A.3 CC.2.3.HS.A.4 CC.2.3.HS.A.11

Unit 5	4	<p><u>Relationships in Triangles</u></p> <p>Students will solve for missing parts of triangles that have medians, altitudes, perpendicular bisectors and angle bisectors.</p> <p>Students will solve problems involving the circumcenter, centroid, orthocenter, and incenter.</p> <p>Students will order a triangle's sides and angles from smallest to largest.</p> <p>Students will determine whether three lengths can create a triangle.</p>	<ul style="list-style-type: none"> ➤ Points of concurrency Quiz ➤ Unit 5 Test 	<p>CC.2.3.HS.A.3</p> <p>CC.2.3.HS.A.11</p> <p>CC.2.2.HS.D.1</p>
Unit 6	3	<p><u>Polygons</u></p> <p>Students will solve for missing angle measures of polygons.</p> <p>Students will solve for missing parts of rectangles, rhombi, squares, and parallelograms.</p> <p>Students will solve for missing parts of trapezoids and kites.</p> <p>Students will identify special quadrilaterals.</p>	<ul style="list-style-type: none"> ➤ Special quadrilateral Quiz ➤ Unit 6 Test ➤ Midterm Exam (Cumulative) 	<p>CC.2.3.HS.A.3</p> <p>CC.2.3.HS.A.11</p>
Unit 7	4	<p><u>Proportions and Similarity</u></p> <p>Students will write ratios and solve proportions.</p> <p>Students will solve for missing parts of similar triangles.</p> <p>Students will prove that two triangles are similar.</p> <p>Students will solve real-world applications of similar triangles.</p>	<ul style="list-style-type: none"> ➤ Similar triangles Quiz ➤ Unit 7 Test 	<p>CC.2.3.HS.A.3</p> <p>CC.2.3.HS.A.6</p> <p>CC.2.3.HS.A.11</p> <p>CC.2.3.HS.A.14</p>
Unit 8	3	<p><u>Right Triangles and Trigonometry</u></p> <p>Students will use the Pythagorean theorem and its converse to solve problems.</p> <p>Students will setup and solve proportions for right triangles.</p> <p>Students will solve for missing parts of special right triangles.</p> <p>Students will use trigonometry to solve for missing parts of right triangles.</p> <p>Students will solve real-world applications problems using trigonometry.</p>	<ul style="list-style-type: none"> ➤ Right Triangle Quiz ➤ Unit 8 Test 	<p>CC.2.3.HS.A.3</p> <p>CC.2.3.HS.A.7</p> <p>CC.2.3.HS.A.14</p> <p>CC.2.2.HS.C.9</p>
Unit 9	2	<p><u>Circles</u></p> <p>Students will identify the parts of a circle.</p> <p>Students will solve for missing angles and lengths in a circle.</p> <p>Students will calculate circumference and arc length.</p> <p>Students will use properties of tangent and secant lines to solve for length and angle measure.</p>	<ul style="list-style-type: none"> ➤ Circumference, Angles, and Arcs Quiz ➤ Unit 9 Test 	<p>CC.2.3.HS.A.8</p> <p>CC.2.3.HS.A.9</p>

Unit 10	3	<p style="text-align: center;"><u>Area</u></p> <p>Students will calculate the area of parallelograms and triangles.</p> <p>Students will calculate the area of trapezoids, rhombi and kites.</p> <p>Students will calculate the area of circles and sectors.</p> <p>Students will calculate the area of regular polygons and composite figures.</p> <p>Students will calculate the area of similar figures.</p>	<ul style="list-style-type: none"> ➤ Area of triangles, quadrilaterals, and circles Quiz ➤ Unit 10 Test 	<p>CC.2.3.HS.A.9</p> <p>CC.2.3.HS.A.14</p>
Unit 11	2	<p style="text-align: center;"><u>Surface Area and Volume</u></p> <p>Students will calculate the surface area and volume of prisms and cylinders.</p> <p>Students will calculate the surface area and volume of pyramids and cones.</p> <p>Students will calculate the surface area and volume of spheres.</p> <p>Students will calculate the surface area and volume of congruent and similar solids.</p> <p>Students will calculate the surface area and volume of composite solids.</p>	<ul style="list-style-type: none"> ➤ Surface area Quiz ➤ Volume Quiz ➤ Unit 11 Test 	<p>CC.2.3.HS.A.12</p> <p>CC.2.3.HS.A.13</p> <p>CC.2.3.HS.A.14</p>