Maryland High School Geometry
Content Standards Mapping

Geometry Core Learning Goals	Boardworks High School Geometry presentation
2.1 The student will represent and analyze two- and three-dimensional figures using tools and technology when appropriate.	
2.1.1 The student will analyze the properties of geometric figures.	Cylinders, cones and spheres Edges of rectangular prisms Prisms Pyramids Surface area of rectangular prisms Volume of rectangular prisms Parts of a circle Polygons Quadrilaterals Radius and circumference Angles in a circle The area of a circle Interior and exterior angles of polygons Using polygons The area of a triangle Triangles Right triangles Congruence and similarity Angles Lines Using circle properties Using length, area and volume formulas The Triangle Inequality Theorem Special right triangles

2.1.2 The student will identify and/or verify properties of geometric figures using the coordinate plane and concepts from algebra.	The equation of a circle Using circle properties The distance between two points The midpoint of a line segment Slopes and intercepts Parallel and perpendicular lines
2.1.3 The student will use transformations to move figures, create designs, and/or demonstrate geometric properties.	Combining transformations Reflection and rotational symmetry Reflection symmetry Rotation Rotational symmetry Tessellation Dilation The center of dilation Translation Using polygons
2.1.4 The student will construct and/or draw and/or validate properties of geometric figures using appropriate tools and technology.	Constructing bisecting lines and angles Constructing triangles Using construction
2.2 The student will apply geometric properties and relationships to solve problems using tools and technology when appropriate.	
2.2.1 The student will identify and/or verify congruent and similar figures and/or apply equality or proportionality of their corresponding parts.	Congruence and similarity Using congruence and similarity Similar right triangles

2.2.2 The student will solve problems using two-dimensional figures and/or right-triangle trigonometry.	Applying trigonometry Inverses in trigonometry Right triangles The sine ratio The cosine ratio The tangent ratio Trigonometry summary Opposite and adjacent sides The sine, cosine and tangent of any angle Trig value functions on the unit circle Sin, cos and tan of 30, 45 and 60
2.2.3 The student will use inductive or deductive reasoning.	–
2.3 The student will apply concepts of measurement using tools and technology when appropriate.	
2.3.1 The student will use algebraic and/or geometric properties to measure indirectly.	Congruence and similarity Dilation

2.3.2 The student will use techniques of measurement and will estimate, calculate, and/or compare perimeter, circumference, area, volume, and/or surface area of two- and three-dimensional figures and their parts.	Radius and circumference Applying trigonometry Cylinders, cones and spheres Edges of rectangular prisms Prisms Pyramids Surface area of rectangular prisms Volume of rectangular prisms Parts of a circle Polygons Quadrilaterals The area of a circle The area of a sector The area of a triangle Triangles Area formulas and calculations Using area formulas Using length, area and volume formulas