# Geometry (High School)

**Course Overview:**

Geometry is a course designed around Maryland’s College and Career Readiness Standards (MCCRS) and focused on seven major themes:

* Congruence
* Similarity, Right Triangles, and Trigonometry
* Expressing Geometric Properties with Equations
* Circles
* Reasoning with Equations and Inequalities
* Geometric Measurement & Dimension
* Modeling with Geometry

*EnVision Geometry* (2018) is the primary resource for the course. Students have access to the textbook online and many other online resources. These resources help students practice concepts and skills so they can demonstrate deep understanding. Students are expected to practice literacy skills during the course through the proper use of grade level mathematical vocabulary, writing explanations and justifications and reading the text.

CCPS has three different geometry classes. This course is the high school geometry course. CCPS also offers an Honors Geometry course to high school students and a semester geometry course to grade 8 students.

A quick overview follows for the high school geometry course.

# Quick Overview by Marking Period

Marking Period 1:

* Segments and angles
* Basic constructions
* Midpoint, distance, and slope
* Writing proofs
* Parallel lines: proofs and algebraic connections

Marking Period 2:

* Transformations: reflections, rotations, translations
* Congruence and congruent triangles
* Perpendicular and angle bisectors
* Medians and altitudes
* Other triangle relationships Marking Period 3:
* Properties of parallelograms
* Proofs with quadrilaterals
* Dilations
* Similarity
* Right Triangles and the Pythagorean Theorem
* Trigonometric ratios (sine, cosine, tangent)

Marking Period 4:

* Polygons in coordinate plane
* Circles in the coordinate plane
* Properties of angles and arcs in circles
* Chords, tangent lines, and secant lines
* Volumes of prisms, cylinders, pyramids, and cones

Recognizing the potential gaps due to COVID and the hybrid-learning model in place since March 2020, algebra 1 will also spiral in major content from previous grade levels during the course. In this manner, all students have the opportunity to catch up and keep up. To be candid, our expectation is that all students earn an 85% or better in each marking period.