

Geometry
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Course Description:

For all of human history, explorers have needed to know where they had been and to determine accurately where they were going, and builders and creators have needed to know how to plan and create precise shapes and figures for their works. Geometry grew out of these needs. Artists, architects, builders, inventors, engineers, surveyors and planners all use geometry in their work. Geometry is the result of humankind's attempts to understand space, shape and dimensions. We will spend the year studying both the practical and theoretical sides of geometry.

Students will begin the trimester by exploring patterns and developing inductive reasoning skills. From there, we'll move into foundational geometric concepts, including points, lines, planes, segments and their measures, as well as angles and how to measure them. As a class, we'll investigate segment and angle bisectors, along with angle pair relationships such as complementary, supplementary, vertical and linear pairs. Using this knowledge, students will learn how to prove basic statements about segments and angles. We'll also apply concepts of perimeter, circumference and area and delve into conditional and biconditional statements. The trimester will conclude with a study of lines and angles, focusing on perpendicular lines, parallel lines and transversals.

Credit will be earned through the satisfactory completion of all in-class and homework assignments, passed quizzes and examinations (at least a 60%), as well as good attendance (at least 75%).

Trimester 1

Unit 1 - Geometry Basics
Unit 2 - Logic and Proof
Unit 3 - Parallel and Perpendicular Lines

Trimester 2

Unit 4 - Congruent Triangles
Unit 5 - Triangle Relationships
Unit 6 - Similar Triangles

Trimester 3

Unit 8 - Polygons and Quadrilaterals
Unit 9 - Transformations
Unit 10 - Circles

D Period

Week 1		
Date	Lesson	Due
8/31	Points, Lines, Planes	
9/2	Segments	HW 1
9/9	Homework 2 Review, Quiz 1	HW 2
9/14	Quiz Review, Distance and Midpoint Formulas	
9/21		HW 3
9/23		

E Period

Week 1		
Date	Lesson	Due
9/1	Points, Lines, Planes	
9/3	Segments	HW 1
9/8	Homework 2 Review, Quiz 1	HW 2
9/10	Quiz Review, Distance and Midpoint Formulas	
9/15		HW 3
9/17		