

**Writing and Reading Enrichment (6-7-8-9)** 

This course is designed to strengthen and improve vocabulary, spelling, grammar, writing, reading, and oral communication skills. Students will continue to enhance their independent writing skills by developing more advanced vocabulary, additional comprehension skills, and literary skills.

In addition, they will concentrate on the areas of composing, written expression, and usage/mechanics in developing narrative, expository and persuasive writings. Students will study media message techniques and apply research techniques to gather, organize and communicate information.

## **Summer Math Adventures, Pre-Algebra**

This course is designed for students who have completed a middle school mathematics sequence but are not yet algebra ready. This course reviews key algebra readiness skills from the middle grades and introduces basic Algebra I work with appropriate support. Students revisit concepts in numbers and operations, expressions and equations, ratios and proportions, and basic functions. By the end of the course, students are ready to begin a more formal high school Algebra I study.

## Summer Math Adventures, Algebra

This course focuses on five critical areas: relationships between quantities and reasoning with equations, linear and exponential relationships, descriptive statistics,

expressions and equations, and quadratic functions and modeling. This course builds on the foundation set in middle grades by deepening students' understanding of linear and exponential functions and developing fluency in writing and solving one-variable equations and inequalities. Students will interpret, analyze, compare, and contrast functions that are represented numerically, tabularly, graphically, and algebraically. Quantitative reasoning is a common thread throughout the course as students use algebra to represent quantities and the relationships among those quantities in a variety of ways. Standards of mathematical practice and process are embedded throughout the course, as students make sense of problem situations, solve novel problems, reason abstractly, and think critically.

## **Summer Math Adventures, Geometry**

Math Achievement, Geometry The geometry students will study geometric concepts including the basic elements of geometry, proofs, parallel and perpendicular lines, the coordinate plane, triangles, quadrilaterals, polygons, circles, trigonometry, congruence and similarity, surface area, volume, and transformations. Course Objectives and Student Learning Outcomes Students who successfully complete the course will be able to: Identify and apply the properties of rays and angles; Identify and apply the properties of parallel and perpendicular lines; Write conditional statements; Write proofs; Write and graph linear functions; Identify and apply the properties of triangle; Identify and apply the properties of polygons; and, Identify and apply the properties of circles.

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