

Grade 6-8 - Scope and Sequence Math

Structure and Method - Students are able to learn Mathematics using a teaching sequence that follows the 5 E instructional model. Students are **engaged** by prompting curiosity of the subject, are encouraged to **explore** by generating new ideas, are provided opportunities to demonstrate and **explain** their conceptual understanding of the material, are challenged to **elaborate** their understanding, and are **evaluated** by assessing their achievement of the educational goals. Through project and inquiry based learning students are able to forge a bridge between classroom content and real world applications.

Sixth Grade Math

Students draw from prior knowledge of whole number multiplication and division and begin to touch on their understanding of abstract and quantitative reasoning to assist in problem solving. Areas of study include: number sense and operations, proportionality, ratios and rates, equivalent expressions, equations and inequalities, relationships in geometry, and measurement and data.

Textbook- HMH *Go Math!* Middle School Grade 6

Seventh Grade HP Math

Students extend their understanding of mathematical concepts by beginning to construct symbolic representations and use logical reasoning to find the solution to problems. Areas of study include: the number system, ratios and proportional relationships, expressions, equations, and inequalities, geometry, statistics, and probability.

Textbook- HMH *Go Math!* Middle School Grade 7

Seventh Grade H Math

Students expand their mathematical knowledge and establish the foundation needed to prepare themselves as they transition to Algebra I. Students will need to score a sufficient level on the standardized Terra Nova test and pass the Algebra Readiness Test in order to enroll in the Honors Algebra I course for 8th grade. Areas of study include: the number system, ratios and proportional relationships, expressions, equations and inequalities, geometry, statistics, probability, real numbers, exponents and scientific notation, linear relationships and equations, and transformational and measurement geometry.

Textbook- HMH *Go Math!* Middle School Accelerated Grade 7

Eighth Grade Pre-Algebra Math

Students will establish the building blocks needed for a smooth transition into High School Algebra I. Areas of study include: real numbers, exponents and scientific notation, proportional and non-proportional relationships and functions, solving equations and systems of equations, transformational and measurement geometry, and statistics.

Textbook- HMH *Go Math!* Middle School Grade 8

Eighth Grade Algebra I Math

Algebra I students continue to explore and deepen their understanding of abstract concepts with regards to numeric relationships needed for Geometry. Logical reasoning skills are strengthened to promote deeper critical thinking and problem-solving prowess. Areas of study include: numbers and expressions, equations and functions, linear relationships, exponential relationships, statistics and data, polynomial expressions and equations, and functions and modeling.

Textbook- HMH *Go Math!* Algebra I