

Grade 6-8 - Scope and Sequence Math

Structure and Method - Students are able to learn Mathematics through daily presentations, modeling, interactive learning, oral exercises, differentiated instruction, visual and tactile activities, multi-media and technology resources. Plans include language, real world, career, and community connections.

Math 6

Students draw from their knowledge of whole-number multiplication and division as they begin their study of ratios and rates. Students cover the following topics: decimal operations, data and graphs, number theory and fractions, fraction operations, ratios, proportions, percent, Geometry tools and measurement, solving equations and exploring integers..

Textbook - Pearson- *Prentice Hall Course 1 Common Core Mathematics*

Math 7

Students extend their study of ratios and rates to develop an understanding of proportionality. The areas of emphasis are decimals and integers, exponents, factors, fraction operations, number theory, ratio, rates and proportions. Students solve a range of percent problems (e.g., discounts, interest, taxes, tips, and percent of change). Geometry and measurement are also emphasized.

Textbook - Pearson- *Prentice Hall Course 2 Common Core Mathematics*

Math 7 Pre-Algebra Honors

This course covers the topics of algebraic expressions and integers, solving multi-step equations and inequalities, decimals and equations, factors, fractions, exponents, ratios, proportions and percent, linear functions and graphing, spatial thinking, area and volume, and irrational numbers. This course prepares students for taking Algebra I as 8th graders. Students must score sufficiently on the standardized Iowa Algebra Aptitude test to enroll in the Honors Algebra I course in 8th grade.

Textbook – Pearson - *Prentice Hall Mathematics Algebra Readiness*

Math 8 Pre-Algebra

This course prepares students for taking Algebra I. Areas of study include integers and algebraic expressions, rational numbers, real numbers and the Coordinate plane, applications of proportions, applications of percent, algebra equations and inequalities, geometry and measurement.

Textbook – Pearson - *Prentice Hall Course 3 Common Core Mathematics*

Math 8 Algebra I Honors

This course prepares students to pass the end of the course test in order to receive high school credit. Students extend the foundations for Algebra developed in Pre-Algebra to the following topics: solving equations, solving inequalities, an introduction to functions, linear functions, systems of equations and inequalities, exponents and exponential functions, polynomials and factoring, quadratic functions and equations, radical expressions and equations and rational expressions and functions.

Textbook – Pearson - *Algebra I Common Core*