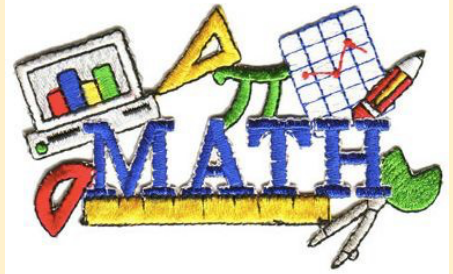




Mathematics Department

Curricula Grades 6-8



Norwell Public Schools' grades 6-8 mathematics curricula follow the standards for mathematical content as outlined in the [2017 Massachusetts Mathematics Curriculum Frameworks](#). In addition, the mathematics department offers rich and rigorous coursework at all grade levels, allowing students to grow academically, cultivate their higher order thinking skills, and develop into thoughtful and capable problem solvers, critical thinkers, and lifelong mathematical learners.

The **Mathematics Department** at Norwell Middle School believes that all mathematically proficient students should develop an expertise in the following **"Standards for Mathematical Practice."**

- Make sense of problems and persevere in solving them
- Reason abstractly and quantitatively.
- Construct viable arguments and critique the reasoning of others.
- Model with Mathematics.
- Use appropriate tools strategically.
- Attend to precision.
- Look for and make use of structure.
- Look for and express regularity in repeated reasoning.

Grade 6

Sixth grade mathematics focuses on number sense, pre-algebra, geometry, rates and ratios, integers, and statistics. Students will use previous knowledge of multiplication and division to solve division fraction problems throughout the major areas of study. An overarching emphasis will be placed on students' ability to apply all skills to real world problems.

Grade 7

Seventh grade mathematics focuses on performing operations with integers and rational numbers, applying properties of operations to create equivalent expressions, solving algebraic equations and inequalities, proportional relationships, graphing and percents, experimental and theoretical probability, drawing inferences about populations based on samples, angle relationships, and the analysis of two and three dimensional figures.

Grade 8

Eighth grade mathematics focuses on teaching all students the foundations of algebra. Topics covered include sets and properties of real numbers, solving equations and inequalities, solving systems of equations and inequalities, linear functions, exponents, polynomials and factoring, and quadratic functions and equations.

The Norwell Middle School Program of Studies provides more detailed information about courses, expectations and opportunities.