Curriculum at a Glance
Mathematics
Grade 7 - Course 2 (on level math)

Mathematics is a vigorous and growing discipline – a universal language useful for communication and research in other disciplines. We want our students to reason and communicate mathematically, to be mathematical problem-solvers, to value mathematics and to feel confident in their ability to use mathematics. Throughout the school year, math teachers at MMS foster and emphasize the following mathematical practices:

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Grade 7 Course 2 is aligned with current Grade 7 Connecticut Core Standards. This course is designed to prepare students to take Grade 8 Course 3.

Unit Name	Content
Integers	Integers and Absolute Value Adding, Subtracting, Multiplying and Dividing Integers
Rational Numbers	Ordering and Comparing Rational Numbers Adding, Subtracting, Multiplying, and Dividing Rational Numbers
Expressions and Equations	Simplifying algebraic expressions Adding and subtracting linear expressions Solving one-step equations using addition and subtraction Solving one-step equations using multiplication and division Solving two-step equations
Inequalities	Writing and graphing inequalities Solving one-step inequalities using addition and subtraction Solving one-step inequalities using multiplication and division Solving two-step inequalities
Ratios and Proportions	Simplify and Write Ratios and Rates Write and Solve Proportions Find and Interpret the Slope of Lines Direct Variation
Percents	Convert from Decimals and Fractions to Percents Compare and Order Fractions, Decimals and Percents Solve Percent Problems with Proportions and Equations Percent of Increase and Decrease Discount and Markup Simple Interest
Constructions and Scale Drawings	Adjacent and Vertical angles Complementary and Supplementary Angles Classify Triangles by Angles and Sides Solve for Missing Measures of Triangles and Quadrilaterals Classify Quadrilaterals Scale drawings

Circles and Area	Area of circles Circumference of circles Perimeter and Area of Composite Figures
Surface Area and Volume	Surface Area and Volume of Right Prisms Surface Area and Volume of Pyramids Surface Area of Cylinders
Probability	Outcomes and events Probability Experimental and theoretical probability Compound events Independent and dependent events