Norwood Public Schools   CMS MATHEMATICS
GRADE 8
Intro to Algebra

Description: Intro to Algebra is a challenging mathematics course taught to most 8th grade students. It is a full year course designed to reinforce students' operations with rational numbers including decimals, fractions and percents, as well as extend their proficiency to irrational numbers. A major focus of the course is to extend students thinking from the concrete to the abstract. Students are encouraged to think algebraically by investigating linear patterns and equations. Additionally, the course includes a unit on 2-D and 3-D geometry concepts such as area, volume and surface area. Finally, Intro to Algebra includes an overview of the topics of probability and statistics. It is anticipated that students successfully completing this course will be ready to complete their Algebra sequence in 9th grade.

Learning Experience: Students will experience learning through multiple modalities including: a) direct instruction, b) manipulatives and c) visuals. Students will work both cooperatively and independently throughout the year and will be encouraged to present their ideas using appropriate mathematical vocabulary. Technology will be incorporated throughout the instruction with the use of calculators, websites, PowerPoint presentations, and videos. The standards for mathematical practice are used to guide instruction.

Website: www.msmath3.net

Chapter		Name
Term 1	1	Algebra: Integers
	2	Algebra: Rational Numbers
	3	Algebra: Real Numbers and the Pythagorean Theorem
Term 2	4	Proportions, Algebra, and Geometry
	5	Percent
	6.	Geometry (Angles, Triangles and Quadrilaterals)
Term 3	6	Geometry (Congruence and Transformations)
	7	Geometry: Measuring Area and Volume
	8	Probability (Counting outcomes, simple probability and compound probability
	9	Statistics (mean, median, mode, outliers, and organizing data)
Term 4	10	Algebra: More Equations and Inequalities
	11	Algebra: Linear Function
	12	Nonlinear functions and applications

Resources Used: