



Middle School 8th Grade Math Year at a Glance

Teacher: Mrs. Matheson

	September	October	November	December	January	February	March	April	May	June
8th Grade	The Number System Rational vs. Irrational Numbers	The Number System Use rational approximations to compare and locate on the number line	Expressions and Equations Square and cube roots Radicals and integer exponents Scientific Notation	Expressions and Equations Understand connections between proportional relationships, lines, and equations	Expressions and Equations Solve linear equations and systems of linear equations	Functions Define, evaluate, and compare functions	Geometry Congruence and Similarity Understand and apply the Pythagorean Theorem Solve real world problems involving cylinders, cones, and spheres	Geometry Solve real world problems involving cylinders, cones, and spheres	Statistics and Probability Investigate patterns of association in bivariate data Scatter plots Apply linear association Meaning of slope	Overflow
Algebra	Seeing Structure in Expressions Interpret the structure of expressions Write expressions in equivalent forms to solve problems {insert rational vs. irrational number standard for 8th grade}	Creating Equations/ Reasoning with Equations Create equations that describe numbers or relationships Understand solving equations as a process of reasoning Solve equations in one variable	Seeing Structure in Expressions/ Creating Equations Reasoning with Equations Functions Create and solve inequalities in one variable Interpreting Functions {insert Function standards for 8th grade}	Reasoning with Equations and Inequalities Functions Represent and solve equations and inequalities graphically Build and interpret Linear Models {insert Linear Function standards for 8th grade} {also insert Bivariate data work with scatter plots}	Creating Equations Reasoning with Equations and Inequalities Solving systems of equations and inequalities	Seeing Structure in Expressions Functions Build and interpret exponential functions {insert radical and integer exponents and exponential functions}	Seeing Structure in Expressions Arithmetic with Polynomials and Rational Functions Perform arithmetic operations on polynomials Understand the relationship between zeros and factors of polynomials Use polynomial identities to solve problems	Seeing Structure in Expressions Reasoning with Equations and Inequalities Functions Build functions Understand quadratic models Understand the relationship between zeros and factors of polynomials Compare linear, exponential, and	Arithmetic with Polynomials and Rational Expressions Reasoning with Equations and Inequalities Interpreting Functions Rational Expressions and Functions	Overflow