## Grades 6 – 8 Major Areas of Focus & Required Fluencies

Domain	6 <sup>th</sup> Grade	7 <sup>th</sup> Grade	8 <sup>th</sup> Grade
RP	Understand ratio concepts and use ratio reasoning to solve problems.	Analyze proportional relationships and use them to solve real- world and mathematical problems.	
NS	Apply and extend previous understandings of multiplication and division to divide fractions by fractions. Apply and extend previous understandings of numbers to the system of rational numbers.	Apply and extend previous understandings of operations with positive rational numbers to add, subtract, multiply and divide all rational numbers.	
EE	Apply and extend previous understandings of arithmetic to algebraic expressions. Reason about and solve one-variable equations and inequalities. Represent and analyze quantitative relationships between dependent and independent variables.	Use properties of operations to generate equivalent expressions. Solve real-life and mathematical problems using numerical and algebraic expressions and equations.	Work with radicals and integer exponents. Understand the connections between proportional relationships, lines, and linear equations. Analyze and solve linear equations and inequalities.
F			Define, evaluate, and compare functions. Use functions to model relationships between quantities.
G			Geometric measurement: understand concepts of angle and measure angles. Understand and apply the Pythagorean Theorem.
Required Fluencies	Multi-digit division. Multi-digit decimal operations.		