**Unit 1 - Rational Numbers**

**Fraction Equivalence With Pattern Blocks:** Pattern blocks provide an excellent concrete experience for understanding fractional equivalence. When discoveries are recorded in the abstract fractional form, they provide a bridge to the understanding of equivalence at the abstract level.

**Fraction Action:** What structures of equivalent fractions are revealed when we plot them on the coordinate plane? See the relationships of proportional relationships and constant rates of change (constant of proportionality) unveiled when equivalent fractions are plotted on the coordinate plane.

6.1.1.1 Locate positive rational numbers on a number line and plot pairs of positive rational numbers on a coordinate grid

* Locating positive fractions or decimals on a number line
* Using benchmarks (0, ½, 1) on a number line to estimate fractions and mixed numbers.
* Using benchmarks on a number line to estimate decimals.

6.1.1.5 Factor whole numbers; express a whole number as a product of prime factors with exponents.

* Identifying and defining powers, exponents, and bases
* Expressing powers in expanded, standard and exponential form
* Writing the prime factorization of a number using exponential form

6.2.2.1 Apply the associative, commutative and distributive properties and order of operations to generate equivalent expressions and to solve problems involving positive rational numbers.

* Simplifying numerical expressions using order of operations
* Applying the distributive, associative and commutative properties to generate equivalent numerical expressions and solve problems with whole numbers

6.1.1.6 Determine greatest common factors and least common multiples. Use common factors and common multiples to ~~calculate with fractions and~~ find equivalent fractions.

* Determining the Greatest Common Factor (Divisor) or Least Common Multiple of a set of numbers
* Determining equivalent fractions using common factors and multiples