**6th Grade Course Outline**

**Number System (30%)**

* Add, subtract, multiply and divide fractions (including mixed numbers, whole numbers)
* Long division (remainder as a decimal)
* Add, subtract, multiply, and divide decimal numbers
* Find the common multiples of 2 numbers
* Find the greatest common factor of 2 numbers
* Reduce a fraction to its lowest term
* Find the absolute value of a number (how far is it from 0 on a number line)
* Order numbers (positive, negative, fractions, and decimals) on a number line

**Rate, Ratio, and Proportion (12%)**

* Write a ratio
* Calculate a unit rate (price or speed)
* Understand proportions are equivalent fractions (ratios) and use that knowledge to solve for an unknown (x)
* Calculate percentages (What is 30% of 12?, 12 is what percent of 60?, 40% of what is 4?)
* Use ratios to convert units of measurement or currency (If 1in = 2.54cm, how many cm are in 6in?)

**Expressions, Equations, and Inequalities (23%)**

* Evaluate expressions (using PEMDAS)
* Write expressions or equations for given situations
* Identify when 2 expressions are equivalent
* Solve 1 step equations
* Graph inequalities on a number line
* Identify which variable is independent and which is dependent

**Geometry (18%)**

* Find the area of triangles, rectangles, trapezoids, rhombus, and other polygons that can be decomposed into triangles and rectangles.
* Find the volume of a rectangular prism.
* Draw and recognize nets of 3D shapes.
* Use nets to find the surface area of 3D shapes

**Statistics (17%)**

* Recognize a statistical question
* Calculate the mean, median, mode, and range
* Display data on a dot plot, histogram, frequency table, and box and whisker plot.