## 6<sup>th</sup> Grade Math Syllabus

Investigations Units Covered	Math Concepts
Shapes and Designs (Two-dimensional shapes)	<ul> <li>Understand the important properties of regular and non-regular polygons</li> <li>Identify similar shapes</li> <li>Estimate angle measures and angle sums</li> <li>Using an angle measure for exact measurements</li> <li>Explore parallel lines and their angles</li> </ul>
Covering and Surrounding (two-dimensional measurement)	<ul> <li>Understand area and how it relates to surface area</li> <li>Understand perimeter and how it relates to surface area</li> <li>Develop strategies for finding area, perimeter, and surface area</li> <li>Compare the areas of different geometric figures</li> </ul>
Bits and Pieces III (Computing with decimals)	<ul> <li>Understand fractions, benchmark fractions, operations of fractions, and converting fractions to decimals</li> <li>Develop algorithms for operations with decimals</li> <li>Understand application of decimals, such as "percent off" problems</li> </ul>
Variables and Patterns (Introducing Algebra)	<ul> <li>Review variables and writing variable expressions</li> <li>Represent patterns in tables, graphs, words, and symbols</li> </ul>
Stretching and Shrinking (Similarity)	<ul> <li>Identifying similar figures</li> <li>Calculating the scale factor of a proportion</li> <li>Setting up equivalent ratios</li> <li>Drawing transformations</li> </ul>
Accentuate the Negative (Positive and negative numbers)	<ul> <li>Adding, subtracting, multiplying and dividing negative numbers</li> <li>Understanding absolute value</li> <li>Solving expressions using the order of operations</li> <li>Plotting points on a four-quadrant graph</li> </ul>
Data Distributions (Describing variability and comparing groups)	<ul> <li>Calculate the mean, median, and mode of a set of data</li> <li>Choose the appropriate sample size for a population</li> <li>Represent data accurately on a graph</li> </ul>