

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

| Investigations Units Covered  | Math Concepts  |
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| <b>Shapes and Designs<br/>(Two-dimensional shapes)</b>                      | <ul style="list-style-type: none"> <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> |
| <b>Covering and Surrounding<br/>(two-dimensional measurement)</b>           | <ul style="list-style-type: none"> <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>            |
| <b>Bits and Pieces III<br/>(Computing with decimals)</b>                    | <ul style="list-style-type: none"> <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>                        |
| <b>Variables and Patterns<br/>(Introducing Algebra)</b>                     | <ul style="list-style-type: none"> <li>• Review variables and writing variable expressions</li> <li>• Represent patterns in tables, graphs, words, and symbols</li> </ul>  |
| <b>Stretching and Shrinking<br/>(Similarity)</b>                            | <ul style="list-style-type: none"> <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>   |
| <b>Accentuate the Negative<br/>(Positive and negative numbers)</b>          | <ul style="list-style-type: none"> <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>  |
| <b>Data Distributions<br/>(Describing variability and comparing groups)</b> | <ul style="list-style-type: none"> <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>   |