

**WESTBROOK SCHOOL DEPARTMENT**  
**Math Essential Outcomes for Grades K-5**  
*What Students Need to Know and Be Able to Do*

<b>(Kindergarten)</b>	<b>(Grade 1)</b>	<b>(Grade 2)</b>	<b>(Grade 3)</b>	<b>(Grade 4)</b>	<b>(Grade 5)</b>
<ul style="list-style-type: none"> <li>• Counts objects</li> <li>• Counts forward</li> <li>• Counts backwards</li> <li>• Counts by 10's</li> <li>• Recognizes numbers</li> <li>• Writes numbers</li> <li>• Identifies circles, triangles, squares and rectangles</li> <li>• Extends simple patterns</li> <li>• Creates simple patterns</li> </ul>	<ul style="list-style-type: none"> <li>• Counts up by 1's starting with any number</li> <li>• Counts back by 1's starting with any number</li> <li>• Counts by 2's</li> <li>• Counts by 5's</li> <li>• Compares and orders numbers</li> <li>• Identifies place value and expresses the value for two digit numbers</li> <li>• Solves basic addition facts</li> <li>• Solves basic subtraction facts</li> <li>• Names and identifies the values of coins</li> <li>• Makes coin exchanges</li> <li>• Tells time</li> </ul>	<ul style="list-style-type: none"> <li>• Skip Counts (by 2's, 5's and 10's)</li> <li>• Identifies place value of 2 and 3 digit numbers</li> <li>• Expresses the value of the digits in 2 and 3 digit numbers</li> <li>• Adds two digit numbers</li> <li>• Subtracts two digit numbers</li> <li>• Calculates the value of coin combinations (pennies nickels, dimes, and quarters)</li> <li>• Makes money exchanges using pennies, nickels, dimes, quarters, and dollar bills</li> <li>• Tells time</li> <li>• Measures to the nearest inch and centimeter</li> <li>• Identifies the fractional parts of a region or set using <math>\frac{1}{2}</math> and <math>\frac{1}{4}</math></li> <li>• Interprets data from tables and bar graphs</li> <li>• Demonstrates appropriate strategies to solve single step addition and subtraction word problems</li> </ul>	<ul style="list-style-type: none"> <li>• Counts by 10's and 100's starting at any number</li> <li>• Identifies and expresses the place values of 4 and 5 digit number up to 99,999</li> <li>• Identifies numerators and denominators</li> <li>• Identifies, reads, and writes fractional parts with denominators up to 10</li> <li>• Adds 3 and 4 digit numbers</li> <li>• Subtracts 3 and 4 digit numbers</li> <li>• Knows multiplication facts 0-5 and 10</li> <li>• Knows division facts 0-5 and 10</li> <li>• Measures line segments to the nearest <math>\frac{1}{4}</math> inch and <math>\frac{1}{2}</math> centimeter</li> <li>• Calculates the value of combinations of bills and coins and writes the total in dollars and cents notation</li> <li>• Identifies 2 dimensional and 3 dimensional shapes</li> <li>• Identifies right angles</li> <li>• Identifies symmetrical figures and draws lines of symmetry</li> <li>• Makes bar graphs and tally charts</li> <li>• Demonstrates appropriate strategies to solve word problems</li> </ul>	<ul style="list-style-type: none"> <li>• Identifies and expresses the place values of numbers with up to nine digits</li> <li>• Rounds whole numbers to a given place value up to the millions</li> <li>• Converts between fractions, decimals, and/or percents</li> <li>• Adds multi-digit whole numbers</li> <li>• Subtracts multi-digit whole numbers</li> <li>• Estimates whole number operations</li> <li>• Knows multiplication facts</li> <li>• Knows division facts</li> <li>• Multiplies multi-digit numbers</li> <li>• Identifies, reads and writes fractions through the tenths</li> <li>• Draws and measures line segments using inches and centimeters</li> <li>• Uses dollars and cents notation in solving problems</li> <li>• Uses a formula to find perimeter of select polygons</li> <li>• Uses a formula to find the area of select polygons</li> <li>• Names, draws and labels lines, angles, and polygons</li> <li>• Identifies lines of reflection, reflected figures, and figures with line symmetry</li> <li>• Displays data with a line plot and/or bar graph</li> <li>• Identifies statistical landmarks (maximum and minimum) for a data set</li> <li>• Demonstrates appropriate strategies to solve word problems</li> </ul>	<ul style="list-style-type: none"> <li>• Identifies and expresses the place value of whole numbers and decimals</li> <li>• Compares and orders fractions and decimals</li> <li>• Converts fractions, decimals, and percents</li> <li>• Identifies factors of a number</li> <li>• Compares and orders positive and negative integers</li> <li>• Knows multiplication and division facts</li> <li>• Adds and subtracts multi-digit numbers with decimals</li> <li>• Multiplies multi-digit whole numbers and decimals</li> <li>• Divides whole numbers and decimals with one digit divisors</li> <li>• Estimates with whole numbers and decimals</li> <li>• Applies the order of operations to solve number sentences and simplify expressions</li> <li>• Adds and subtracts fractions</li> <li>• Multiplies and divides fractions</li> <li>• Estimates and measures angles</li> <li>• Finds the area of two dimensional shapes and the volume of three dimensional shapes</li> <li>• Describes and classifies polygons and geometric solids</li> <li>• Identifies statistical landmarks for a data set</li> <li>• Demonstrates appropriate strategies to solve word problems</li> </ul>