

## 8<sup>th</sup> Grade Mathematics Syllabus

Revised May 2016

1 <sup>ST</sup> BENCHMARK	MATH LAB	2 <sup>ND</sup> BENCHMARK	MATH LAB
<p><b><u>Chapter 1- Equation Solving</u></b> (8.EE 7, 8.EE 7, a, b)</p> <p>1.1 Solving Simple Equations</p> <p>1.2 Solving Multi-Step Equations</p> <p>1.3 Solving Equations with Variables on Both Sides (include Identity and No Solution)</p> <p>1.4 Rewriting Equations and Formulas (Literal Equations)</p>	<p><b><u>Chapter 2 - Transformations</u></b> (8.G.1 a-c, 8.G.2, 8.G3, 8.G.4)</p> <p>2.1 Congruent figures</p> <p>2.3 Reflections</p> <p>2.4 Rotations</p> <p>2.5 Similar Figures</p> <p>2.6 Perimeter and area of similar figures</p> <p>2.7 Dilations</p> <p>2.2 Translations</p> <p><b><u>Chapter 3 - Angles and Triangles</u></b> (8.G.5)</p> <p>3.1 Parallel lines and Transversals</p> <p>3.2 Angles of Triangles</p> <p>3.3 Angles of Polygons</p> <p>3.4 Using Similar Triangles</p>	<p><b><u>Chapter 4- Graphing and Writing Linear Equations</u></b> (8.EE.5., 8.EE.6, 8.F.4)</p> <p>4.1 Graphing Linear Equations</p> <p>4.2 Slope of a Line (from a graph, two points, T.O.V.)</p> <p>4.3 Graphing Proportional Relationships</p> <p>4.4 Graphing Linear Equations in Slope Intercept Form</p> <p>4.6 Writing Equations in Slope-Intercept Form</p> <p>4.5 Graphing Linear Equations in Standard Form</p> <p>4.7 Writing Equations in Point-Slope Form</p> <p><b><u>Chapter 5- Systems of Equations</u></b> (8.EE.8a-c, 8.EE.7)</p> <p>5.1 Solving Systems of Equations by Graphing</p> <p>5.2 Solving Systems of Equations by Substitution</p> <p>5.3 Solving Systems of Equations by Elimination</p> <p>5.4 Solving Special Systems of Linear Equations</p>	<p><b><u>Chapter 7- Real Numbers and the Pythagorean Theorem</u></b> (8.NS.1, 8.NS2, 8.EE2, 8.G6, 8.G7, 8.G.8)</p> <p>7.1 Finding Square Roots</p> <p>7.2 Finding Cube Roots</p> <p>7.3 Pythagorean Theorem</p> <p>7.4 Approximating Square Roots</p> <p>7.5 Using Pythagorean Theorem</p> <p><b><u>Chapter 8 - Volume and Similar Solids</u></b> (8.G.9)</p> <p>8.1 Volume of Cylinders</p> <p>8.2 Volume of Cones</p> <p>8.3 Volume of Spheres</p> <p>8.4 Surface Areas and Volumes of Similar Solids</p>

<b>3<sup>rd</sup> Benchmark</b>	<b><i>MATH LAB</i></b>	<b>4<sup>th</sup> Benchmark</b>	<b><i>MATH LAB</i></b>
<p><b><u>Chapter 6- Functions</u></b>  <b><u>(8.F.1, 8.F.2, 8.F.3, 8.F.4, 8.F.5)</u></b></p> <p>6.1 Relations and Functions</p> <p>6.2 Representations of Functions</p> <p>6.3 Linear Functions</p> <p>6.4 Comparing Linear and Non-linear Functions</p> <p>6.5 Analyzing and Sketching Graphs</p> <p><b><u>Chapter 10- Exponents and Scientific Notation</u></b>  <b><u>(8.EE.1, 8.EE.3, 8.EE.4)</u></b></p> <p>10.1 Exponents</p> <p>10.2 Product of Powers Property</p> <p>10.3 Quotient of Powers Property</p> <p>10.4 Zero and Negative Exponents</p> <p>10.5 Reading Scientific Notation</p> <p>10.6 Writing Scientific Notation</p> <p>10.7 Operations in Scientific Notation</p>	<p><b><u>Chapter 9 - Data Analysis and Displays</u></b>  <b><u>(8.SP1, 8.SP2, 8.SP3, 8.SP.4)</u></b></p> <p>9.1 Scatter Plots</p> <p>9.2 Lines of Best Fit</p> <p>9.3 Two Way Tables</p> <p>9.4 Choosing a Data Display</p>	<p>Polynomials (Adding, Subtracting, Multiplying)</p> <p>GCF of Monomials/division</p> <p>Factoring with a Leading Coefficient of 1</p> <p>Factoring Special Cases</p>	<p><b><u>Finance</u></b></p> <p>%s</p> <p>Sales Tax</p> <p>Withholding Taxes (Definition and Rationale)</p> <p>W-2</p> <p>Working Papers</p> <p>Labor</p> <p>% which gives you the best deal</p> <p>Open-ended question</p>