

8th Grade (Pre Algebra)/Math Curriculum Map

<u>Dates</u>	<u>Units/Curriculum Connections</u>	<u>Standards Met</u>	<u>Assessments</u>	<u>Resources /Materials used</u>
<u>September</u>	Integers and Algebraic Expressions Variables and Expressions Order of Operations Writing and Evaluating Expressions Adding, Subtracting, Multiplying, and Dividing Integers Inductive Reasoning The Coordinate Plane	8.EE.A.1, 8.EE.A.3, 8.EE.A.4	Observations Discussions Classroom Activities Chapter Tests Group / Peer Teaching Student Created Expressions - Written and Numerical Modeling Integers Calendar Trivia Reading Bar and Line Graphs	Problem Solving Strategies Educreation Videos Graph Paper Projector Whiteboard IPads Rulers / Meter Stick Classroom Floor Duct Tape Blocks Computer
<u>October</u>	Solving One-Step Equations and Inequalities Properties of Numbers Distributive Property Variables and Equations Solving Equations and Inequalities by Adding, Subtracting, Multiplying, and Dividing Graphing Inequalities	8.EE.7, 8.EE.7.a, 8.EE.7.b	Observations Discussions Classroom Activities Chapter Tests Student Created Posters Math Duel Tournament Student Presentations Using Models with Equations High Use Academic Words Jeopardy	Problem Solving Strategies Educreation Videos Projector Whiteboard IPads Rulers Math Duel App Base-Ten Blocks Dictionary Computer

<p><u>November</u></p>	<p>Decimals and Equations Rounding and Estimating Decimals / Decimal Products and Quotients Solving Equations with Decimals by Adding, Subtracting, Multiplying, and Dividing Using Formulas Using the Metric System</p>	<p>8.EE.7, 8.EE.7.a, 8.EE.7.b</p>	<p>Observations Discussions Classroom Activities Chapter Tests Decimal War Writing and Comparing Decimals Reading a Table Precision and Significant Digits</p>	<p>Problem Solving Strategies Educreation Videos Graph Paper Projector Whiteboard IPads Decimal Cards Base-Ten Blocks Ruler</p>
<p><u>December</u></p>	<p>Factors, Fractions, and Exponents Divisibility, Factors and Exponents Multiplying and Dividing Exponents Prime Factorization, GCF, and Simplifying Fractions Scientific Notation</p>	<p>8.EE.A.1, 8.EE.A.2, 8.EE.A.3, 8.EE.A.4</p>	<p>Observations Discussions Classroom Activities Chapter Tests Multi-Magic Squares Patterns and Equations Venn Diagram</p>	<p>Problem Solving Strategies Educreation Videos Projector Whiteboard IPads Colored Pencils Graph Paper</p>
<p><u>January</u></p>	<p>Operations with Fractions Comparing and Ordering Rational Numbers Fractions and Decimals Adding, Subtracting, Multiplying, and Dividing Fractions Solving Equations by Adding, Subtracting, Multiplying, Dividing Fractions Customary Units of</p>	<p>8.NS.A.1, 8.NS.A.2</p>	<p>Observations Discussions Classroom Activities Chapter Tests Estimating With Fractions and Mixed Numbers Greatest Possible Error Choosing Fractions or Decimals to Solve a Problem Operations with Rational</p>	<p>Problem Solving Strategies Educreation Videos Projector Whiteboard IPads Graph Paper Colored Pencils</p>

	Measurement Powers of Products and Quotients		Numbers	
<u>February</u>	Ratios, Proportions, and Percents Ratios and Unit Rates Proportions Scale Drawings Fractions, Decimals, and Percents Proportions and Percents Percents and Equations Percent of Change Markup and Discount Applications of Real Numbers	8.EE.B.5	Observations Discussions Classroom Activities Chapter Tests Estimating to Convert Between Measurement Scale Drawings Dilations Estimating with Percents	Problem Solving Strategies Educreation Videos Graph Paper Ruler Projector Whiteboard IPads Colored Pencils Ruler Metric and Customary Unit Containers Newspaper
<u>March</u>	Solving Equations and Inequalities Solving Two and Multi-Step Equations Two-Step Equations With Fractions and Decimals Solving Two-Step Inequalities Transforming Formulas Simple and Compound Interest	8.EE.B.5, 8.EE.C.7, 8.EE.B.6, 8.EE.C.8	Observations Discussions Classroom Activities Chapter Tests Banking 101 Modeling Multi-Step Equations	Problem Solving Strategies Educreation Videos Graph Paper Projector Whiteboard IPads Ruler Pattern Blocks
<u>April</u>	Linear Functions and Graphing Relations and Functions Equations with Two Variables Slope and y-intercept Direct Variation Solving Systems of Linear Equations Graphing Linear Inequalities	8.F.A.1, 8.F.A.2, 8.F.A.3, 8.F.A.4, 8.F.A.5	Observations Discussions Classroom Activities Chapter Tests Relating Graphs to Events Rate of Change	Problem Solving Strategies Educreation Videos Ruler Graph Paper Projector Whiteboard IPads Colored Pencils

				Pattern Blocks
<u>Dates</u>	<u>Units/Curriculum Connections</u>	<u>Standards Met</u>	<u>Assessments</u>	<u>Resources /Materials used</u>
<u>May</u>	<p>Using Graphs to Analyze Data Mean, Median, and Mode Frequency Venn Diagrams, Stem-and-Leaf Plots, Box-and-Whisker Plots, Scatter Plots, and Circle Graphs</p> <p>Spatial Thinking Points, Lines, and Planes Angle Relationships and Parallel Lines Polygons Congruence Circles Constructions Translations Rotations</p>	8.SP.1, 8.SP.2, 8.SP.3, 8.SP.4 8.G.A.1, 8.G.A.2, 8.G.A.3, 8.G.A.4, 8.G.A.5	Observations Discussions Classroom Activities Chapter Tests Relating Geometric Objects Angles of a Polygon Parts of a Circle Dilations in the Coordinate Plane	Problem Solving Strategies Educreation Videos Graph Paper Compass Pattern Blocks Projector Whiteboard IPads Dice Marbles Graph Maker App
<u>June</u>	<p>Area and Volume Area of Parallelograms, Triangles, and Trapezoids Surface Area of Prisms, Cylinders, Pyramids, Cones, and Spheres Volume of Prisms, Cylinders, Pyramids, Cones, and Spheres Scale Factors and Solids</p>	8.G.A.3, 8.G.B.6, 8.G.B.7, 8.G.B.8, 8.G.B.9	Observations Discussions Classroom Activities Chapter Tests Perimeter and Area of Similar Figures Three Views of an Object Cross Sections of Space Figures Surface Area of Rectangular Prisms Oblique Prisms and	Problem Solving Strategies Educreation Videos Compass Pattern Blocks Graph Paper Projector Whiteboard IPads Scissors Colored Pencils Blocks

			Cylinders	
--	--	--	-----------	--