Content Area Math | **Grade Level/Course** | **District**

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Unit #	Content	Essential questions	Objectives Skills Processes	Vocabulary	Assessment	Resources Chapters / Sections	Mn Standard & Benchmarks	Estimate # of days on Unit
1	Variables and Equations		1.Review Foundational Skills	**Evaluate** **substitute** **simplify** Perimeter Area		Chapter 1 (Skip 1.1)	7.1.2.4, 7.2.3.3	11 Days
2	Integer Operations		1. Students learn how to do operations on numbers less than zero. 2. Explore Number Properties 3. Plot points and define parts of a coordinate plane	**absolute value** **Coordinate** **Origin, opposite** Distributive Integers Mean Comm/Ass/Dist Prop		Chapter 2 All	7.4.1.1, 7.2.3.1, 7.1.2.6	15 Days
3	Equations and Inequalities		1. Write and Solve Equations 2. Graph Inequalities	Equations Inequalities **Inverse** **Inversely** Simplify		Chapter 3 (Light on 3.6 and 3.7)	7.2.3.2, 7.2.2.4	10 Days
4	Factors, Fractions, Exponents		1. Find Prime factorization 2. Find GCF and LCM 3. Simplify exponent expressions with positive and negative exponents 4. Express numbers in scientific notation	Prime Composite Factor GCF LCM Equivalent Fraction Multiples (Common) Scientific Notation		Chapter 4 All		19 Days
5	Rational Number Operations		1. Fraction and Decimal Operations 2. Find mean, median, mode, range	Rational Reciprocal **Terminating** **Repeating** MMMR		Chapter 5 All		15 Days

6	Multi-Step Equations		1. Solving Multi-Step Equations 2. Combining Like terms 3. Applying distributive property 4. Solving circle equations (Circumference, radius, diameter)	Like-terms **Radius** **Diameter** **Circumference** pi (proportional relationship)		Chapter 6 (Skip 6.2, 6.5, 6.6)	7.3.1.1, 7.2.1.1, 7.2.3.1, 7.2.4.1, 7.2.4.2	7 Days
7	Ratio, Proportion, Percent		1. Find Ratios and Unit Rates 2. Write and Solve proportions 3. Solve problems using proportions 4. Convert fractions, decimals, percents 5. Work with percents 6. Probability of simple events	Rates **Proportions** Unit Rate **Scale** **Circle Graph** Percents (change, increase, decrease, markup, discount) **Simple Interest** Principal Theoretical Prob Experimental Prob Expected Value Outcome (Prob), **compound interest**		Chapter 7 All	7.3.1.1, 7.3.2.2, 7.3.2.3, 7.2.2.3, 7.2.2.2, 7.1.2.5	20 Days
8	Polygons and Transformations		1. Define polygons and types of polygons 2. Solve equations to calculate angle measures of polygons 3.Define transformations and types (rotation, reflection, translation, dilation) 4.Calculate new points using transformation notation	Supplementary Complementary Polygon Congruent **Similar** Symmetry Rotation Reflection Translation Dilation		Chapter 8 (Skip 8.1, Replace 8.6 and 8.7 with Packet)	7.3.2.1, 7.3.2.2, 7.3.2.4	12 Days
9	Real number ans Right Triangles		1.Define square roots 2.Determine if numbers are rational or irrational 3.Memorize Perfect squares to 20 4. Use the pythagorean theorem to solve right triangle problems	Square Roots Pythagorean Theorem Rational Irrational		Chapter 9 (Skip 9.5 and 9.6)	7.1.2.4	6 Days

10	Measurement, Area and Volume		1. Calculate area of parallelograms and trapezoids 2. Calculate area or circle 3. If given any one piece of a circle (radius, diameter, area, circumference) be able to calculate the others 4. Define and identify 3-d Figures 5. Create isometric drawings of 3-d shapes 6. Draw the nets of 3-d shapes 7. Calculate the volume and surface area of prisms and cylinders using the appropriate formula	Parallelogram, **lateral area** Trapezoid Isometric Drawings Nets Prisms Pyramids **Cylinders** **Surface Area** Volume		Chapter 10 (Skip 10.5 and 10.7)	7.3.1.2	13 Days
11	Probability		1. Calculate the impact of adding or removing data points on mean and median of a data set 2.Express probabilities as a percent, decimal or fraction 3.Use proportional reasoning to predict relative frequence of outcomes based on probability 4. Make a stem and leaf plot	Probability, **outlier** Theoretical Prob. Experimental Prob. **Relative Frequency** Sample Space **Histogram** Pie Chart **Stem and Leaf Plot**		Chapter 12 (Only Section 12.1) Supplement the rest!	7.4.1.2, 7.4.2.1, 7.4.3.2, 7.4.3.3	5 Days
12	Linear Equations		1. Calculate Slope 2. Graph lines by plotting points 3. Graph lines using slope intercept form 4. Write the equations of a line given a graph	**Slope** Intercept Scatter Plot Slope-Intercept Form Solution		Chapter 11 (11.2, 11.3, 11.4 11.6, 11.7) Many supplemental worksheets used		12 Days