

Math – Grade 8
District 2853

Month	Content	Performance Standards Addressed	Skills for Student Achievement	Assessment Power Standards
September	<ul style="list-style-type: none"> Data Analysis 	Mathematical Reasoning - Benchmark #3 Patterns and Functions - Benchmark #2 Data and Statistics - Benchmark #1	<ul style="list-style-type: none"> Understand line plots Work with Mean/Median Interpret bar/line graphs Take, record and understand surveys 	<ul style="list-style-type: none"> Make graphs Test on concepts Use formulas to find central tendencies.
September and October	<ul style="list-style-type: none"> Integers 	Mathematical Reasoning - Benchmark #4 Number Sense - Benchmarks #1, #3 Computation and Operation - Benchmark #5 Patterns and Functions - Benchmark #3	<ul style="list-style-type: none"> Interpret negative numbers $+$, $-$, \times, \div of integers and application Evaluate integer expressions Coordinate system application Work with exponents Standard vs. expanded form Scientific notation and use 	<ul style="list-style-type: none"> Oral interpretation by students Test Apply basic math concepts using integers.
October and November	<ul style="list-style-type: none"> Variables, Expressions, Equations 	Mathematical Reasoning - Benchmarks #1, #2, #3, #5, #6 Algebra - Benchmark #4	<ul style="list-style-type: none"> Write and evaluate variable expressions Apply formulas to real life situations Write algebraic expressions Write and solve Algebraic equations Work with inequalities 	<ul style="list-style-type: none"> Application by students in class Test Identify variables to write algebraic expressions and solve.
November and December	<ul style="list-style-type: none"> Ratio and Proportion 	Mathematical Reasoning - Benchmarks #1, #4 Algebra - Benchmark #3	<ul style="list-style-type: none"> Work with rate, ratio, and unit rate Write and solve proportions for application Apply unit rate for price comparison Work with scale models and similar shapes 	<ul style="list-style-type: none"> In class evaluation on assignment and application Test
December and January	<ul style="list-style-type: none"> Percent 	Mathematical Reasoning - Benchmark #1 Algebra - Benchmark #3	<ul style="list-style-type: none"> Learn % basic Fraction to % to decimal Apply and learn 3 basic types of % problems Estimate with % find and apply % of change to increases and decreases Find interest on loans 	<ul style="list-style-type: none"> Interpret ads and mailings that deal with % Apply in class to current situations Test Find percent of change.
January and February	<ul style="list-style-type: none"> State Test Prep 	8 Test Strands	<ul style="list-style-type: none"> Review numerous skills for state test 	<ul style="list-style-type: none"> Practice/review sheets Diagnostic/practice test
February and March	<ul style="list-style-type: none"> Geometry Area and Volume, Perimeter, Surface Area 	Mathematical Reasoning - Benchmark #3, #4, #5 Geometry - Benchmarks #1, #3, #4, #5 Algebra - Benchmark #2	<ul style="list-style-type: none"> Learn various geometry terms - define, draw, and label Work with various geometric shapes and their properties Identify 2D and 3D objects and applicable 	<ul style="list-style-type: none"> Discuss in class real life use of Geometry Tests Measure and find perimeter, area, and volume of real life objects Find area, perimeter and polygons and volume and surface area on polyhedrons.

		Measurement - Benchmarks #1, #2 Spatial Sense - Benchmark #1	terms • Apply various formulas to find perimeter, area and volume	
March and April	• Number Sense, Rational and Irrational Numbers	Mathematical Reasoning - Benchmark #4 Number Sense - Benchmarks #1, #2, #4 Patterns and Functions - Benchmark #1 Computation and Operation - Benchmarks #1, #2, #4	• Work with divisibility • Rules and application • GCF and LCM • $+$, $-$, \times , \div Rational Numbers and application • Learn square roots, Pythagorean Theorem	<ul style="list-style-type: none"> • In class application to real life – surveys, Stock Market, etc. • Test <p>Identify rational and irrational numbers. Use the Pythagorean Theorem to find missing values on right triangles.</p>
May	• Probability	Mathematical Reasoning - Benchmark # 2 Probability - Benchmarks #1, #2, #3	• Understand and apply basic concerns of chance (probability)	<ul style="list-style-type: none"> • In class experiments to determine probability • Test Find probability and odds of independent events.
	• Similar and Congruent Shapes	Geometry - Benchmark #2	<ul style="list-style-type: none"> • Learn the difference between similar and congruent shapes • Apply properties of similar/congruent shapes to real life situations 	<ul style="list-style-type: none"> • Real life application in class • Test <p>Identify similar polygons and find missing values on similar polygons.</p>

* Computation and Operation, Benchmark #7, is done all year