

# Schoolwide Benchmark Assessment Plan

## Math Standards

Test 1 September  
Test 2 November

Test 3 January  
Test 4 March

			<b>SEVENTH GRADE</b>		<b>SEVENTH GRADE</b>
<b>Test</b>	<b>Standard</b>	<b>Category</b>	<b>Essential Math Standards</b>		<b>Kid Friendly Standards</b>
<b>1</b>	<b>1.2</b>	Number Sense	Add, subtract, multiply, and divide rational numbers (integers, fractions, and terminating decimals) and take positive rational numbers to whole-number powers.	<b>1.2</b>	I can add, subtract, multiply and divide positive and negative numbers (which includes fractions and decimals) and take them to positive powers.
<b>1</b>	<b>1.4</b>	Number Sense	Differentiate between rational and irrational numbers.	<b>1.4</b>	I can tell the difference between a number that can be expressed as a fraction and a number that cannot.
<b>1</b>	<b>1.5</b>	Number Sense	Know that every rational number is either a terminating or repeating decimal and be able to convert terminating decimals into reduced fractions.	<b>1.5</b>	I know that every number other than zero can be represented as a decimal and be able to turn decimals that terminate (end) into fraction form.
<b>2</b>	<b>1.1</b>	Statistics, Data Analysis, and Probability	Know various forms of display for data sets, including a stem-and-leaf plot or box-and-whisker plot; use the forms to display a single set of data or to compare two sets of data.	<b>1.1</b>	I can display data in various ways.
<b>2</b>	<b>1.7</b>	Number Sense	Solve problems that involve discounts, markups, commissions, and profit and compute simple and compound interest.	<b>1.7</b>	I can find the discount, markup, commission, and profit and solve for simple and compound interest
<b>2</b>	<b>2.2</b>	Number Sense	Add and subtract fractions by using factoring to find common denominators.	<b>2.2</b>	I can add and subtract fractions with different denominators by factoring
<b>2</b>	<b>2.3</b>	Number Sense	Multiply, divide, and simplify rational numbers by using exponent rules.	<b>2.3</b>	I can multiply, divide and simplify numbers with exponents.
<b>2</b>	<b>2.5</b>	Number Sense	Understand the meaning of the absolute value of a number; interpret the absolute value as the distance of the number from zero on a number line; and determine the absolute value of real numbers.	<b>2.5</b>	I can understand and show on a number line the number of units a number is from zero (absolute value).
<b>3</b>	<b>1.3</b>	Algebra and Functions	Simplify numerical expressions by applying properties of rational numbers (e.g., identity, inverse, distributive, associative, commutative) and justify the process used.	<b>1.3</b>	I can simplify expressions by using the identity, the inverse, and the distributive, the associative, or commutative property
<b>3</b>	<b>3.3</b>	Algebra and Functions	Graph linear functions, noting that the vertical change (change in y-value) per unit of horizontal change (change in x-value) is always the same and know that the ratio ("rise over run") is called the slope of a graph.	<b>3.3</b>	I can graph an equation and know if it is linear based on rise-over-run (slope)
<b>3</b>	<b>3.4</b>	Algebra and Functions	Plot the values of quantities whose ratios are always the same (e.g., cost to the number of an item, feet to inches,	<b>3.4</b>	I can determine the relationship between 2 quantities and graph the relationship

			circumference to diameter of a circle). Fit a line to the plot and understand that the slope of the line equals the quantities.		
<b>3</b>	<b>4.1</b>	Algebra and Functions	Solve two-step linear equations and inequalities in one variable over the rational numbers, interpret the solution or solutions in the context from which they arose, and verify the reasonableness of the results.	<b>4.1</b>	I understand that when there is a missing number in an equation I can solve the equation and determine if it is a possible solution.
<b>3</b>	<b>4.2</b>	Algebra and Functions	Solve multi-step problems involving rate, average speed, distance, and time or a direct variation.	<b>4.2</b>	I can use a formula to find and solve rate, speed, distance and time.
<b>4</b>	<b>2.1</b>	Measurement and Geometry	Use formulas routinely for finding the perimeter and area of basic two-dimensional figures and the surface area and volume of basic three-dimensional figures, including rectangles, parallelograms, trapezoids, squares, triangles, circles, prisms, and cylinders.	<b>2.1</b>	I know and can use formulas to solve for the perimeter, area, surface area, and volume of basic 2 & 3D shapes.
<b>4</b>	<b>1.3</b>	Measurement and Geometry	Use measures expressed as rates (e.g., speed, density) and measures expressed as products (e.g., person-days) to solve problems; check the units of the solutions; and use dimensional analysis to check the reasonableness of the answer.	<b>1.3</b>	I can convert different units of measurement to solve problems.
<b>4</b>	<b>3.3</b>	Measurement and Geometry	Know and understand the Pythagorean theorem and its converse and use it to find the length of the missing side of a right triangle and the lengths of other line segments and, in some situations, empirically verify the Pythagorean theorem by direct measurement.	<b>3.3</b>	I can use the formula $a^2+b^2=c^2$ (Pythagorean theorem) to find a missing side length of a right triangle
<b>4</b>	<b>3.4</b>	Measurement and Geometry	Demonstrate an understanding of conditions that indicate two geometrical figures are congruent and what congruence means about the relationships between the sides and angles of the two figures.	<b>3.4</b>	I know what is needed to show that two shapes have the same size and shape (congruent)
<b>4</b>	<b>3.6</b>	Measurement and Geometry	Identify elements of three-dimensional geometric objects (e.g., diagonals of rectangular solids) and describe how two or more objects are related in space (e.g., skew lines, the possible ways three planes might intersect).	<b>3.6</b>	I can identify parts of 3 dimensional shapes and understand how they are alike.

