NUMBER AND QUANTITY			
Multiplying and Dividing Fractions			
Grade 6			
Score 4.0	**In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught.**		
	Score 3.5	*In addition to score 3.0 performance, partial success at score 4.0 content*	
Score 3.0	**The student will:** • solve word problems involving the division of fractions by fractions (6.NS.1)		**Sample Activities:** The student will determine how wide a rectangular strip of land is with length ¾ of a mile and area ½ square mile. 2/3 ÷ 3/4 The student will use a visual fraction model to show the quotient of 2/3 ÷ 3/4.
	Score 2.5	*No major errors or omissions regarding score 2.0 content, and partial success at score 3.0 content*	
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • compute, division, equation, fraction, model, quotient, visual, word problem **The student will perform basic processes, such as:** • interpret quotients of fractions (6.NS.1) • compute quotients of fractions by using visual fraction models and equations to represent the problem (6.NS.1)		**Sample Activities:** The student will determine how much chocolate each person will get if 3 people share ½ lb. equally. The student will use models to show the relationship between and among the quotient, divisor, and dividend.
	Score 1.5	*Partial success at score 2.0 content, and major errors or omissions regarding score 3.0 content*	
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**		
	Score 0.5	*With help, partial success at score 2.0 content but not at score 3.0 content*	

Score 0.0	**Even with help, no success**	

NUMBER AND QUANTITY			
Ratios and Unit Rates			
Grade 6			
Score 4.0	**In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught.**		
	Score 3.5	*In addition to score 3.0 performance, partial success at score 4.0 content*	
Score 3.0	**The student will:** • solve real-world and mathematical problems using ratios and unit rates (6.RP.3)		**Sample Activities:** The student will solve unit rate problems (e.g., unit pricing, constant speed). The student will find the percent of a quantity as a rate per 100. The student will compare unit rates on items from store ads to find best price.
	Score 2.5	*No major errors or omissions regarding score 2.0 content, and partial success at score 3.0 content*	
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • equivalent, mathematical, quantity, rate, ratio, real-world, relationship, representation, unit rate **The student will perform basic processes, such as:** • use ratio language to describe a ratio relationship between two quantities (6.RP.1) • use rate language in the context of a ratio relationship (6.RP.2) • recognize multiple equivalent representations of ratios (e.g., 1:2, 1 to 2, 1/2)		**Sample Activities:** The student will use a set of pattern blocks to identify that ¼ of the blocks are squares and that the ratio of squares to other shapes is 1:3. Also, the ratio of squares to all shapes is 1 to 4. Repeat with multiple relationships.
	Score 1.5	*Partial success at score 2.0 content, and major errors or omissions regarding score 3.0 content*	
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**		
	Score 0.5	*With help, partial success at score 2.0 content but not at score 3.0 content*	
Score 0.0	**Even with help, no success**		

NUMBER AND QUANTITY			
Rational and Irrational Numbers			
Grade 6			
Score 4.0	**In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught.**		
	Score 3.5	*In addition to score 3.0 performance, partial success at score 4.0 content*	
Score 3.0	**The student will:** • write, interpret, and explain statements of order for rational numbers in real-world contexts (e.g., writing -3°C > -7°C to express the fact that -3°C is warmer than -7°C) (6.NS.7b) • interpret absolute value as a magnitude for a positive or negative quantity in a real-world situation (6.NS.7c) • distinguish comparisons of absolute value from statements about order (6.NS.7d)		**Sample Activities:** The teacher will use examples from temperature (above/below zero) and elevation (above /below sea level), credits/debits, and positive/negative electric charges.
	Score 2.5	*No major errors or omissions regarding score 2.0 content, and partial success at score 3.0 content*	
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • absolute value, comparison, diagram, inequality, integer, interpret, magnitude, negative, number, number line, opposite, order, positive, quantity, rational number, real-world, relative, represent, sign **The student will perform basic processes, such as:** • use positive and negative numbers to represent quantities in real-world context explaining the meaning of zero in each situation (6.NS.5) • recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line (6.NS.6a) • recognize that the opposite of the opposite of a number is the number itself (e.g., -(-3) = 3)(6.NS.6a) • find and position rational numbers, including integers, on a number line (6.NS.6c) • interpret statements of inequality as statements about the relative position of two numbers on a number line diagram (6.NS.7a)		**Sample Activities:** The student will use two-color counters and number lines to model the properties of integers. The student will physically move on a number line to demonstrate location.
	Score 1.5	*Partial success at score 2.0 content, and major errors or omissions regarding score 3.0 content*	
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**		
	Score 0.5	*With help, partial success at score 2.0 content but not at score 3.0 content*	
Score 0.0	**Even with help, no success**		

OPERATIONS AND ALGEBRA			
Multiplication and Division			
Grade 6			
Score 4.0	**In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught.**		
	Score 3.5	*In addition to score 3.0 performance, partial success at score 4.0 content*	
Score 3.0	**The student will:** • use the distributive property to express a sum of two whole numbers between one and 100 with a common factor as a multiple of a sum of two whole numbers with no common factor (6.NS.4)		**Sample Activities:** The student will use models or pictures to demonstrate the distributive property (e.g., express 36 + 8 as 4(9+2)).
	Score 2.5	*No major errors or omissions regarding score 2.0 content, and partial success at score 3.0 content*	
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • add, algorithm, common, decimal, digit, distributive property, divide, express, factor, greatest common factor, least common multiple, multiple, multiply, subtract, sum, whole number **The student will perform basic processes, such as:** • divide multi-digit numbers using the standard algorithm (6.NS.2) • add, subtract, multiply, and divide multi-digit decimals using the standard algorithm (6.NS.3) • find greatest common factor (≤100) and least common multiple (≥12) for two whole numbers (6.NS.4)		**Sample Activities:** The student will choose a whole number between 1 and 100. With a partner, they will work together to find the greatest common fact and least common multiple for their two numbers.
	Score 1.5	*Partial success at score 2.0 content, and major errors or omissions regarding score 3.0 content*	
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**		
	Score 0.5	*With help, partial success at score 2.0 content but not at score 3.0 content*	
Score 0.0	**Even with help, no success**		

OPERATIONS AND ALGEBRA			
Expressions and Equations			
Grade 6			
Score 4.0	**In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught.**		
	Score 3.5	*In addition to score 3.0 performance, partial success at score 4.0 content*	
Score 3.0	**The student will:** • evaluate expressions at specific values of their variables including whole-number exponents (6.EE.1; 6.EE.2c) • generate equivalent expressions using the properties of operations (6.EE.3)		**Sample Activities:** The student will evaluate an expression when provided values for the variables using order of operation. The student will include expressions that rise from formulas used in real-world formulas. For example, volume, surface area, velocity.
	Score 2.5	*No major errors or omissions regarding score 2.0 content, and partial success at score 3.0 content*	
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • equivalent, exponent, expression, generate, mathematical, number, operation, part, property, term, value, variable, whole number **The student will perform basic processes, such as:** • write expressions involving exponents, numbers, and letters standing for numbers (6.EE.1; 6.EE.2a) • identify parts of an expression using mathematical terms (6.EE.2b) • identify when two expressions are equivalent (6.EE.4)		**Sample Activities:** The student will relate mathematical expressions and word phrase. For example, 5 less than some number, 5 less than 3 times a number The student will use manipulatives, such as algebra tiles, to demonstrate that $3(x + 2) = 3x + 6$.
	Score 1.5	*Partial success at score 2.0 content, and major errors or omissions regarding score 3.0 content*	
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**		
	Score 0.5	*With help, partial success at score 2.0 content but not at score 3.0 content*	
Score 0.0	**Even with help, no success**		

OPERATIONS AND ALGEBRA			
Equations and Inequalities			
Grade 6			
Score 4.0	**In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught.**		
	Score 3.5	*In addition to score 3.0 performance, partial success at score 4.0 content*	
Score 3.0	**The student will:** • solve real-world and mathematical equations of the form $x + p = q$ and $px = q$ when all variables are non-negative, rational numbers (6.EE.7) • write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition of a real-world or mathematical problem (6.EE.8)		**Sample Activities:** The student will find the length of a garden plot if the area of the garden is 100 and the width is 10. The student will find the length of side of garden plot if the width is 10 feet and the amount of fence around the plot is 60 feet.
	Score 2.5	*No major errors or omissions regarding score 2.0 content, and partial success at score 3.0 content*	
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • condition, constraint, diagram, equation, expression, inequality, mathematical, negative, number, number line, rational number, real-world, represent, solution, substitution, variable **The student will perform basic processes, such as:** • use substitution to determine whether a given number makes an equation or inequality true (6.EE.5) • use variables to represent numbers and write expressions (6.EE.6) • represent solutions of inequalities on number line diagrams (6.EE.8)		**Sample Activities:** The student will be able to solve a problem such as the following: Given that you have $5 to purchase prizes and that each prize cost 50 cents, how many toys could be purchased? $.50x \leq 5$
	Score 1.5	*Partial success at score 2.0 content, and major errors or omissions regarding score 3.0 content*	
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**		
	Score 0.5	*With help, partial success at score 2.0 content but not at score 3.0 content*	
Score 0.0	**Even with help, no success**		

OPERATIONS AND ALGEBRA			
Dependent and Independent Variables			
Grade 6			
Score 4.0	**In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught.**		
	Score 3.5	*In addition to score 3.0 performance, partial success at score 4.0 content*	
Score 3.0	**The student will:** • analyze the relationship between the independent and dependent variable using graphs, tables, and equations (6.EE.9)		**Sample Activities:** Given any one of the tables, rules, or graphs, the student will be able to create the other two.
	Score 2.5	*No major errors or omissions regarding score 2.0 content, and partial success at score 3.0 content*	
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • analyze, dependent, equation, graph, independent, quantity, relationship, table, variable **The student will perform basic processes, such as:** • write an equation to express one quantity (dependent variable) in terms of the other quantity (independent variable) (6.EE.9)		**Sample Activities:** The student will represent an equation with an input-output machine. The student will put in the number of items to purchase (independent variable) and the machine will output the cost (dependent variable).
	Score 1.5	*Partial success at score 2.0 content, and major errors or omissions regarding score 3.0 content*	
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**		
	Score 0.5	*With help, partial success at score 2.0 content but not at score 3.0 content*	
Score 0.0	**Even with help, no success**		

GEOMETRY			
Coordinate System			
Grade 6			
Score 4.0	**In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught.**		
	Score 3.5	*In addition to score 3.0 performance, partial success at score 4.0 content*	
Score 3.0	**The student will:** • use coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate (6.NS.8) • use coordinate to find the length of a side joining points with the same first coordinate or the same second coordinate (6.G.3)		**Sample Activities:** The student will stand on a life size coordinate plane to recognize the relationships of points with common x or y coordinates.
	Score 2.5	*No major errors or omissions regarding score 2.0 content, and partial success at score 3.0 content*	
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • absolute value, axis, coordinate, coordinate plane, distance, graph, integer, join, length, location, mathematical, ordered pair, point, polygon, position, quadrant, rational number, real-world, reflection, side, sign, vertex **The student will perform basic processes, such as:** • draw polygons in the coordinate plane given coordinates for the vertices (6.G.3) • find and position rational numbers, including integers, on a coordinate plane (6.NS.6) • understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the location of the points are related by reflection across one or both axes (6.NS.6b) • graph points (including rational numbers) in all four quadrants of the coordinate plane to solve real-world and mathematical problems (6.NS.6; 6.NS.8; 6.G.3)		**Sample Activities:** The student will be given an ordered pair in which they will plot the opposite on a coordinate plane.
	Score 1.5	*Partial success at score 2.0 content, and major errors or omissions regarding score 3.0 content*	
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**		
	Score 0.5	*With help, partial success at score 2.0 content but not at score 3.0 content*	
Score 0.0	**Even with help, no success**		

GEOMETRY			
Area			
Grade 6			
Score 4.0	**In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught.**		
	Score 3.5	*In addition to score 3.0 performance, partial success at score 4.0 content*	
Score 3.0	**The student will:** • solve real-world or mathematical problems involving the area of polygons (6.G.1)		**Sample Activities:** The student will use drawings to show how the polygon can be decomposed into common shapes.
	Score 2.5	*No major errors or omissions regarding score 2.0 content, and partial success at score 3.0 content*	
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • area, compose, decompose, mathematical, polygon, quadrilateral, real-world, rectangle, right triangle, shape, triangle **The student will perform basic processes, such as:** • find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes (6.G.1)		**Sample Activities:** The student will use arrays or grid paper to justify finding the area of a rectangle. The student will justify that the area of a parallelogram is equivalent to a rectangle with the same base X height. The student will justify that the area of a triangle is half of the area of parallelogram with the same base and height. The teacher will support students in understanding formulas rather than memorizing them.
	Score 1.5	*Partial success at score 2.0 content, and major errors or omissions regarding score 3.0 content*	
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**		
	Score 0.5	*With help, partial success at score 2.0 content but not at score 3.0 content*	
Score 0.0	**Even with help, no success**		

GEOMETRY			
Surface Area			
Grade 6			
Score 4.0	**In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught.**		
	Score 3.5	*In addition to score 3.0 performance, partial success at score 4.0 content*	
Score 3.0	**The student will:** • solve real-world and mathematical problems involving the surface area of a right prism (6.G.4) • use nets to find the surface area of the figure (6.G.4)		**Sample Activities:** Note: It is important for students to actually handle the shapes as opposed to looking at a two-dimensional picture of the object. The teacher will provide the student with three-dimensional objects and have them trace the faces, create a net, determine the area of each face and the surface area. Real world example: determine the amount of paper needed to wrap a box.
	Score 2.5	*No major errors or omissions regarding score 2.0 content, and partial success at score 3.0 content*	
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • figure, mathematical, net, real-world, rectangle, right prism, surface area, three-dimensional, triangle **The student will perform basic processes, such as:** • represent three-dimensional figures using nets made up of rectangles and triangles (6.G.4)		**Sample Activities:** Given a net, the student will predict the shape of the solid and create the solid.
	Score 1.5	*Partial success at score 2.0 content, and major errors or omissions regarding score 3.0 content*	
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**		
	Score 0.5	*With help, partial success at score 2.0 content but not at score 3.0 content*	
Score 0.0	**Even with help, no success**		

GEOMETRY			
Volume			
Grade 6			
Score 4.0	**In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught.**		
	Score 3.5	*In addition to score 3.0 performance, partial success at score 4.0 content*	
Score 3.0	**The student will:** • apply the formulas $V = lwh$ and $V = bh$ to find the volume of a right rectangular prism with fractional edge lengths in the context of solving real-world and mathematical problems (6.G.2)		**Sample Activities:** The student will find the volume of a swimming pool. Given the rate of the pool being filled or emptied, the student will find the time to complete the task (relates to 6.RP.3).
	Score 2.5	*No major errors or omissions regarding score 2.0 content, and partial success at score 3.0 content*	
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • edge, formula, fractional, length, mathematical, real-world, right rectangular prism, unit cube, volume **The student will perform basic processes, such as:** • find the volume of a right rectangular prism by packing it with unit cubes of the appropriate fractional edge length (6.G.2)		**Sample Activities:** The student will find a variety of rectangular prisms and fill with unit cubes to determine the volume. The teacher will cut away the sides of the box to show the number of cubes stacked inside (h stacks of l x w). The teacher will give students a set of unit cubes to create a variety of rectangular prisms and find the volume of the each.
	Score 1.5	*Partial success at score 2.0 content, and major errors or omissions regarding score 3.0 content*	
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**		
	Score 0.5	*With help, partial success at score 2.0 content but not at score 3.0 content*	
Score 0.0	**Even with help, no success**		

MEASUREMENT, DATA, STATISTICS, AND PROBABILITY			
Data Distributions			
Grade 6			
Score 4.0	**In addition to score 3.0 performance, the student demonstrates in-depth inferences and applications that go beyond what was taught.**		
	Score 3.5	*In addition to score 3.0 performance, partial success at score 4.0 content*	
Score 3.0	**The student will:** • display numerical data on a box plot (6.SP.4) • calculate quantitative measures of center (median, mean) and variability (interquartile range, mean absolute deviation) (6.SP.5c) • describe patterns and deviations from patterns in the data (6.SP.5c) • choose the appropriate measure of center and variability based on the shape of the data distribution and the context in which the data were gathered (6.SP.5d)		**Sample Activities:** The student will measure his/her height in inches and write that number on a piece of paper. The students will arrange themselves in order from low to high and identify the minimum and maximum scores. To find the median, fold the line in half. Talk about what to do with an even or odd number in the class. Fold the "half" in half again to find the 1st and 3rd quartile scores. Once again discuss what will happen if the line contains an even or odd number of students. To create a box plot connect the 1st and 3rd quartile with a box. This length is called the interquartile range. Move the 5 critical points, minimum, maximum, median, 1st and 3rd quartile to a number line to show the distribution of the box plot. Use the web site cdc.gov/growth charts/ to compare class results to national averages. Compare box plots that compare data from different groups such as boys and girls heights.
	Score 2.5	*No major errors or omissions regarding score 2.0 content, and partial success at score 3.0 content*	

Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • attribute, box plot, calculate, center, context, data, data set, deviation, distribution, histogram, interquartile range, mean, mean absolute deviation, measure, measure of center, measurement, median, numerical, observation, pattern, quantitative, shape, spread, surface feature, unit, variability (6.SP.1; 6.SP.3) **The student will perform basic processes, such as:** • describe the distribution of a set of data by center, spread, and overall shape (6.SP.2) • display numerical data on a histogram (6.SP.4) • describe surface features of numerical data sets (e.g., number of observations, how the attribute was measured, units of measurement) (6.SP.5a; 6.SP.5b)		**Sample Activities:** The student will measure his/her height in inches and write that number on a piece of paper. The students will arrange themselves in order from low to high and identify the minimum and maximum scores. To find the median, fold the line in half. Talk about what to do with an even or odd number in the class. Fold the "half" in half again to find the 1st and 3rd quartile scores. Once again discuss what will happen if the line contains an even or odd number of students. To create a box plot connect the 1st and 3rd quartile with a box. This length is called the interquartile range. Move the 5 critical points, minimum, maximum, median, 1st and 3rd quartile to a number line to show the distribution of the box plot. Use the web site cdc.gov/growth charts/ to compare class results to national averages. Compare box plots that compare data from different groups such as boys and girls heights.
	Score 1.5	*Partial success at score 2.0 content, and major errors or omissions regarding score 3.0 content*	
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**		
	Score 0.5	*With help, partial success at score 2.0 content but not at score 3.0 content*	
Score 0.0	**Even with help, no success**		