NUMBER AND QUANTITY		
Place Value		
Grade 4		
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 3.0	**The student will:** • compare two multi-digit numbers based on meanings of the digits in each place using <, >, and = (4.NBT.2) • use place value understanding to round multi-digit whole numbers to any place (4.NBT.3)	**Sample Activities:** The student will be given a number in the hundred thousands place by the teacher. The student will then proceed to round that number to each place value and share their results.
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • base-ten numeral, compare, digit, expanded form, multi-digit number, number name, place, place value, round, whole number **The student will perform basic processes, such as:** • recognize symbols, such as <, >, and = • recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right (4.NBT.1) • read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form (4.NBT.2)	**Sample Activities:** The student will write down the multi-digit whole number given orally by the teacher. The student will then write that number in word form and expanded form.
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**	
Score 0.0	**Even with help, no success**	

NUMBER AND QUANTITY			
Compare Fractions			
Grade 4			
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 3.0	**The student will:** • compare two fractions with different numerators and different denominators using <, >, and =, and justify the comparison (4.NF.2)		**Sample Activities:** The student will be given a teacher-determined fraction on a notecard. Upon cue, the student will work with a partner to compare their fractions and explain which fraction is greater and why.
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • compare, comparison, denominator, equivalent, fraction, generate, justify, numerator **The student will perform basic processes, such as:** • recognize symbols, such as <, >, and = • recognize and generate equivalent fractions (4.NF.1)		**Sample Activities:** The student will be given a teacher-determined fraction. The student will then proceed to generate two equivalent fractions.
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**		
Score 0.0	**Even with help, no success**		

NUMBER AND QUANTITY			
Adding and Subtracting Fractions			
Grade 4			
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 3.0	**The student will:** • add and subtract mixed numbers with like denominators (4.NF.3c) • solve word problems involving addition and subtraction of fractions referring to the same whole and having the same denominator (4.NF.3d) • add two fractions with denominators 10 and 100 by making the denominators equivalent (4.NF.5)		**Sample Activities:** The student will choose two mixed numbers from teacher selected pile of mixed numbers with like denominators. Upon cue, the student will add or subtract the mixed numbers.
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • add, addition, decompose, denominator, equivalent, express, fraction, join, mixed number, part, refer, separate, subtract, subtraction, sum, whole, word problem **The student will perform basic processes, such as:** • describe addition and subtraction of fractions as joining and separating parts referring to the same whole (4.NF.3a) • decompose a fraction into a sum of fractions with the same denominator in a variety of ways (e.g., 3/8 = 1/8 + 1/8 + 1/8) (4.NF.3b) • express a fraction with denominator 10 as an equivalent fraction with denominator 100 (4.NF.5)		**Sample Activities:** The student will be given a teacher-selected fraction in which they will decompose in two different ways. For example, if the student was given the fraction 5/8, they could decompose it as 3/8 +2/8 = 5/8 and 1/8 + 4/8 = 5/8.
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**		
Score 0.0	**Even with help, no success**		

NUMBER AND QUANTITY			
Multiplying and Dividing Fractions			
Grade 4			
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 3.0	**The student will:** • solve word problems involving the multiplication of a fraction by a whole number using fraction models and equations (4.NF.4c)		**Sample Activities:** The student will be given a word problem involving the multiplication of a fraction by a whole number. The student will illustrate the word problem to help them find the answer and share their results.
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • equation, fraction, model, multiple, multiplication, multiply, whole number, word problem **The student will perform basic processes, such as:** • describe a fraction *a*/*b* as a multiple of 1/*b* (4.NF.4a) • multiply a fraction by a whole number using the understanding that a multiple of *a*/*b* is a multiple of 1/*b* (4.NF.4b)		**Sample Activities:** In partners, the students will draw three numbered cards from a deck of playing cards. The first number they draw will represent the numerator, the second card will represent the denominator, and the third card will represent the whole number. Together the students will write the repeated addition that represents the multiplication problem and determine the answer. For example, if the students draw cards to create the multiplication problem 1/6 x 3, they would write out 1/6 + 1/6 + 1/6 = 3/6.
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**		

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

NUMBER AND QUANTITY			
Decimal Concepts			
Grade 4			
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 3.0	**The student will:** • compare and justify the comparison of two decimals to hundredths (4.NF.7)		**Sample Activities:** The student will write a self-selected decimal to the hundredths place on a notecard, using zero as the whole number. Upon cue, the student will work with a partner to compare the two decimals and to explain which decimal is greater and why.
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • compare, comparison, decimal, denominator, fraction, hundredth, justify, notation **The student will perform basic processes, such as:** • use decimal notation for fractions with denominators of 10 or 100 (4.NF.6)		**Sample Activities:** The student will write a fraction using 10 or 100 as the denominator on a notecard. Upon cue, they will give their partner the notecard and proceed to write the decimal notation for the fraction they received.
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**		
Score 0.0	**Even with help, no success**		

OPERATIONS AND ALGEBRA			
Addition and Subtraction			
Grade 4			
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 3.0	**The student will:** • fluently add and subtract multi-digit whole numbers using the standard algorithm (4.NBT.4)		**Sample Activities:** Using a set of playing cards with all non-number cards removed, the students will draw a card. Their partner will draw a second card and add the two together. The student will draw a third card and add on to the sum. The student could draw two cards at a time, representing a two-digit number and complete the same activity.
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • add, algorithm, concrete, digit, model, subtract, whole number **The student will perform basic processes, such as:** • add and subtract multi-digit whole numbers using concrete models or drawings		**Sample Activities:** The student will use base 10 blocks to represent multi-digit addition and subtraction problems given by the teacher.
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**		
Score 0.0	**Even with help, no success**		

OPERATIONS AND ALGEBRA		
Multiplication and Division		
Grade 4		
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 3.0	**The student will:** • solve multistep word problems posed with whole numbers and having whole number answers using the four operations (4.OA.3) • solve division word problems in which remainders must be interpreted (4.OA.3) • multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit whole numbers (4.NBT.5) • find whole number quotients and remainders with up to four-digit dividends and one-digit divisors (4.NBT.6) • illustrate and explain calculations using strategies based on place value, properties of operations, equations, and/or models (4.NBT.5)	**Sample Activities:** Half of the class will choose a number from 2-9 while the other half of the class will choose a number up to 4 digits big. Upon cue, a student will pair up with a student from the other half which they will multiply their numbers together.
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • additive, array, calculation, comparison, digit, distinguish, divide, dividend, divisor, equation, interpret, model, multiplication, multiplicative, multiply, number, operation, place value, property, remainder, represent, quotient, strategy, symbol, unknown, verbal, whole number, word problem **The student will perform basic processes, such as:** • interpret a multiplication equation as a comparison (4.OA.1) • represent verbal statements of multiplicative comparisons as multiplication equations (4.OA.1) • multiply or divide to solve word problems involving multiplicative comparisons (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison) (4.OA.2) • use arrays and/or models to solve multiplication and division problems	**Sample Activities:** Students will work with a partner to write multiplicative comparison statements that represent a teacher-selected multiplication problem. The students will share their statements with the rest of the class, and the class will write the statement in equation form.
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**	

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

OPERATIONS AND ALGEBRA			
Expressions and Equations			
Grade 4			
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 3.0	**The student will:** • solve multistep word problems involving the four operations posed with whole numbers with a symbol for the unknown number (4.OA.3)		**Sample Activities:** The student will explain the process they used to solve a multi-step word problem and compare their strategies and answers with a partner.
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • equation, letter, number, operation, quantity, represent, solve, symbol, unknown, whole number, word problem **The student will perform basic processes, such as:** • represent word problems using equations with a letter standing for the unknown quantity (4.OA.3)		**Sample Activities:** The students will be divided into two groups. Half of the groups will receive an equation, and the other half will receive a corresponding word problem. Upon cue, the students will work together in order to find their partner. Once they are partnered up, the students will solve the word problem.
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**		
Score 0.0	**Even with help, no success**		

OPERATIONS AND ALGEBRA			
Factors and Multiples			
Grade 4			
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 3.0	**The student will:** • determine whether a given whole number in the range one to 100 is prime or composite (4.OA.4) • determine whether a given whole number in the range one to 100 is a multiple of a given one-digit number (4.OA.4)		**Sample Activities:** The students will receive a chart with the numbers 1-100 and proceed to color in all the numbers that are composite. The student will compare their charts with a partner.
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • composite, digit, factor pair, multiple, number, prime, range, whole number **The student will perform basic processes, such as:** • find all factor pairs for a whole number in the range one to 100 (4.OA.4)		**Sample Activities:** The student will draw a number 1-100 and find all factor pairs for that number.
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**		
Score 0.0	**Even with help, no success**		

OPERATIONS AND ALGEBRA			
Patterns			
Grade 4			
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 3.0	**The student will:** • generate a number or shape pattern that follows a given rule (4.OA.5)		**Sample Activities:** The student will use pattern blocks to create a shape pattern. Upon cue, a classmate will explain the given rule for that shape pattern.
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • number, pattern, rule, shape **The student will perform basic processes, such as:** • describe the features of a number or shape pattern (4.OA.5)		**Sample Activities:** The student will explain the features of the shape pattern that their classmates created using the pattern blocks.
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**		
Score 0.0	**Even with help, no success**		

GEOMETRY			
Shapes			
Grade 4			
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 3.0	**The student will:** • classify shapes based on the presence or absence of parallel or perpendicular lines (4.G.2) • classify shapes based on the presence or absence of angles of a specified size (4.G.2)		**Sample Activities:** The student will be given a group of different shapes. The teacher will call out a specific shape name, and the student will need to hold up the shape that corresponds with the name called out by the teacher.
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • absence, angle, classify, line, parallel, perpendicular, presence, right triangle, shape, size **The student will perform basic processes, such as:** • identify right triangles (4.G.2)		**Sample Activities:** The student will be given a group of different types of triangles in which they will need to identify which one is the right triangle.
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**		
Score 0.0	**Even with help, no success**		

GEOMETRY			
Lines and Symmetry			
Grade 4			
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 3.0	**The student will:** • draw points, lines, line segments, rays, angles, and perpendicular and parallel lines (4.G.1) • draw all possible lines of symmetry in two-dimensional figures (4.G.3)		**Sample Activities:** The student will be given a variety of different shapes, all of which are symmetric shapes. The student will proceed to draw all lines of symmetry on the given shapes.
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • angle, example, figure, line, line segment, line-symmetric, parallel, perpendicular, point, ray, symmetry, two-dimensional **The student will perform basic processes, such as:** • identify examples of points, lines, line segments, rays, angles, and perpendicular and parallel lines in two-dimensional figures (4.G.1) • identify line-symmetric figures (4.G.3)		**Sample Activities:** The student will be given a variety of different shapes (e.g.- star, triangle, diamond, irregular polygons, etc.) and will be asked to identify which shapes are line-symmetric figures.
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**		
Score 0.0	**Even with help, no success**		

GEOMETRY			
Area			
Grade 4			
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 3.0	**The student will:** • apply the area formula for rectangles in real-world and word problems (4.MD.3)		**Sample Activities:** The student will create their own dream home by drawing the floor plans using graph paper. The student will write the dimensions for each room and calculate the area.
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • area, formula, mathematical, real-world, rectangle, word problem **The student will perform basic processes, such as:** • apply the formula for area in mathematical problems (4.MD.3)		**Sample Activities:** In a whole group setting, a student called upon by the teacher will say a number to represent the length of a rectangle. Upon cue, a second student will say a number to represent the width of the rectangle. The whole class will work independently to find the area of the rectangle.
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**		
Score 0.0	**Even with help, no success**		

GEOMETRY			
Angles			
Grade 4			
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 3.0	**The student will:** • solve addition and subtraction problems to find unknown angles on a diagram (4.MD.7)		**Sample Activities:** Students will determine all the angles in a common pattern block shape set based on equilateral triangles, knowing that an equilateral triangle has all three angles that measure 60 degrees. For example, the students may be given a hexagon. If the student lays 6 equilateral triangles in the shape of a hexagon next to it, they can determine that 2 equilateral triangle angles make up one hexagon angle. Therefore, the hexagon angle would measure 120 degrees.
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • addition, angle, angle measure, circle, degree, diagram, endpoint, measure, one-degree angle, protractor, ray, subtraction, unknown, whole number (4.MD.5; 4.MD.5a; 4.MD.5b) **The student will perform basic processes, such as:** • measure angles in whole number degrees using a protractor (4.MD.6)		**Sample Activities:** The student will go to various stations throughout the room in which they will use a protractor to measure different angles to the nearest whole number. They will record their results on a teacher-provided chart.
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**		

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

MEASUREMENT, DATA, STATISTICS, AND PROBABILITY			
Measurement			
Grade 4			
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 3.0	**The student will:** • use the four operations to solve word problems involving distance, intervals of time, liquid volumes, masses of objects, and money, including problems that involve simple fractions or decimals and problems that require expressing measurements given in a larger unit in terms of a smaller unit (4.MD.2)		**Sample Activities:** The students will use a teacher provided flight schedule to determine lay over time, flight time, and/or other intervals of time asked by the teacher.
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • centimeter, decimal, distance, express, fraction, gram, hour, interval, kilogram, kilometer, liquid, liter, mass, meter, milliliter, minute, money, operation, ounce, pound, second, simple, time, unit, volume, word problem **The student will perform basic processes, such as:** • express measurements in a larger unit in terms of a smaller unit (e.g., km, m, cm, kg, g, lb, oz, l, ml, hr, min, sec) (4.MD.1)		**Sample Activities:** Working in pairs, the students will draw a playing card, which will represent a larger unit determined by the teacher (e.g.- km, kg, hr, etc.). The students will work together to express that card number as a smaller unit, also determined by the teacher (e.g.- m, cm, g, min, etc.). The students will record their conversions on a teacher-provided document.
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**		
Score 0.0	**Even with help, no success**		

MEASUREMENT, DATA, STATISTICS, AND PROBABILITY			
Represent and Interpret Data			
Grade 4			
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 3.0	**The student will:** • solve problems using a line plot of measurement data in fractions of a unit (1/2, 1/4, 1/8) (4.MD.4)		**Sample Activities:** The students will create a class line plot. They will choose a fraction from 1/8-8/8 and write it on a notecard. Upon cue, the students will place their notecard at the appropriate spot on the line plot. The students will proceed to answer problems verbalized by the teacher regarding the class line plot.
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • data, fraction, line plot, measurement, solve, unit **The student will perform basic processes, such as:** • make a line plot of measurement data in fractions of a unit (1/2, 1/4, 1/8)		**Sample Activities:** The students will create a class line plot. They will choose a fraction from 1/8-8/8 and write it on a notecard. Upon cue, the students will place their notecard at the appropriate spot on the line plot.
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**		
Score 0.0	**Even with help, no success**		

MEASUREMENT, DATA, STATISTICS, AND PROBABILITY			
Perimeter			
Grade 4			
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 3.0	**The student will:** • apply the perimeter formula for rectangles in real-world and word problems (4.MD.3)		**Sample Activities:** The students will design a new building (e.g.- shopping mall, apartment, workout facility) for their town. They will use graph paper to create the 'blue prints' in which they will draw and name each room of the building and calculate the perimeter.
Score 2.0	**The student will recognize or recall specific vocabulary, such as:** • formula, mathematical, perimeter, real-world, rectangle, word problem **The student will perform basic processes, such as:** • apply the formula for perimeter in mathematical problems (4.MD.3)		**Sample Activities:** The student will be given a piece of graph paper in which they will cut a rectangle of any size. After trading their rectangles with another student, they will proceed to find the perimeter of the rectangle, using the squares of the graph paper to find the length and width.
Score 1.0	**With help, partial success at score 2.0 content and score 3.0 content**		
Score 0.0	**Even with help, no success**		