5th Grade Math

Statement	Exceeds (4)	Secure (3)	Developing (2)	Beginning (1)
Understands the place value system.	Creates and solves real world math problems using powers of 10, in which exponents can be positive or negative.	Explains patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Uses whole-number exponents to denote powers of 10.	Recognizes place value to the thousandth place. Converts between standard notation and exponential notation.	Names place value without describing the relationship between placements.
Perform operations with multi-digit whole numbers and with decimals to the hundredths.	Adds, subtracts, multiplies, and divides decimals.	Adds, subtracts, multiplies, AND divides decimals to hundredths.	Adds, subtracts, multiplies, OR divides decimals to hundredths.	Represents addition, subtraction, multiplication, or division problems in concrete example (array, picture).
Writes and interprets numerical expressions.	Writes expressions that include nested parentheses and interprets the expressions.	Writes simple expressions that use parentheses and interprets numerical expressions.	Writes simple expressions that use parentheses OR interprets numerical expressions.	Inserts parentheses into an expression to make it true.
Graph coordinates on a coordinate plane to solve real world and mathematical problems.	Generates numerical patterns using given rules. Identifies apparent relationships between corresponding terms and plots on coordinate graph to solve problems using multiple quadrants.	Generate two numerical patterns using two given rules. Identifies apparent relationships between corresponding terms and plots on coordinate graph to solve problems.	Graphs ordered pairs when given rules.	Given an ordered pair, plots point in first quadrant.

Represent and interpret data.	Creates a line plot to display a data set of measurements in fractions with any denominator. Creates and solves problems using the information provided in the line plots.	Creates a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Solves problems involving information in the line plots.	Given a line plot, solves problems using the information provided.	Unable to solve problems using a line plot.
Use equivalent fractions as a strategy to add and subtract fractions.	Finds and uses the LCM to add and subtract fractions with unlike denominators.	Adds AND subtracts fractions with unlike denominators.	Adds OR subtracts fractions with unlike denominators.	Adds or subtracts fractions with like denominators.
Multiply and divide fractions.	Divides a fraction of a fraction.	Multiplies fractions AND divides unit fractions using fraction models or equations to solve the problem.	Multiplies fractions OR divides unit fractions using fraction models or equations to solve the problem.	Multiplies fractions to solve problem, unable to represent the solution.
Convert like measurement units within a given measurement system.	Converts multiple standard measurements within and between measurement systems to solve real-world problems.	Converts among standard measurement units within a given measurement system. Uses the conversions in solving multi-step, real world problems.	Converts among standard measurement units within a given measurement system.	Converts among measurement units within a given measurement system when given a conversion chart.
Classify two-dimensional figures into categories based on their	Classifies three-dimensional figures in a hierarchy based on	Classifies two-dimensional figures in a hierarchy based on properties.	Provided a hierarchy, categorizes and classifies figures.	Uses attributes to categorize two-dimensional figures.

properties.	properties.			
Demonstrate understanding concepts of volume and relate volume to multiplication and to addition.	Solves and justifies real world and mathematical problems to find volume of irregular figures.	Solves real world and mathematical problems to find volume.	Solves real world and mathematical problems to find volume.	Recognizes volume as an attribute of a solid figure which can be measured.