

SKILL-BASED MATH CHECKLIST Grade 5

Name of Student _____

Name of Teacher _____ Date Completed _____

Please evaluate the student's skills in math based on the Common Core Standards below.

List some of the student's **strengths** in the classroom in the area of math:

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Operations and Algebraic Thinking

	Insufficient Skills	Skills Emerging	Skill Mastered	Not Yet Taught
Can evaluate/simplify (solve) numerical expressions by following the order of operations.				
Can write simple expressions using numbers and symbols ($=$, $-$, x , $/$) without solving.				
Can interpret simple expressions using numbers and symbols ($=$, $-$, x , $/$) without solving.				
Can verbally describe what an expression represents using numbers and symbols ($=$, $-$, x , $/$).				
Can complete number patterns with given rules.				
Can form ordered pairs using given rules, and graph them on a coordinate plane.				
Can explain the relationship between the numbers (terms) in a pattern.				
Can name points as ordered pairs on a coordinate plane.				

Number and Operations in Base Ten

	Insufficient Skills	Skills Emerging	Skill Mastered	Not Yet Taught
Can read base ten numbers using decimals up to the thousandths place with number names and expanded notation.				
Can write base ten numbers using decimals up to the thousandths place with number names and expanded notation.				
Can compare base ten numbers using decimals up to the thousandths place.				
Can round decimals to any place.				
Can reason and explain the answer derived when rounding.				
Can use the benchmarks (0, 0.5, 1, 1.5) to round.				
Can multiply numbers with two or more digits in the traditional way.				
Can divide a multi-digit number by a two-digit number.				
Can show work and explain how he/she got the answer through equations, rectangular array, and/or area model.				

Number and Operations in Base Ten (cont.)

	Insufficient Skills	Skills Emerging	Skill Mastered	Not Yet Taught
Can show how multiplication and division are related.				
Can check work using multiplication.				
Can show how division is related to subtraction.				
Can use inverse operations.				
When problem solving, can apply concepts of a quotient, divisor, and a dividend.				
Can add, subtract, multiply, and divide numbers with decimals.				
Can use drawings, models, and strategies to the hundredths to explain his/her thinking.				

Number and Operations Fractions

	Insufficient Skills	Skills Emerging	Skill Mastered	Not Yet Taught
Can add fractions with unlike denominators by finding common denominator.				
Can subtract fractions with unlike denominators by finding common denominators.				
Can add and subtract fractions with denominators that are the same when solving word problems.				
Can add and subtract fractions with denominators that are different when solving word problems.				
Can identify a fraction as a division problem.				
Can solve a whole-number division word problem as a fraction.				
Can write the quotient as a fraction or mixed number.				
Can multiply a fraction or whole number by a fraction.				
Can find the area of a rectangle using fraction side lengths.				
Can find the area of a rectangle by tiling it with unit squares.				
Can describe the relationship between scaling (resizing) and multiplication.				
Can describe how a factor changes when resized or scaled.				
Can explain why, when a number is multiplied by a fraction greater than 1, the product is greater than the original number.				
Can explain why, when a number is multiplied by a fraction less than 1, the product is less than the original number.				
Can create equivalent fractions.				
Can use problem-solving strategies/ideas to multiply fractions and mixed numbers in everyday life.				
Can use visual fraction models to show the solution.				
Can divide a fraction (less than 0) by a whole number greater than 0 by using what is known about multiplication.				
Can divide a whole number greater than 0 by a fraction (less than 0) using what is known about multiplication.				
Can use models to prove his/her answers.				
Can use what is known in real-world examples.				

Measurement and Data

	Insufficient Skills	Skills Emerging	Skill Mastered	Not Yet Taught
Can fluently convert measurement units within the same system.				
Can solve multi-step, real-world problems, based on different measurement systems.				
Can represent data in a line plot to display a data set of measurements in fractions of a unit.				
Can interpret the data on a line plot to solve problems.				
Can identify benchmark fractions.				
Can recognize that all solid figures have volumes.				
Can demonstrate and explain that a cube that measures one unit on each side is called one cubic unit.				
Can recognize that cubic units are used to measure volume.				
Can explain that to measure volume means a solid figure is packed with cubic unit cubes without any gaps or overlaps. The number of unit cubes in the figure is volume.				
Can measure volume using unit cubes and improvised units.				
Can measure volume of combined rectangular prisms.				
Can distinguish between which cubic measurements to use for a given situation.				
Can use manipulatives to measure the volume of right rectangular prisms.				
Can use the volume formulas to determine the volume of right rectangular prisms.				
Can decompose solid figures into smaller right rectangular prisms.				
Can add the volumes of several right rectangular prisms to determine the volume of the original figure.				

Geometry

	Insufficient Skills	Skills Emerging	Skill Mastered	Not Yet Taught
Can use the x and y axis to locate and identify points on a coordinate plane.				
Can identify the origin on a coordinate plane.				
Can graph points in the first quadrant of a coordinate plane.				
Can represent real-world math problems by graphing points on a coordinate plane.				
Can understand and explain that two-dimensional figures can be categorized multiple ways based on their attributes.				
Can classify two-dimensional shapes into groups and sub-groups based on their properties.				