

Fourth Grade Math Rubric

Operations & Algebraic Thinking

	SN	P	M
	Assistance is required; lack of evidence of understanding to progress/maintain the standard.	Minimal assistance is required; minor errors; understanding is adequate to maintain the standard.	Assistance is not required; minor errors do not impact understanding; student communicates ideas and meets the standard.
Interpret a multiplication equation as a comparison.	Limited ability to read, write and interpret multiplication equations as a comparison.	Inconsistent ability to read, write and interpret a multiplication equation as a comparison.	Consistent ability to read, write and interpret a multiplication equation as a comparison.
Multiply or divide to solve word problems involving multiplicative comparison. Solve multistep word problems using the four operations.	Limited ability to solve multistep word problems using the four operations and interprets remainders, if any.	Inconsistent ability to solve multistep word problems using the four operations and interprets remainders, if any.	Consistent ability to solve multistep word problems using the four operations and interprets remainders, if any.
Find all factor pairs for whole numbers (1-100) and determine prime and composite whole numbers within that range.	Limited ability to find all factor pairs for whole numbers (1-100) and to determine prime and composite whole numbers within that range.	Inconsistent ability to find all factor pairs for whole numbers (1-100) and to determine prime and composite whole numbers within that range.	Consistent ability to find all factor pairs for whole numbers (1-100) and to determine prime and composite whole numbers within that range.
Recognize and determine multiples.	Limited ability to recognize and determine multiples.	Inconsistent ability to recognize and determine multiples.	Consistent ability to recognize and determine multiples.
Generate a number or shape pattern that follows a given rule.	Limited ability to extend and describe patterns.	Inconsistent ability to extend and describe patterns, including numeric patterns.	Consistent ability to extend and describe patterns, including numeric patterns.

Number & Operations in Base Ten

	SN	P	M
Read, write, and compare multi-digit whole numbers using base-ten numerals, number names, and expanded form.	Limited ability to read, write and compare multi-digit whole numbers, number names, and expanded form.	Inconsistent ability to read, write and compare multi-digit whole numbers to five digits using base-ten numerals, number names and expanded form.	Consistent ability to read, write and compare multi-digit whole numbers to six or more digits using base-ten numerals, number names, and expanded form.
Round multi-digit whole numbers to any place.	Limited ability to round multi-digit whole numbers to any place.	Inconsistent ability to round multi-digit whole numbers to five digits.	Consistent ability to round multi-digit whole numbers to six digits or larger.
Understands place value by multiplying and dividing by multiples of 10.	Limited ability to apply concepts of place value and division.	Inconsistent ability to apply concepts of place value and division.	Consistent ability to apply concepts of place value and division.
Fluently add and subtract multi-digit whole numbers using the standard algorithm.	Limited ability to estimate, add and subtract multi-digit whole numbers.	Inconsistent ability to estimate, add and subtract multi-digit whole numbers.	Consistent ability to estimate, add and subtract multi-digit whole numbers.
Multiply multi-digit whole numbers using a variety of strategies	Limited ability to multiply multi-digit whole numbers correctly using a variety of strategies.	Inconsistent ability to multiply multi-digit whole numbers correctly using a variety of strategies.	Consistent ability multiply multi-digit whole numbers correctly using a variety of strategies.
Divide multi-digit dividends by one-digit divisors using a variety of strategies.	Limited ability to divide multi-digit dividends correctly using a variety of strategies.	Inconsistent ability to divide multi-digit dividends correctly using a variety of strategies.	Consistent ability to divide multi-digit dividends using a variety of strategies.

Number & Operations ~ Fractions

	SN	P	M
Demonstrate an understanding of fraction equivalency. Compares and orders fractions.	Limited ability to understand fraction equivalency and to compare and order fractions,	Inconsistent ability to demonstrate understanding of fraction equivalency and ability to compare/order fractions.	Consistent ability to demonstrate understanding of fraction equivalency and ability to compare/order fractions.
Understand addition and subtraction of fractions with like denominators. Solve word problems involving addition and subtraction of fractions with like denominators.	Limited ability to add, subtract and solve word problems involving fractions/mixed numbers with like denominators.	Inconsistent ability to add, subtract and solve word problems involving fractions/mixed numbers with like denominators.	Consistent ability to add, subtract and solve word problems involving fractions/mixed numbers with like denominators.
Apply and extend understanding of multiplication to multiply a fraction by a whole number. Solve word problems involving multiplication of a fraction by a whole number.	Limited ability to correctly solve word problems involving multiplication of a fraction by a whole number.	Inconsistent ability to correctly solve word problems involving multiplication of a fraction by a whole number.	Consistent ability to correctly solve word problems involving multiplication of a fraction by a whole number.
Express a fraction with denominator 10 as an equivalent fraction with denominator 100. Use decimal notation for fractions with denominators 10 or 100.	Limited ability to express a fraction with denominator 10 as an equivalent fraction with denominator 100 and to use the decimal notation for fractions with denominators 10 or 100.	Inconsistent ability to express a fraction with denominator 10 as an equivalent fraction with denominator 100 and to use the decimal notation for fractions with denominators 10 or 100.	Consistent ability to express a fraction with denominator 10 as an equivalent fraction with denominator 100 and to use the decimal notation for fractions with denominators 10 or 100.
Compare two decimals to hundredths by reasoning about their size.	Limited ability to compare two decimals to hundredths by reasoning about their size.	Inconsistent ability to compare two decimals to hundredths by reasoning about their size.	Consistent ability to compare two decimals to hundredths by reasoning about their size.

Measurement & Data

	SN	P	M
Know relative sizes of measurement units within the customary and metric system (length, volume, mass).	Limited ability to understand relative sizes of measurement units within customary and metric systems.	Inconsistent ability to understand relative sizes of measurement units within customary and metric systems.	Consistent ability to understand relative sizes of measurement units within customary and metric systems.
Use the four operations to solve word problems involving measurement.	Limited ability to correctly solve word problems involving measurement.	Inconsistent ability to correctly solve word problems involving measurement.	Consistent ability to correctly solve word problems involving measurement.
Apply the area and perimeter formulas for rectangles.	Limited ability to apply area and perimeter formulas for rectangles.	Inconsistent ability to apply area and perimeter formulas for rectangles.	Consistent ability to apply area and perimeter formulas for rectangles.
Make a line plot to display a data set of measurements in fractions of a unit.	Limited ability to construct a line plot to display a data set of measurements.	Inconsistent ability to construct a line plot to display a data set of measurements.	Consistent ability to construct and label a line plot to display a data set of measurements.
Understand concepts of angle measurement (additive quality; able to measure and sketch)	Limited ability to understand and recognize concepts of angle measurements and additive measure concepts.	Inconsistent ability to understand and recognize concepts of angle measurements and additive measure concepts.	Consistent ability to understand and recognize concepts of angle measurements and additive measure concepts.
Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.	Limited ability to measure angles in whole-number degrees using a protractor and to sketch angles of specified measure.	Inconsistent ability to measure angles in whole-number degrees using a protractor and to sketch angles of specified measure.	Consistent ability to measure angles in whole-number degrees using a protractor and to sketch angles of specified measure.

Geometry

	SN	P	M
Draw and identify lines and angles. Classify shapes by properties of their lines and angles.	Limited ability to identify points, lines, line segments, rays, angles, perpendicular, parallel lines and to identify shapes by properties based on their lines and angles.	Inconsistent ability to identify points, lines, line segments, rays, angles, perpendicular, parallel lines and to identify shapes by properties based on their lines and angles.	Consistent ability to identify points, lines, line segments, rays, angles, perpendicular, parallel lines and to identify shapes by properties based on their lines and angles.
Recognize a line of symmetry for a two-dimensional figure.	Limited ability to recognize lines of symmetry for a two-dimensional figure.	Inconsistent ability to recognize lines of symmetry for a two-dimensional figure.	Consistent ability to recognize lines of symmetry for a two-dimensional figure.