GRADE 4

Domain	Code	Standard Description	Essential Vocabulary
Operations and Algebraic Thinking	4.OA.3	Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity (variable). Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	variable, remainder, unknown, estimation, rounding
Number and Operations in Base Ten	4.NBT.3	Use place value and/or understanding of numbers to round multi-digit whole numbers to any place.	rounding
	4.NBT.4	Fluently add and subtract multi-digit whole numbers to the one millions place using strategies flexibly, including the standard algorithm.	
	4.NBT.5	Using strategies based on place value and the properties of operations, multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models	equations, rectangular array, area model
	4.NBT.6	Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	dividend, divisor, quotient, rectangular array, area model

Number and Operations – Fractions	4.NF.2	By creating common denominators or numerators, or by comparing to a benchmark fraction such as 1/2, compare two fractions with different numerators and different denominators. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.	common denominator/numerator, benchmark fraction
	4.NF.3	Understand a fraction a/b with a > 1 as a sum of unit fractions 1/b. a) Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. b) Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition with an equation. Justify decompositions by using a visual fraction model or other strategies. c) Add and subtract mixed numbers with like denominators. d) Using visual fraction models and equations, solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators.	decompose, mixed number
	4.NF.4	Apply and extend previous understandings of multiplication to multiply a fraction by a whole number. a) Understand a fraction a/b as a multiple of 1/b. b) Understand a multiple of a/b as a multiple of 1/b, and use this understanding to multiply a fraction by a whole number. c) Using visual fraction models and equations, solve word problems involving multiplication of a fraction by a whole number.	multiple
Measurement and Data	4.MD.1	Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb., oz.; l, ml; hr., min., sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table.	measurement systems: US customary/metric, conversion table
	4.MD.2	Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Using diagrams such as number line diagrams that feature a measurement scale, to represent measurement quantities.	measurement scale

Geometry	4.G.2	Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of specified size. Recognize right triangles as a category, and identify right triangles	two-dimensional, parallel, perpendicular, angle, right triangle