

Fourth Grade First Semester Math Curriculum Guide

First Nine Weeks

Place Value, Rounding, Addition & Subtraction, Unit Conversion Metric System

4.OA.A.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

Assess the reasonableness of answers using mental computation and estimation strategies including rounding

4.NBT.B.1 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

Read and write multi-digit *whole numbers* using base-ten numerals, number names, and *expanded form*

4.NBT.B.2 Compare two multi-digit numbers based on meanings of the digits in each place, using symbols ($>$, $=$, $<$) to record the results of comparisons

4.NBT.B.3 Use *place value* understanding to round multi-digit *whole numbers* to any place

4.NBT.B.4 Add and subtract multi-digit *whole numbers* with *computational fluency* using a standard *algorithm*

4.MD.A.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; yd, ft, in; gal, qt, pt, c

Within a single system of measurement, express measurements in the form of a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table

4.MD.A.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money including the ability to make change; including problems involving simple *fractions* or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as *number line diagrams* that feature a measurement scale

Second Nine Weeks

4.OA.A.1 Interpret a multiplication equation as a comparison (e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5). Represent verbal statements of multiplicative comparisons as multiplication *equations*

4.OA.A.2 Multiply or divide to solve word problems involving multiplicative comparison

Use drawings and *equations* with a letter for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison

4.OA.A.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

Assess the reasonableness of answers using mental computation and estimation strategies including rounding

4.OA.B.4 Find all factor pairs for a whole number in the range 1-100

Recognize that a whole number is a multiple of each of its *factors*

Determine whether a given whole number in the range 1-100 is a multiple of a given one-digit number

Determine whether a given whole number in the range 1-100 is prime or composite

4.NBT.B.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on *place value* and the properties of operations

Illustrate and explain the calculation by using *equations*, *rectangular arrays*, and area models

4.NBT.B.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 the relationship between multiplication and division. Illustrate and explain the calculation by using *equations*, *rectangular arrays*, and area models

4.MD.A.3 Apply the area and perimeter formulas for rectangles in real world and mathematical problems