

Mathematics

Grade 2

It is essential that these standards be addressed in contexts that promote problem solving, reasoning, communication, making connections, and designing and analyzing representations.

2.1 Number and Operations: **Develop an understanding of the base-ten numeration system and place-value concepts.**

2.1.1 Write, compare, and order whole numbers to 1000.

2.1.2 Understand and apply base-ten numeration, and count in multiples of one, two, five, ten, and one hundred.

2.1.3 Compose and decompose whole numbers less than one thousand by place value (e.g., 426 as 4 hundreds + 2 tens + 6 ones and $400 + 20 + 6$).

2.1.4 Use place value and properties of operations to find and use equivalent representations of numbers (such as 35 represented by 35 ones, 3 tens and 5 ones, or 2 tens and 15 ones).

2.2 Number and Operations and Algebra: **Develop fluency with addition facts and related subtraction facts, and with multi-digit addition and subtraction.**

2.2.1 Apply, with fluency, sums to 20 and related subtraction facts.

2.2.2 Solve multi-digit whole number problems by applying various meanings (e.g., taking away, and comparing) and models (e.g., combining or separating sets, using number lines, and hundreds charts) of addition and subtraction.

2.2.3 Develop fluency with efficient procedures for adding and subtracting multi-digit whole numbers and understand why the procedures work on the basis of place value and number properties.

2.2.4 Select and apply efficient methods to estimate sums and differences or calculate them mentally depending on the numbers and context involved.

2.2.5 Determine the value of mixed collections of coins to \$1.00.

2.3 Measurement: **Develop an understanding of linear measurement and facility in measuring.**

2.3.1 Determine length by finding the total number of equal-length units that are placed end-to-end without gaps or overlaps.

2.3.2 Apply concepts of partitioning (the mental activity of slicing the length of an object into equal-sized units) and transitivity (e.g., if object A is longer than object B and object B is longer than object C, then object A is longer than object C).

2.3.3 Demonstrate an understanding that using different measurement units will result in different numerical measurements for the same object.

2.3.4 Explain the need for equal length units and the use of standard units of measure.

2.3.5 Use rulers and other measurement tools to estimate and measure length in common units (e.g., centimeter and inch).

2.3.6 Use the measurement process: choose an appropriate measurement unit, compare that unit to the object, and report the number of units.

2.3.7 Demonstrate an understanding of time and use of time relationships (e.g., how many minutes in an hour, days in a week, and months in a year).

2.3.8 Tell time in increments of five minutes using analog and digital clocks.