

Second Grade Math Standards

Key Concept: Number Sense and Base Ten

The student will:

2.NSBT.1 Understand place value through 999 by demonstrating that:

- 100 can be thought of as a bundle (group) of 10 tens called a “hundred”;
- the hundreds digit in a three-digit number represents the number of hundreds, the tens digit represents the number of tens, and the ones digit represents the number of ones;
- three-digit numbers can be decomposed in multiple ways (e.g., 524 can be decomposed as 5 hundreds, 2 tens and 4 ones or 4 hundreds, 12 tens, and 4 ones, etc.).

2.NSBT.2 Count by tens and hundreds to 1,000 starting with any number.

2.NSBT.3 Read, write and represent numbers through 999 using concrete models, standard form, and equations in expanded form.

2.NSBT.4 Compare two numbers with up to three digits using words and symbols (i.e., $>$, $=$, or $<$).

2.NSBT.5 Add and subtract fluently through 99 using knowledge of place value and properties of operations.

2.NSBT.6 Add up to four two-digit numbers using strategies based on knowledge of place value and properties of operations.

2.NSBT.7 Add and subtract through 999 using concrete models, drawings, and symbols which convey strategies connected to place value understanding.

2.NSBT.8 Determine the number that is 10 or 100 more or less than a given number through 1,000 and explain the reasoning verbally and in writing.

Key Concept: Algebraic Thinking and Operations

The student will:

2.ATO.1 Solve one- and two-step real-world/story problems using addition (as a joining action and as a part-part-whole action) and subtraction (as a separation action, finding parts of the whole, and as a comparison) through 99 with unknowns in all positions.

2.ATO.2 Demonstrate fluency with addition and related subtraction facts through 20.

2.ATO.3 Determine whether a number through 20 is odd or even using pairings of objects, counting by twos, or finding two equal addends to represent the number (e.g., $3 + 3 = 6$).

2.ATO.4 Use repeated addition to find the total number of objects arranged in a rectangular array with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.

Key Concept: **Geometry**

The student will:

2.G.1 Identify triangles, quadrilaterals, hexagons, and cubes. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.

2.G.2 Partition a rectangle into rows and columns of same-size squares to form an array and count to find the total number of parts.

2.G.3 Partition squares, rectangles and circles into two or four equal parts, and describe the parts using the words halves, fourths, a half of, and a fourth of. Understand that when partitioning a square, rectangle or circle into two or four equal parts, the parts become smaller as the number of parts increases.

Key Concept: **Measurement and Data Analysis**

The student will:

2.MDA.1 Select and use appropriate tools (e.g., rulers, yardsticks, meter sticks, measuring tapes) to measure the length of an object.

2.MDA.2 Measure the same object or distance using a standard unit of one length and then a standard unit of a different length and explain verbally and in writing how and why the measurements differ.

2.MDA.3 Estimate and measure length/distance in customary units (i.e., inch, foot, yard) and metric units (i.e., centimeter, meter).

2.MDA.4 Measure to determine how much longer one object is than another, using standard length units.

2.MDA.5 Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences through 99 on a number line diagram.

2.MDA.6 Use analog and digital clocks to tell and record time to the nearest five-minute interval using a.m. and p.m.

2.MDA.7 Solve real-world/story problems involving dollar bills using the \$ symbol or involving quarters, dimes, nickels, and pennies using the ¢ symbol.

2.MDA.8 Generate data by measuring objects in whole unit lengths and organize the data in a line plot using a horizontal scale marked in whole number units.

2.MDA.9 Collect, organize, and represent data with up to four categories using picture graphs and bar graphs with a single-unit scale.

2.MDA.10 Draw conclusions from t-charts, object graphs, picture graphs, and bar graphs.