

# Math Standards

## First Grade

### Course Abilities

#### 1. Develop abilities in math.

- A. Think clearly and solve problems in math.
- B. Use a variety of strategies to solve problems.
- C. Solve problems in a step-by-step manner.
- D. Be able to solve complex problems using a multi-step method.
- E. Be able to use manipulatives to help solve problems: graphs, charts, clocks, calendars, shapes, money, calculators, computers etc.
- F. Be able to use math to solve daily life problems.

### Course Content

#### 1. Be able to read, write, and compare numbers to 120.

- A. Be able to count out loud to 120.
- B. Be able to write numbers to 120 in order.
- C. Be able to identify and write numbers to 100 out of order.
- D. Be able to represent whole numbers up to 120 using manipulative.
- E. Be able to order two-digit numbers.
- F. Be able to describe if numbers are greater than, less than, equal to, 10 more/10 less, etc.
- G. Be able to recognize number words (2: two).
- H. Be able to use counting and comparison skills to create and analyze bar graphs and tally charts.

#### 2. Be able to count forward and backward to 120.

- A. Be able to see the pattern in objects, pictures, and numbers (0 to 120).
- B. Be able to count and write by 2's (both evens and odds), 5's, and 10's to 120.

#### 3. Understand place value of ones and tens.

- A. Be able to group objects by ones and tens.
- B. Be able to identify the ones place and tens place in two-digit numbers.

#### 4. Be able to do addition and subtraction process to 12.

- A. Be able to use manipulative, words, and pictures to add and subtract.
- B. Be able to add or subtract using numbers vertically and horizontally.
- C. Be able to solve addition and subtraction through 12
- D. Be able to put together and take apart numbers up to 12 with emphasis on making ten.

#### 5. Be able to represent, solve, and create real-world mathematical problems and situations using number sentences.

- A. Be able to represent real-world situations using addition and subtraction basic facts, using objects and number sentences.
- B. Be able to determine if equations involving addition and subtraction are true.  
Examples:  $7 = 7$   
 $7 = 8 - 1$   
 $5 + 2 = 2 + 5$   
 $4 + 1 = 5 + 2$
- C. Be able to use number sense and models of addition and subtraction, such as objects and number lines, to identify the missing number in an equation such as:  
 $2 + 4 = \underline{\quad}$   
 $3 + \underline{\quad} = 7$   
 $5 = \underline{\quad} - 3$
- D. Be able to use addition and subtraction basic facts to represent a given problem situation using a number sentence.

#### 6. Be able to describe characteristics of basic shapes.

- A. Be able to describe characteristics of two and three dimensional objects, such as triangles, squares, rectangles, circles, rectangular prisms, cylinders, cones, and spheres.
- B. Be able to compose (combine) and decompose (take apart) two and three dimensional figures such as triangles, squares, rectangles, circles, rectangular prisms, and cylinders.

**7. Be able to use basic concepts of measurement in real-world and mathematical situations.**

- A. Be able to measure the length of an object using multiple copies of another object.  
For example: Measure a table by placing paper clips end to end and counting.
- B. Be able to tell time to the hour and half hour.

**8. Be able to recognize coins and their values up to \$1.00.**

- A. Be able to give value of a penny, nickel, dime, and quarter.
- B. Be able to count money using a penny, nickel, dime, and quarters up to \$1.00.

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