Grade Two

The second-grade standards extend the study of number and spatial sense to include three-digit whole numbers and solid geometric figures. Students will continue to learn, use, and gain proficiency in the basic addition facts through the tens table and the corresponding subtraction facts. Students will begin to use U.S. Customary and metric units of measure; predict, using simple probability; and create and interpret picture and bar graphs. Students will work with a variety of patterns and will develop knowledge of equality by identifying missing numbers in addition and subtraction facts. While learning mathematics, students will be actively engaged, using concrete materials and appropriate technology such as calculators and computers. However, facility in the use of technology shall not be regarded as a substitute for a student's understanding of quantitative concepts and relationships or for proficiency in basic computations. Mathematics has its own language, and the acquisition of specialized vocabulary and language patterns is crucial to a student's understanding and appreciation of the subject. Students should be encouraged to use correctly the concepts, skills, symbols, and vocabulary identified in the following set of standards.
Problem solving has been integrated throughout the six content strands. The development of problem solving skills should be a major goal of the mathematics program at every grade level. Instruction in the process of problem solving will need to be integrated early and continuously into each student's mathematics education. Students must be helped to develop a wide range of skills and strategies for solving a variety of problem types.

Number and Number Sense

Focus: Place Value, Number Patterns, and Fraction Concepts
2.1 The student will
a) read, write, and identify the place value of each digit in a three-digit numeral, using numeration models;
b) round two-digit numbers to the nearest ten; and
c) compare two whole numbers between 0 and 999, using symbols (>, <, or =) and words (greater than, less than, or equal to).

2.2 The student will
a) identify the ordinal positions first through twentieth, using an ordered set of objects; and
b) write the ordinal numbers.

2.3 The student will
a) identify the parts of a set and/or region that represent fractions for halves, thirds, fourth sixths, eighths, and tenths;
b) write the fractions; and

c) compare the unit fractions for halves, thirds, fourths, sixths, eighths, and tenths.

2.4 The student will
a) count forward by twos, fives, and tens to 100, starting at various multiples of 2, 5, or 10;
b) count backward by tens from 100; and
c) recognize even and odd numbers.

Computation and Estimation

Focus: Number Relationships and Operations
2.5 The student will recall addition facts with sums to 20 or less and the corresponding subtraction facts.

2.6 The student, given two whole numbers whose sum is 99 or less, will
a) estimate the sum; and
b) find the sum, using various methods of calculation.

2.7 The student, given two whole numbers, each of which is 99 or less, will
a) estimate the difference; and
b) find the difference, using various methods of calculation.

2.8 The student will create and solve one- and two-step addition and subtraction problems, using data from simple tables, picture graphs, and bar graphs.

2.9 The student will recognize and describe the related facts that represent and describe the inverse relationship between addition and subtraction.

Measurement

Focus: Money, Linear Measurement, Weight/Mass, and Volume
2.10 The student will
a) count and compare a collection of pennies, nickels, dimes, and quarters whose total value is $2.00 or less; and
b) correctly use the cent symbol (¢), dollar symbol ($), and decimal point (.).

2.11 The student will estimate and measure
a) length to the nearest centimeter and inch;
b) weight/mass of objects in pounds/ounces and kilograms/grams, using a scale; and
c) liquid volume in cups, pints, quarts, gallons, and liters.

2.12 The student will tell and write time to the nearest five minutes, using

analog and digital clocks.
2.13 The student will
a) determine past and future days of the week; and
b) identify specific days and dates on a given calendar.

2.14 The student will read the temperature on a Celsius and/or Fahrenheit thermometer to the nearest 10 degrees.

Geometry

Focus: Symmetry and Plane and Solid Figures
2.15 The student will
a) draw a line of symmetry in a figure; and
b) identify and create figures with at least one line of symmetry.

2.16 The student will identify, describe, compare, and contrast plane and solid geometric figures (circle/sphere, square/cube, and rectangle/rectangular prism).

Probability and Statistics

Focus: Applications of Data
2.17 The student will use data from experiments to construct picture graphs, pictographs, and bar graphs.

2.18 The student will use data from experiments to predict outcomes when the experiment is repeated.

2.19 The student will analyze data displayed in picture graphs, pictographs, and bar graphs.

Patterns, Functions, and Algebra

Focus: Patterning and Numerical Sentences
2.20 The student will identify, create, and extend a wide variety of patterns.

2.21 The student will solve problems by completing numerical sentences involving the basic facts for addition and subtraction. The student will create story problems, using the numerical sentences.

2.22 The student will demonstrate an understanding of equality by recognizing that the symbol = in an equation indicates equivalent quantities and the symbol ≠ indicates that quantities are not equivalent.