Kindergarten

The kindergarten standards place emphasis on developing the concept of number by counting; combining, sorting, and comparing sets of objects; recognizing, describing, and creating simple repeating patterns; and recognizing shapes and sizes of figures and objects. Students will investigate measurement through direct comparisons, collect data, and create graphs. The concept of fractions is introduced through sharing experiences.

The use of appropriate technology and the interpretation of the results from applying technology tools must be an integral part of teaching, learning, and assessment. While learning mathematics, students will be actively engaged, using concrete materials and appropriate technologies to facilitate problem solving. However, facility in the use of technology shall not be regarded as a substitute for a student's understanding of quantitative and algebraic concepts or for proficiency in basic computations.

The acquisition of specialized mathematical vocabulary and language is crucial to a student's understanding and appreciation of the subject and fosters confidence in mathematics communication and problem solving.

Problem solving is integrated throughout the content strands. The development of problem-solving skills is a major goal of the mathematics program at every grade level. The development of skills and problem-solving strategies must be integrated early and continuously into each student's mathematics education.

Number and Number Sense

K.1   The student will
   a) tell how many are in a given set of 20 or fewer objects by counting orally; and
   b) read, write, and represent numbers from 0 through 20.

K.2   The student, given no more than three sets, each set containing 10 or fewer concrete objects, will
   a) compare and describe one set as having more, fewer, or the same number of objects as the other set(s); and
   b) compare and order sets from least to greatest and greatest to least.

K.3   The student will
   a) count forward orally by ones from 0 to 100;
   b) count backward orally by ones when given any number between 1 and 10;
   c) identify the number after, without counting, when given any number between 0 and100 and identify the number before, without counting, when given any number between 1 and 10; and
   d) count forward by tens to determine the total number of objects to 100.

K.4   The student will
   a) recognize and describe with fluency part-whole relationships for numbers up to 5; and
   b) investigate and describe part-whole relationships for numbers up to 10.

K.5   The student will investigate fractions by representing and solving practical problems involving equal sharing with two sharers.

Computation and Estimation

K.6   The student will model and solve single-step story and picture problems with sums to 10 and differences within 10, using concrete objects.

Measurement and Geometry

K.7   The student will recognize the attributes of a penny, nickel, dime, and quarter and identify the number of pennies equivalent to a nickel, a dime, and a quarter.

K.8   The student will investigate the passage of time by reading and interpreting a calendar.

K.9   The student will compare two objects or events, using direct comparisons, according to one or more of the following attributes: length (longer, shorter), height (taller, shorter), weight (heavier, lighter), temperature (hotter, colder), volume (more, less), and time (longer, shorter).

K.10   The student will
   a)   identify and describe plane figures (circle, triangle, square, and rectangle);
   b)   compare the size (smaller, larger) and shape of plane figures (circle, triangle, square, and rectangle); and
   c)   describe the location of one object relative to another (above, below, next to) and identify representations of plane figures (circle, triangle, square, and rectangle) regardless of their positions and orientations in space.

Probability and Statistics

K.11   The student will
   a)   collect, organize, and represent data; and
   b)   read and interpret data in object graphs, picture graphs, and tables.

Patterns, Functions, and Algebra

K.12   The student will sort and classify objects according to one attribute.

K.13   The student will identify, describe, extend, create, and transfer repeating patterns.