

**INDEPENDENT SCHOOL DISTRICT OF BOISE CITY
IDAHO ACHIEVEMENT STANDARDS
KINDERGARTEN
MATHEMATICS**

Mathematical reasoning and problem solving processes should be incorporated throughout all mathematics standards. Students should use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, and models to communicate mathematical information and to explain mathematical reasoning and concepts.

Standard 1: Number and Operation

Students in Kindergarten demonstrate knowledge of our numeration system by counting forward by ones to at least 31. Students show the verbal, symbolic, and physical representations of a number up to 10.

Goal 1.1: Understand and use numbers.

Objective(s): By the end of Kindergarten, the student will be able to:

- K.M.1.1.1 Demonstrate knowledge of our numeration system by counting forward by ones to at least 31.
- K.M.1.1.2 Show the verbal, symbolic, and physical representations of a number up to 10.
- K.M.1.1.3 Identify a penny as a value of money.
- K.M.1.1.4 Select strategies appropriate for solving a problem.
- K.M.1.1.5 Use appropriate vocabulary.

Goal 1.2: Perform computations accurately.

Objective(s): By the end of Kindergarten, the student will be able to:

- K.M.1.2.1 Use concrete objects to illustrate the concepts of addition and subtraction.
- K.M.1.2.2 Use appropriate vocabulary.

Goal 1.3: Estimate and judge reasonableness of results.

Objective(s): By the end of Kindergarten, the student will be able to:

- K.M.1.3.1 Use estimation to identify a number of objects.
- K.M.1.3.2 Use estimation to evaluate the reasonableness of an answer.
- K.M.1.3.3 Use appropriate vocabulary.

Standard 2: Concepts and Principles of Measurement

Students in Kindergarten use appropriate vocabulary.

Goal 2.1: Understand and use U.S. customary and metric measurements.

Objective(s): By the end of Kindergarten, the student will be able to:

- K.M.2.1.1 Compare the lengths or sizes of objects (e.g., longer, shorter, larger, smaller).
- K.M.2.1.2 Estimate measurement using concrete objects.
- K.M.2.1.3 Name the day of the week and the day's date using a calendar.
- K.M.2.1.4 Use appropriate vocabulary.

Goal 2.2: Apply the concepts of rates, ratios, and proportions.

No objectives at this grade level.

Goal 2.3: Apply dimensional analysis.

No objectives at this grade level.

Standard 3: Concepts and Language of Algebra and Functions

Students in Kindergarten compare sets of objects using the vocabulary words/phrases of less than, greater than, and same as. Students replicate and extend simple repeating patterns.

Goal 3.1: Use algebraic symbolism as a tool to represent mathematical relationships.

Objective(s): By the end of Kindergarten, the student will be able to:

- K.M.3.1.1 Use concrete objects to identify and show a solution to problems.
- K.M.3.1.2 Compare sets of objects using vocabulary (less than, greater than, and same as).

Goal 3.2: Evaluate algebraic expressions.

No objectives at this grade level.

Goal 3.3: Solve algebraic equations and inequalities.

No objectives at this grade level.

Goal 3.4: Understand the concept of functions.

Objective(s): By the end of Kindergarten, the student will be able to:

- K.M.3.4.1 Replicate and extend simple repeating patterns (e.g., ABAB).
- K.M.3.4.2 Use appropriate vocabulary.

Goal 3.5: Represent equations, inequalities and functions in a variety of formats.

No objectives at this grade level.

Goal 3.6: Apply functions to a variety of problems.

No objectives at this grade level.

Standard 4: Concepts and Principles of Geometry

Students in Kindergarten recognize, name, compare, and sort the two- and three- dimensional shapes of triangles, squares, circles, cones, and cubes. Students apply appropriate vocabulary for position and size.

Goal 4.1: Apply concepts of size, shape, and spatial relationships.

Objective(s): By the end of Kindergarten, the student will be able to:

- K.M.4.1.1 Recognize, name, compare, and sort two- and three- dimensional shapes (triangle, rectangle, square, circle, cone, cube).
- K.M.4.1.2 Sort and classify objects.
- K.M.4.1.3 Apply appropriate vocabulary.

Goal 4.2: Apply the geometry of right triangles.

No objectives at this grade level.

Goal 4.3: Apply graphing in two dimensions.

Objective(s): By the end of Kindergarten, the student will be able to:

- K.M.4.3.1 Describe the location of an object relative to another (e.g., next to, under, over, behind).

Standard 5: Data Analysis, Probability, and Statistics

Students in Kindergarten interpret information from real object graphs and simple pictographs.

Goal 5.1: Understand data analysis.

Objective(s): By the end of Kindergarten, the student will be able to:

- K.M.5.1.1 Interpret information from real object graphs and simple pictographs.
- K.M.5.1.2 Use appropriate vocabulary.

Goal 5.2: Collect, organize, and display data.

Objective(s): By the end of Kindergarten, the student will be able to:

- K.M.5.2.1 Create a graph using real objects or pictorial representations.

Goal 5.3: Apply simple statistical measurements.

No objectives at this grade level.

Goal 5.4: Understand basic concepts of probability.

No objectives at this grade level.

Goal 5.5: Make predictions or decisions based on data.

No objectives at this grade level.