

Grand Island Public Schools

1st GRADE MATHEMATICS

As a result of their participation in this course, students will:

Strand 1: Communicating Mathematical Thinking

- Build new mathematical knowledge through problem solving (Problem Solving).
- Apply and adapt a variety of appropriate strategies to solve problems (Problem Solving).
- Recognize and use connections among mathematical ideas and/or apply in contexts outside of mathematics. (Connections)
- Investigate, develop, and evaluate mathematical arguments and proofs. (Reasoning and Proof).
- Select, apply, and move fluently among mathematical representations to solve problems. (Representation)

Strand 2: Number and Operations

- Compare numbers from 0 to 100.
- Identify odd/even numbers.
- Represent $\frac{1}{2}$ and $\frac{1}{4}$ using manipulatives, drawings, and symbols.
- Count objects by 1s, 5s, 10's to 100.
- Connect number words and numerals to the quantities they represent, using various physical models and representations.
- Count on to a given number (89 count on 2).
- Know addition and subtraction facts to ten with or without manipulatives.
- Solve addition and subtraction type problems in context.
- Represent two-digit numbers using manipulatives, ten frames, and 100 charts.

Strand 3: Algebraic Concepts

- Identify, describe, and extend patterns.
- Create patterns using manipulatives, words, and symbols.
- Find and show the missing value in addition and subtraction facts from one to ten.

Strand 4: Geometry, Spatial Concepts, and Measurement

- Use a calendar to measure passage of time.
- Identify relationships between pennies, nickels, and dimes.
- Predict and measure using nonstandard units (cubes) and inches.
- Find the value of pennies, nickels, and dimes.
- Describe and create two-dimensional shapes using their properties (number of sides, length of sides, and number of corners).
- Describe the location of an object using direction (left/right, above/below).
- Identify two-dimensional shapes in their environment.

Strand 5: Data Analysis, Probability, and Statistics

- Collect and organize real and pictorial data in a table.
- Create bar graphs.
- Analyze data given on a table or graph.