

Grade Level Expectations for the Sunshine State Standards

Mathematics First Grade

This extract of the *Grade Level Expectations for the Sunshine State Standards - Mathematics First Grade* has been annotated to show the correlation between the specific expectations for *First Grade* and the activities in Mathville 1. □

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**Sunshine State Standards
Grade Level Expectations
Mathematics
First Grade**

The first grade student:

Number Sense, Concepts, and Operations

- uses one-to one correspondence to count objects to 100 or more. Count, Numbers & Fractions
- reads and writes numerals to 100 or more. Count, Numbers & Fractions
- uses ordinal numbers 1st - 10th or higher.
- compares and orders whole numbers to 100 or more using concrete materials, drawings, number lines, symbols (<, =, >), and vocabulary such as equal to, more than, or less than.
- represents real-world applications of whole numbers, to 100 or more, using concrete materials, drawings, and symbols.
- represents, explains, and compares fractions (one half, one fourth, three fourths) as part of a whole and part of a set using concrete materials, drawings, and real-life situations. Numbers & Fractions
- knows that the total of equivalent fractional parts makes a whole (for example, two halves equal one whole). Numbers & Fractions
- represents equivalent forms of the same number, up to 20 or more, through the use of concrete materials (including coins), diagrams, and number expressions (for example, 16 can be represented as 8+8, 10+6, 4+4+4+4, 20-4, 17-1). Count, Balance
- counts orally to 100 or more by 2s, 5s, and 10s with or without a hundred chart. Skip Count
- uses concrete materials, pictures, and symbols to show the grouping and place value of numbers to 100 or more.
- counts forward and backward by one beginning with any number less than 100.
- counts forward by tens from any number less than 10 using a hundred chart.
- knows place value patterns and uses zero as a place holder (for example, trading 10 ones for 1 ten).
- knows the place value of a designated digit in whole numbers to 100.
- demonstrates knowledge of the meaning of addition (putting together, increasing) and subtraction (taking away, comparing, finding the difference) using manipulatives, drawings, symbols, and story problems. Add & Subtract
- solves basic addition facts using concrete objects and thinking strategies, such as count on, count back, doubles, doubles plus one, and make ten. Add & Subtract
- describes the related facts that represent a given fact family up to 18 (for example, 9+3=12, 12-9=3, 12-3=9). Balance
- knows how to use the commutative and associative properties of addition in solving problems and basic facts.

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- adds and subtracts two-digit numbers without regrouping (sums to 100) using models, concrete materials, or algorithms.
- poses and solves simple number problems by selecting the proper operation (for example, finding how many students are sitting at tables one and two).
- uses concrete objects to solve number problems with one operation.
- describes thinking when solving number problems.
- writes number sentences associated with addition and subtraction situations.
- knows appropriate methods (for example, concrete materials, mental mathematics, paper and pencil) to solve real-world problems involving addition and subtraction.
- uses a calculator to explore addition, subtraction, and skip counting.
- uses the language of estimation and approximation to identify and describe numbers in real-world situations (for example, about, near, closer to, between). Estimate
- estimates the number of objects, explains the reasoning for the estimate, and checks the reasonableness of the estimate by counting. Estimate
- makes reasonable estimates when comparing larger or smaller quantities. Estimate
- estimates reasonable answers to basic facts (e.g., Will $7+8$ be more than 10?).
- demonstrates and builds models to show the difference between odd and even numbers using concrete objects or drawings.

Measurement

- knows how to communicate measurement concepts.
- demonstrates an understanding of measurement of lengths by selecting appropriate units of measurement (for example, inches or feet).
- demonstrates an understanding of weight by selecting appropriate units of measurement (for example, grams or kilograms).
- demonstrates an understanding of time using digital and analog clocks (for example, hour and half-hour intervals). Time
- demonstrates an understanding of temperature using thermometers.
- demonstrates an understanding of capacity by selecting appropriate units of measurement (for example, cups, pints, quarts, liters).
- measures length, weight, or capacity of an object using standard and nonstandard units (for example, pounds, grams, or wooden blocks).
- uses nonstandard, customary, and metric units to measure, compare, and order objects according to their lengths or weights.

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- knows that a uniform unit is needed to measure in real-world situations (for example, length, weight, time, capacity).
- estimates, measures, and compares dimensions of an object.
- estimates and measures the passage of time using before or after; yesterday, today, or tomorrow; day or night; morning, afternoon, or evening; hour or half-hour.
- knows and compares money values, including the quarter (25 cents), half-dollar (50 cents), and dollar (100 cents).
- selects and uses an appropriate nonstandard unit to measure length, weight, time, and capacity.
- knows appropriate standard tools for measuring linear dimensions, weight, capacity, and temperature.
- knows appropriate tools (clocks and calendar) for measuring time (including days, weeks, months).

Geometry and Spatial Sense

- knows attributes of two- and three-dimensional figures (for example, vertices, edges). Identify, Sort
- sorts two- and three-dimensional figures according to their attributes. Sort
- understands lines of symmetry in two-dimensional shapes (for example, paper folding, ink blot pictures, mirrors).
- knows shapes that can be combined to form other shapes (for example, using pattern blocks, six triangles make a hexagon). Build
- uses concrete materials to demonstrate slides, turns, and reflections.
- follows directions to move or place an object and describes the relationship of objects using positional language (for example, over, to the left of).
- compares and sorts two-dimensional and three-dimensional real-life objects. Identify, Sort
- knows geometric shapes in real-life situations. Identify
- compares, describes, and sorts objects according to attributes (for example, corners, curves, faces). Sort
- locates and explains known and unknown numbers on a number line from 0 to 100 or more. Estimate, Skip Count

Algebraic Thinking

- identifies, describes, and compares patterns using a wide variety of materials and attributes (for example, size, shape, color). Pattern
- describes a pattern rule.

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- explores number patterns on a hundred chart and with a calculator.
- predicts and extends existing patterns that are concrete or pictorial. **Pattern**
- uses one attribute to create a pattern (for example, thick or thin, open or closed).
- transfers patterns from one medium to another (for example, concrete objects to actions or symbols).
- predicts, extends, and creates patterns **Pattern**
- identifies and generates patterns in a list of related number pairs based on real-life situations (for example, T-chart with number of children to number of eyes).
- | Number of Children | Number of Eyes |
|--------------------|----------------|
| 1 | 2 |
| 2 | 4 |
- solves addition and subtraction sentences where an unknown number is represented by a geometric shape (for example, $2 + \square = 9$).
- uses concrete objects to solve number sentences with equalities and inequalities (using the symbols $>$, $=$, $<$).
- uses concrete objects to solve real-world addition and subtraction problems using one unknown (for example, There are 28 children in this class, and 25 are here today. How many are absent?).

Data Analysis and Probability

- surveys a small group to answer a simple question involving two categories or choices (for example, students who bring lunches or students who buy lunches).
- uses mathematical language to read and interpret data on a simple concrete graph, pictorial graph, or chart.
- uses concrete materials, pictures, or graphs to display data and identify range and mode. **Graph**
- discusses a reasonable prediction for a large group using data from a small group.
- uses a calculator to compare data and explores computer graphing software.
- knows the likelihood of a given situation (for example, snowing in South Florida).
- explains if an event is certain, probable, or impossible.
- discusses results of games and activities dependent upon chance.
- knows if a given event is more likely, equally likely, or less likely to occur (for example, six blue marbles and two green marbles in a bag).
- constructs appropriate questions for a class survey, in a whole group setting.
- analyzes results of a survey as part of a class discussion.