

**MATHEMATICS
CONTENT
STANDARDS
FOR CHRISTIAN
UNIFIED SCHOOLS OF
SAN DIEGO**

**First Grade
Parent Handbook**



Standards for Mathematics

Number Sense

1.0 Number Relationships

By the end of first grade, your child will:

- 1.1 Count, read, and write whole numbers to 100.
- 1.2 Compare and order whole numbers to 100 by using the symbols for less than, equal to, or greater than ($<$, $=$, $>$).
- 1.3 Represent equivalent forms of the same number to 20, using physical models, diagrams, and number expressions (e.g., 8 may be represented as $4+4$, $5+3$, $2+2+2$, $10-2$, $11-3$).
- 1.4 Count and group objects into ones and tens, and hundreds (e.g., three groups of 10 and 4 equals 34, or $30+4$).
- 1.5 Identify and know the value of coins; then show different combinations of coins equaling the same value.

2.0 Addition and Subtraction

By the end of first grade, your child will:

- 2.1 Begin to memorize the addition facts (sums to 18) and the corresponding subtraction facts.
- 2.2 Use the inverse relationship (e.g., checking a subtraction problem using addition).
- 2.3 Identify one more than, one less than, 10 more than, and 10 less than a given number.
- 2.4 Count by 2's, 5's, and 10's to 100.
- 2.5 Show the meaning of addition (putting together) and subtraction (taking away, compare, find the difference).
- 2.6 Solve addition and subtraction problems with 1 and 2 digit numbers (e.g., $5 + 58 = \underline{\quad}$).
- 2.7 Find the sum on three one-digit numbers.

3.0 Estimation

By the end of first grade, your child will:

- 3.1 Make reasonable estimates when comparing larger or smaller numbers.

Algebra and Functions

1.0 Number Sentences

By the end of first grade, your child will:

- 1.1 Write and solve number sentences from problem situations that express relationships involving addition and subtraction.
- 1.2 Understand the meaning of the symbols for addition, subtraction, greater than, less than, and equal to (+, -, >, <, =)
- 1.3 Create problem situations that might lead to a given number sentence involving addition and subtraction.
- 1.4 Identify missing numbers in a sequence.
- 1.5 Identify the missing shape or design in a repeating pattern.

Measurement and Geometry

1.0 Measurement

By the end of first grade, your child will:

- 1.1 Compare the length, width, and volume of two or more objects by using standard or nonstandard units.
- 1.2 Tell time to the nearest half hour and relate time to events (e.g., before/after, shorter/longer).
- 1.3 Estimate and measure capacity of a container using standard units.
- 1.4 Read a Fahrenheit thermometer to the nearest ten degrees.
- 1.5 Solve problems using a calendar.
- 1.6 Draw and measure line segments.

2.0 Geometry

By the end of first grade, your child will:

- 2.1 Identify, describe, and compare triangles, rectangles, squares, and circles, including the faces of three-dimensional objects.
- 2.2 Classify familiar plane and solid objects by common attributes such as color, position, shape, size, roundness, or number of corners, and explain which attributes are being used for classification.
- 2.3 Identify congruent shapes.
- 2.4 Arrange and describe objects in space by proximity, position, and direction (e.g., near, far, below, above, up, down, behind, in front of, next to, left or right of).

Statistics, Data Analysis, and Probability

1.0 Data

By the end of first grade, your child will:

- 1.1 Sort objects and data by common attributes and describe the categories.
- 1.2 Represent and compare data (e.g., largest, smallest, most often, least often) by using pictures, bar graphs, tally charts, and picture graphs.
- 1.3 Predict the outcome of a probability experiment.
- 1.4 Conduct a probability experiment.

2.0 Patterning

By the end of first grade, your child will:

- 2.1 Describe, extend, and explain ways to get to the next element in a simple repeating pattern (e.g. rhythmic, numeric, color, shape).

Mathematical Reasoning

1.0 Making Decisions about a Problem

By the end of first grade, your child will:

- 1.1 Determine the approach, materials, and strategies to be used.
- 1.2 Use tools, such as manipulative or sketches, to model problems.

2.0 Solve Problems and Justify Reasoning

By the end of first grade, your child will:

- 2.1 Explain reasoning used and justify the procedures selected.
- 2.2 Make precise calculations and check the validity of the results from the context of the problem.

3.0 Make Connections

By the end of first grade, your child will:

- 3.1 Note the connections between one problem and another.
- 3.2 Recognize God as the creator of Earth and founder of mathematic principles.
- 3.3 Recognize the attributes of God evident in mathematics (e.g., orderly, unchanging, absolute)