

**Bethlehem Lutheran School
Math Grade 1**

In recognizing the need for understanding and mastering mathematical computations and concepts, the philosophy of the mathematics program is to involve each student in a learning program that blends mathematical skills with practical applications to their daily Christian lives.

State Standard 1

Students develop number sense and use of numbers and number relationships in problem-solving situations and communicate the reasoning used in solving these problems.

Classroom objectives

The student will:

- 1.1 Identify groups of 0 through 99.
- 1.2 Understand ordinal numbers through 10th.
- 1.3 Identify place values for tens and ones.
- 1.4 Count by 2's to 20.
- 1.5 Count by 5's and 10's to 100.
- 1.6 Identify even and odd numbers to 20.
- 1.7 Add two numbers through a sum of 18.
- 1.8 Add two 2-digit numbers without regrouping.
- 1.9 Subtract from numbers through 18.
- 1.10 Subtract two 2-digit numbers without borrowing.
- 1.11 Identify fractional parts of $\frac{1}{2}$, $\frac{1}{3}$, and $\frac{1}{4}$.
- 1.12 Identify the value of quarters, dimes, nickels, and pennies.
- 1.13 Construct and interpret number meanings through real-world experiences and the use of hands-on materials.
- 1.14 Represent and use numbers in a variety of equivalent forms
- 1.15 Understand structure and properties of the real number system.
- 1.16 Use number sense, including estimation and mental arithmetic to determine the reasonableness of solutions.
- 1.17 Read and write numerals from 0 to 100 in meaningful contexts.
- 1.18 Read and write the number words for selected numbers from zero to one hundred.
- 1.19 Identify place value through tens.

State Standard 2

Students use algebraic methods to explore, model, and describe patterns and functions involving numbers, shapes, data, and graphs in problem-solving situations and communicate the reasoning used in solving these problems.

Classroom objectives

The student will:

- 2.1 Solve problems through methods of classifying, patterning, organizing information, choosing operations, and determining reasonable answers.
- 2.2 Identify triangles, rectangles, circles, squares, cubes, cylinders, spheres, and cones.
- 2.3 Make and use bar graphs, pictographs, tally charts, and tables.
- 2.4 Interpret data for "more", "fewer", and "same."

State Standard 3

Students use data collection and analysis, statistics, and probability in problem-solving situations and communicate the reasoning used in solving these problems.

Classroom objectives

The student will:

- 3.1 Make and use bar graphs, pictographs, tally charts, and tables.
- 3.2 Interpret data for "more", "fewer", and "same."
- 3.3 Solve problems using various strategies for making combinations.
- 3.4 Make valid inferences and decisions based on data analysis.

State Standard 4

Students use geometric concepts, properties, and relationships in problem-solving situations and communicate the reasoning used in solving these problems.

Classroom objectives

The student will:

- 4.1 Identify triangles, rectangles, circles, squares, cubes, cylinders, spheres, and cones.
- 4.2 Identify the number of sides and angles of shapes.
- 4.3 Measure using standard and nonstandard units of measurement.
- 4.4 Measure using inches and centimeters.

State Standard 5

Students use a variety of tools and techniques to measure, apply the results in problem-solving situations, and communicate the reasoning used in solving these problems.

Classroom objectives

The student will:

- 5.1 Tell time to the hour and half hour.
- 5.2 Identify the days of the week and months of the year.
- 5.3 Measure using standard and nonstandard units of measurement.
- 5.4 Estimate and measure the capacity of a container in cups.
- 5.5 Estimate and weigh an object on a balance with a non-standard unit.
- 5.6 Measure temperature to the nearest 10 degrees.
- 5.7 Identify the value of quarters, dimes, nickels, and pennies.
- 5.8 Compare objects according to measurable attributes.

Standard 6

Students link concepts and procedures as they develop and use computational techniques, including estimation, mental arithmetic, paper-and-pencil, calculators, and computers in problem-solving situations and communicate the reasoning used in solving these problems.

Classroom objectives

The student will:

- 6.1 Add two numbers through a sum of 18.
- 6.2 Add two 2-digit numbers without regrouping.
- 6.3 Subtract from numbers through 18.
- 6.4 Subtract two 2-digit numbers without borrowing.
- 6.5 Link the operations of addition and subtraction and equality with mathematical terms and symbols.
- 6.6 Determine the operation of addition or subtraction needed to calculate answers to story problems.