



Mathematics - Grade 1

2024 - 2025

Students working at grade-level expectations will achieve the following learning objectives:

Number
Read, write, and model numbers up to 100.
Count in steps of 10 up to 100.
Illustrate numbers using number grouping and arrays.
Count by 1s, 2s, 5s, and 10s; compare and order numbers up to 100.
Understand place value up to 9 tens and units (or ones).
Understand the difference between a digit and a number.
Count, compare, and order numbers up to 20 using the symbols =, ≠, <, and >.
Understand and use ordinal numbers (1st, 2nd, 3rd, first, second, third, etc.).
Estimate the reasonableness of answers.
Describe the meaning and use of addition and subtraction.
Achieve fluency with fact families up to 10 (e.g., $3 + 5 = 8$, $5 + 3 = 8$, $8 - 3 = 5$, $8 - 5 = 3$).
Achieve fluency with number bonds up to 10 using addition and subtraction (e.g., $3 + 6 = 9$, $4 + 5 = 9$, $7 + 2 = 9$).
Calculate number bonds up to 20 using addition and subtraction (e.g., $9 + 4 = 13$, $8 + 5 = 13$, $6 + 7 = 13$).
Use mathematical vocabulary and symbols for addition and subtraction: add, subtract, +, - (and for advanced learners: difference and sum).
Read, write, and model addition and subtraction up to 100, both with and without crossing the tens boundary.
Automatically recall addition and subtraction facts up to 10.
Recognize related additions and subtractions involving tens (e.g., $4 + 3 = 7$, $14 + 3 = 17$, $24 + 3 = 27$).
Explore and model multiplication and division using their own language/methods ("grouping" and "sharing").
Solve real-life word problems using basic one-step calculations.
Recognize, find, and name a half as 1 of 2 equal parts of an object, shape, or quantity.
Recognize, find, and name a quarter as 1 of 4 equal parts of an object, shape, or quantity.
Select and explain the appropriate method for solving a problem.
Estimate the reasonableness of answers.
Read, write, and count Euros and cents.
Order coins based on their value.
Identify the value of money by adding coins (e.g., $15\text{¢} + 5\text{¢} = 20\text{¢}$, $1\text{€} + 2\text{€} = 3\text{€}$).

Patterns and Functions
Create, describe, and extend patterns without using numbers to develop logical thinking.
Analyze patterns in number systems up to 100.
Recognize, describe, and extend patterns in numbers, including odd and even numbers, and skip counting by 2s, 5s, and 10s.
Identify patterns and rules for addition, such as the commutative property (e.g., $4 + 3 = 7$, $3 + 4 = 7$).
Identify patterns and rules for subtraction (e.g., $7 - 3 = 4$, $7 - 4 = 3$).
Model the relationship between addition and subtraction using manipulatives (e.g., $3 + 4 = 7$, $7 - 3 = 4$).
Understand and use number patterns to solve problems, including finding missing numbers.
Double and halve numbers up to 20 (e.g., $6 + 6 = 12$, $4 = 2 + 2$, $10 + 10 = 20$).
Solve real-life word problems involving patterns using one-step calculations.
Measurement
Estimate, measure, label, and compare length, mass, capacity, and time using non-standard units of measurement.
Use a ruler to measure the length in centimeters.
Use a calendar to determine the date and to identify and sequence the days of the week and months of the year.
Estimate, identify, and compare lengths of time, such as an hour, day, week, month, and year.
Read and write the time to the hour and half-hour.
Compare weights by identifying which objects are heavier and which are lighter.
Solve one-step real-life word problems involving measurement.
Shape and Space
Sort, describe, and compare 2-D shapes based on size, form, and color attributes.
Sort and label 2-D shapes using appropriate mathematical vocabulary, such as sides, corners, circles, squares, etc.
Create 2-D shapes.
Identify and describe 3-D shapes by their names, including cubes, cones, prisms, cylinders, and spheres.
Sort and label 3-D shapes using appropriate mathematical vocabularies, such as faces, corners, and edges.
Create and explain various spatial concepts with simple directions.
Describe paths, regions, and boundaries within their immediate environment using terms like forwards, backward, left, and right.
Describe the position of an object using prepositions such as on, under, in, next to, and in between.
Understand slides (translations), which involve moving shapes to a new position without rotating them, and flips (reflections), which include turning a shape horizontally or vertically.
Draw objects after sliding them
Solve real-life word problems involving shapes and space with one-step solutions.

Data Handling

Sort and label objects by one or more attributes to represent data.

Understand the purpose of graphing data.

Create a pictograph and simple bar graph from a graph of real objects and interpret data by comparing quantities: more, fewer, less than, and greater than.

Discuss and compare the data represented by teacher-generated diagrams: Venn diagram, bar graph, and pictograph.

Collect, display, and interpret data to find information.

Discuss and become familiar with the probability vocabulary: impossible, unlikely, likely, and certain.

Solve real-life word problems with data handling—one step.