



Mathematics - Grade 3

2024 - 2025

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

Number
Review from Grade 2: Read, write, and model numbers, and review place value and rounding up to 1,000.
Read, write, and model numbers using the base-10 system up to 10,000.
Recognize and understand even and odd numbers through pairing.
Extension: Introduce Roman numerals: I, V, X, L, C, D, M.
Count, compare, and order numbers up to 1,000.
Estimate quantities up to 10,000.
Reasonably estimate answers using rounding and approximation.
Automatically recall basic addition and subtraction facts.
Use mental and written strategies for addition and subtraction of whole numbers up to 10,000.
Model addition and subtraction equations up to 10,000, both with and without regrouping, first horizontally and then vertically with carrying and borrowing.
Review and automatically recall multiplication tables up to 10×10 and division facts up to 100.
Read, write, and model multiplication problems involving up to 3-digit numbers multiplied by 1-digit numbers.
Read, write, and model division problems involving 3-digit numbers divided by 1-digit numbers, both with and without remainders.
Use mathematical vocabulary and symbols of multiplication and division: multiply, product, \times , divide, quotient, \div .
Use and describe multiple strategies to solve addition, subtraction, multiplication, and division problems.
Solve real-life word problems using each of the basic operations up to 10,000 and up to three steps for advanced.
Understand that the numerator represents the number of parts considered, while the denominator represents the number of equal parts a whole is divided into.
Write fractions to represent the shaded part of a whole
Use fractions to tell time and make other measurements.
Compare fractions in a number line; recognize greater and lesser fractions with the same denominator.
Select and explain the most appropriate method for solving a given problem.
Model addition and subtraction with money.
Convert between Euros and cents, with cents always shown using a decimal point.

Compare two or three amounts of money.
Patterns and Functions
Recognize, describe, and extend more complex number patterns, including those following a 2-step rule, and write the rule for the pattern.
Identify more complex patterns and rules for addition, subtraction, multiplication, and division.
Solve real-life word problems using patterns and functions with numbers up to 1,000.
Measurement
Estimate, measure, label, and compare using formal methods and standard units of measurement for length, mass, volume/capacity, time, and temperature.
Select appropriate tools and units of measurement.
Measure length using kilometers (km), meters (m), centimeters (cm), and millimeters (mm) with a ruler.
Understand the conversion of centimeters (cm) to meters (m), millimeters (mm) to centimeters (cm), and decimeters (dm) to meters (m).
Describe measurements that fall between numbers on a measuring scale (e.g., 3 ½ kg, between 4 cm and 5 cm).
Read and write the time using intervals as small as 1 minute on 12-hour clocks, including full hours, half past, quarter past, and quarter to, in analog and digital formats.
Measure time by converting years to days and hours to minutes.
Calculate elapsed time for full and half-hour intervals.
Calculate elapsed time in 5-minute intervals.
Write volumes using units such as milliliters (mL) and liters (L).
Estimate, compare, and arrange the masses of objects in grams (g).
Measure and convert weight using kilograms (kg), and grams (g).
Explain tons (metric tons) as a larger unit of mass.
Solve two-step real-life word problems involving various types of measurement, with three-step problems for advanced levels.
Shape and Space
Describe and model regular and irregular polygons: triangles, parallelograms, hexagons, and trapezoids.
Identify, describe, and sort 3-D shapes according to their properties (faces, edges, and vertices), including spheres, cubes, cuboids, pyramids, cones, and cylinders. For advanced students, include triangular prisms and hemispheres
Describe the similarities and differences between the two shapes.
Identify and draw the nets of 3-D shapes.d draw the nets of 3-D shapes.
Understand angles as the amount of turn between two arms.
Identify shapes with right angles.
Compare angles based on their openings.
Draw angles (e.g., draw an acute angle).
Describe angles in clocks and directions.
Understand that an object is symmetrical if one side is a mirror image of the other.
Identify whether an object is symmetric or not.
Understand, identify, and draw (up to two) lines of symmetry.
Create symmetrical patterns, including tessellations.

Locate features on a grid using coordinates. For advanced students, create a map using grids.
Describe routes using grid references and compass directions.
Review from Grade 2: Identifying slides, turns, and flips.
Create slide, turn, and flip patterns.
Solve real-life word problems involving shapes and space concepts above—up to three steps for advanced problems.
Data Handling
Collect and display data (complete with labels) in a bar graph and interpret the results.
Use the scale on the vertical axis of a bar graph to represent large quantities.
Discuss, compare, and interpret sets from data that have subsets using Venn diagrams, tree diagrams, and other diagrams.
Design a survey by collecting data (e.g., through observation, survey test scores, and other sources) and then processing and interpreting the data.
Use probability to determine mathematically fair and unfair games and to explain possible outcomes.
Create simple experiments (e.g., rolling a die) and record the results.
Solve real-life word problems using data handling and simple probability—up to three steps for advanced.