



## Grade Three: Mathematic Standards

By the end of grade three, students deepen their understanding of place value and their understanding of and skill with addition, subtraction, multiplication, and division of whole numbers. Students estimate, measure, and describe objects in space. They use patterns to help solve problems. They represent number relationships and conduct simple probability experiments.

### Number Sense

- 1.3 Identify the place value for each digit in numbers to 10,000.
- 1.5 Use expanded notation to represent numbers (e.g.,  $3,206 = 3,000 + 200 + 6$ ).
- 2.1 Find the sum or difference of two whole numbers between 0 and 10,000.
- 2.2 Memorize to automaticity the multiplication table for numbers between 1 and 10.
- 2.3 Use the inverse relationship of multiplication and division to compute and check results.
- 2.4 Solve simple problems involving multiplication of multidigit numbers by one-digit numbers ( $3,671 \times 3 + \underline{\hspace{1cm}}$ ).
- 3.2 Add and subtract simple fractions (e.g., determine that  $1/8 + 3/8$  is the same as  $1/2$ ).
- 3.3 Solve problems involving addition, subtraction, multiplication, and division of money amounts in decimal notation by using whole-number multipliers and divisors.

### Algebra and Functions

- 1.1 Represent relationships of quantities in the form of mathematical expressions, equations, or inequalities.
- 2.1 Solve simple problems involving a functional relationship between two quantities (e.g., find the total cost of multiple items given the cost per unit).

### Measurement and Geometry

- 1.2 Estimate or determine the area and volume of solid figures by covering them with squares or by counting the number of cubes that would fill them.
- 1.3 Find the perimeter of a polygon with integer sides.
- 2.1 Identify, describe, and classify polygons (including pentagons, hexagons, and octagons)
- 2.2 Identify attributes of triangles (e.g., two equal sides for the isosceles triangle, three equal sides for the equilateral triangle, right angle for the right triangle).
- 2.3 Identify attributes of quadrilaterals (e.g., parallel sides for the parallelogram, right for the rectangle, equal sides and right angles for the square).

## **Statistics, Data Analysis, and Probability**

1.2 Record the possible outcomes for a simple event (e.g., tossing a coin) and systematically keep track of the outcomes when the event is repeated many times.

1.3 Summarize and display the results of probability experiments in a clear and organized way (e.g., use a bar graph or a line plot).