

Grade 2

Mathematical Practices

0 Display perseverance and patience in problem-solving. Demonstrate skills and strategies needed to succeed in mathematics, including critical thinking, reasoning, and effective collaboration and expression. Seek help and apply feedback. Set and monitor goals. 2.MP

0.1 Make sense of problems and persevere in solving them. 2.MP.1

0.2 Reason abstractly and quantitatively. 2.MP.2

0.3 Construct viable arguments and critique the reasoning of others. 2.MP.3

0.4 Model with mathematics. 2.MP.4

0.5 Use appropriate tools strategically. 2.MP.5

0.6 Attend to precision. 2.MP.6

0.7 Look for and make use of structure. 2.MP.7

0.8 Look for and express regularity in repeated reasoning. 2.MP.8

Numerical Reasoning

1 Using the place value structure, explore the count sequences to represent, read, write, and compare numerical values to 1000 and describe basic place-value relationships and structures. 2.NR.1

1.1 Explain the value of a three-digit number using hundreds, tens, and ones in a variety of ways. 2.NR.1.1

1.2 Count forward and backward by ones from any number within 1000. Count forward by fives from multiples of 5 within 1000. Count forward and backward by 10s and 100s from any number within 1000. Count forward by 25s from 0. 2.NR.1.2

1.3 Represent, compare, and order whole numbers to 1000 with an emphasis on place value and equality. Use $>$, $=$, and $<$ symbols to record the results of comparisons. 2.NR.1.3

2 Apply multiple part-whole strategies, properties of operations and place value understanding to solve real-life, mathematical problems involving addition and subtraction within 1,000. 2.NR.2

- 2.1 Fluently add and subtract within 20 using a variety of mental, part-whole strategies. 2.NR.2.1
- 2.2 Find 10 more or 10 less than a given three-digit number and find 100 more or 100 less than a given three-digit number. 2.NR.2.2
- 2.3 Solve problems involving the addition and subtraction of two-digit numbers using part-whole strategies. 2.NR.2.3
- 2.4 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. 2.NR.2.4

3 Work with equal groups to gain foundations for multiplication through real-life, mathematical problems. 2.NR.3

- 3.1 Determine whether a group (up to 20) has an odd or even number of objects. Write an equation to express an even number as a sum of two equal addends. 2.NR.3.1
- 3.2 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends. 2.NR.3.2

Patterning & Algebraic Reasoning

4 Identify, describe, extend, and create repeating patterns, growing patterns, and shrinking patterns. 2.PAR.4

- 4.1 Identify, describe, and create a numerical pattern resulting from repeating an operation such as addition and subtraction. 2.PAR.4.1
- 4.2 Identify, describe, and create growing patterns and shrinking patterns involving addition and subtraction up to 20. 2.PAR.4.2

Measurement & Data Reasoning

5 Estimate and measure the lengths of objects and distance to solve problems found in real-life using standard units of measurement, including inches, feet, and yards and analyze graphical displays of data to answer relevant questions. 2.MDR.5

- 5.1 Construct simple measuring instruments using unit models. Compare unit models to rulers. 2.MDR.5.1
- 5.2 Estimate and measure the length of an object or distance to the nearest whole unit using appropriate units and standard measuring tools. 2.MDR.5.2
- 5.3 Measure to determine how much longer one object is than another and express the length difference in terms of a standard-length unit. 2.MDR.5.3
- 5.4 Ask questions and answer them based on gathered information, observations, and appropriate graphical displays to solve problems relevant to everyday life. 2.MDR.5.4
- 5.5 Represent whole-number sums and differences within a standard unit of measurement on a number line diagram. 2.MDR.5.5

6 Solve real-life problems involving time and money. 2.MDR.6

- 6.1 Tell and write time from analog and digital clocks to the nearest five minutes, and estimate and measure elapsed time using a timeline, to the hour or half hour on the hour or half hour. 2.MDR.6.1
- 6.2 Find the value of a group of coins and determine combinations of coins that equal a given amount that is less than one hundred cents, and solve problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. 2.MDR.6.2

Geometric & Spatial Reasoning

7 Draw and partition shapes and other objects with specific attributes, and conduct observations of everyday items and structures to identify how shapes exist in the world. 2.GSR.7

- 7.1 Describe, compare and sort 2-D shapes including polygons, triangles, quadrilaterals, pentagons, hexagons, and 3-D shapes including rectangular prisms and cones, given a set of attributes. 2.GSR.7.1
- 7.2 Identify at least one line of symmetry in everyday objects to describe each object as a whole. 2.GSR.7.2
- 7.3 Partition circles and rectangles into two, three, or four equal shares. Identify and describe equal-sized parts of the whole using fractional names (“halves,” “thirds,” “fourths,” “half of,” “third of,” “quarter of,” etc.). 2.GSR.7.3
- 7.4 Recognize that equal shares of identical wholes may be different shapes within the same whole. 2.GSR.7.4