Maine Mathematics

Grade 2

Adopted 2020

Standards for Mathematical Practice

1. **Make sense of problems and persevere in solving them - Students will plan strategies to use and persevere in solving math problems.** MP.1
2. **Reason abstractly and quantitatively - Students will think about numbers in many ways and make sense of numerical relationships as they solve problems.** MP.2
3. **Construct viable arguments and critique the reasoning of others - Students will explain their thinking and make sense of the thinking of others.** MP.3
4. **Model with mathematics - Students will use representations to show their thinking in a variety of ways.** MP.4
5. **Use appropriate tools strategically - Students will use math tools such as tables, diagrams, and technology to explore and deepen their understanding of concepts.** MP.5
6. **Attend to precision - Students will use precise mathematical language and check their work for accuracy.** MP.6
7. **Look for and make use of structure - Students will use their current mathematical understandings to identify patterns and structure to make sense of new learning.** MP.7
8. **Look for and express regularity in repeated reasoning - Students will look for patterns and rules to help create general methods and shortcuts that can be applied to similar mathematical problems.** MP.8

Quantitative Reasoning

Quantitative Reasoning

Algebraic Reasoning

Operations and Algebraic Thinking

1. Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from. AR.C.1
    1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. 2.OA.A.1
2. Understand and apply properties of operation and the relationship between addition and subtraction within 20. AR.C.2
    2. Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers. 2.OA.B.2
    3. Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends. 2.OA.C.3
    4. 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.OA.C.4

Geometric Reasoning

Geometry

1. Identify, describe, analyze, compare, create, and compose shapes based on their attributes. GR.C.1
    1. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals (including squares, rectangles, rhombuses, and trapezoids) pentagons, hexagons, and cubes. Sizes are compared directly or visually, not compared by measuring. 2.G.A.1
    2. Partition a rectangle into rows and columns of same-size squares and count to find the total number of them. 2.G.A.2
    3. Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape. 2.G.A.3

Statistical Reasoning

Measurement & Data

1. Describe and compare measurable attributes. SR.C.1

    4. Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit. 2.MD.A.4

    1. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. 2.MD.A.1

    2. Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen. 2.MD.A.2

    3. Estimate lengths using units of inches, feet, centimeters, and meters. 2.MD.A.3

2. Represent and interpret data. SR.C.2

    9. Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Organize and record data on a line plot, where the horizontal scale is marked off in whole-number units. 2.MD.D.9

    10. Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph. 2.MD.D.10

3. Relate addition and subtraction to length. SR.C.3

    5. Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem. 2.MD.B.5

    6. Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram. 2.MD.B.6

4. Work with time and money. SR.C.4

    7. Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. 2.MD.C.7

    8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have? 2.MD.C.8