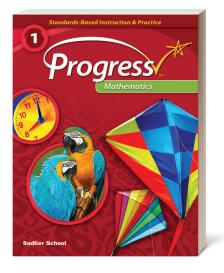
# sadlier **Progress** Mathematics



### Aligned to the

# Massachusetts Curriculum Framework for Mathematics

# Grade 1

#### Contents

- 2 Operations and Algebraic Thinking
- 3 Number and Operations in Base Ten
- 4 Measurement and Data
- 5 Geometry



## **Operations and Algebraic Thinking**

#### GRADE 1 CONTENT STANDARDS SADLIER PROGRESS MATHEMATICS, GRADE 1 Represent and solve problems involving addition and subtraction. 1. Use addition and subtraction within 20 to solve word Lesson 1 Problem Solving: Addition—pp. 10–17 problems involving situations of adding to, taking from, putting together, taking apart, and comparing, Lesson 2 Problem Solving: Subtraction—pp. 18–25 with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. 2. Solve word problems that call for addition of three Lesson 3 **Problem Solving: Addition of Three** whole numbers whose sum is less than or equal to Numbers—pp. 26–33 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. Understand and apply properties of operations and the relationship between addition and subtraction. 3. Apply properties of operations as strategies to add Apply Properties of Operations—pp. 34–41 Lesson 4 and subtract.<sup>10</sup> Examples: If 8 + 3 = 11 is known, then 3 +8 = 11 is also known. (Commutative property of addition.) To add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.) <sup>10</sup> Students need not use formal terms for these properties. 4. Understand subtraction as an unknown-addend Lesson 5 Relate Addition and Subtraction Facts-pp. problem. For example, subtract 10 - 8 by finding the 42-49 number that makes 10 when added to 8. Add and subtract within 20. Relate counting to addition and subtraction (e.g., by 5. Lesson 6 **Relate Counting to Addition and** counting on 2 to add 2). Subtraction—pp. 50–57 6. Add and subtract within 20, demonstrating fluency **Addition and Subtraction Facts to 10** Lesson 7 for addition and subtraction within 10. Use strategies (fluency)—pp. 58-65 such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 24 = 10 + 4 = 14; decomposing a number leading to a Lesson 8 Addition and Subtraction Facts to 20-pp. ten (e.g., 13 - 4 = 13 - 3 - 1 = 10 - 1 = 9); using the 66-73 relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 - 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 +1 = 12 + 1 = 13).

1.OA

# **Operations and Algebraic Thinking**

#### GRADE 1 CONTENT STANDARDS

#### Work with addition and subtraction equations.

- 7. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? 6 = 6, 7 = 8 1, 5 + 2 = 2 + 5, 4 + 1 = 5 + 2.
- 8. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations  $8 + ? = 11, 5 = \Box 3, 6 + 6 = \Box$ .
- MA.9. Write and solve number sentences from problem situations that express relationships involving addition and subtraction within 20.

#### SADLIER PROGRESS MATHEMATICS, GRADE 1

Lesson 9	<b>Addition and Subtraction Equations</b> —pp. 74 81
Lesson 10	<b>Find Missing Numbers in Equations</b> —pp. 82– 95
Lesson 1	Problem Solving: Addition—pp. 10–17
Lesson 2	Problem Solving: Subtraction—pp. 18–25
Lesson 3	Problem Solving: Addition of Three Numbers—pp. 26–33
Lesson 10	Find Missing Numbers in Equations—p. 89

### Number and Operations in Base Ten

#### GRADE 1 CONTENT STANDARDS

#### Extend the counting sequence.

1. Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.

#### Understand place value.

- 2. Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:
  - a. 10 can be thought of as a bundle of ten ones called a "ten."
  - b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.
  - c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).

SADLIER PROGRESS MATHEMATICS, GRADE 1

Lesson 11 Count to 120—pp. 96–103

Lesson 12 Read and Write Numbers—pp. 104–111

Lesson 13	Understand Place Value: Tens and Ones—pp. 112–119
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1.NBT

## Number and Operations in Base Ten

#### GRADE 1 CONTENT STANDARDS

 Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.</li>

# Use place value understanding and properties of operations to add and subtract.

- 4. Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
- 5. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
- 6. Subtract multiples of 10 in the range 10–90 from multiples of 10 in the range 10–90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

## Measurement and Data

GRADE 1 CONTENT STANDARDS

Measure lengths indirectly and by iterating length units.

- 1. Order three objects by length; compare the lengths of two objects indirectly by using a third object.
- 2. Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. *Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.*

SADLIER PROGRESS MATHEMATICS, GRADE 1

Lesson 14 Compare Numbers—pp. 120–127

Lesson 15 Add Two-Digit Numbers—pp. 128–135

Lesson 16 Find 10 More and 10 Less—pp. 136–143

Lesson 17 Subtract Multiples of 10—pp. 144–161

### 1.MD

SADLIER PROGRESS MATHEMATICS, GRADE 1

Lesson 18	Compare and Order Lengths—pp. 162–169

Lesson 19 Measure Length in Length Units—pp. 170– 177

### Measurement and Data

GRADE 1 CONTENT STANDARDS

#### Tell and write time.

3. Tell and write time in hours and half-hours using analog and digital clocks.

#### Represent and interpret data.

4. Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

#### Work with money.

MA.5. Identify the values of all U.S. coins and know their comparative values (e.g., a dime is of greater value than a nickel). Find equivalent values (e.g., a nickel is equivalent to 5 pennies). Use appropriate notation (e.g., 69¢). Use the values of coins in the solutions of problems.

### Geometry

GRADE 1 CONTENT STANDARDS

#### Reason with shapes and their attributes.

- 1. Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.
- 2. Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quartercircles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.<sup>11</sup>

<sup>11</sup> Students do not need to learn formal names such as "right rectangular prism."

3. Partition circles and rectangles into two and four equal shares, describe the shares using the words *halves, fourths,* and *quarters,* and use the phrases *half* of, fourth of, and *quarter of.* Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.

SADLIER PROGRESS MATHEMATICS, GRADE 1

Lesson 20 Tell Time—pp. 178–185

Lesson 22 Use Tables—pp. 194–207

Lesson 22 Money—pp. 186–193

1.G

SADLIER PROGRESS MATHEMATICS, GRADE 1

Lesson 23 Identify Shapes—pp. 208–215

Lesson 24 Two-Dimensional Shapes—pp. 216–223

Lesson 25 Three-Dimensional Shapes—pp. 224–231

Lesson 26 Equal Shares—pp. 232–239