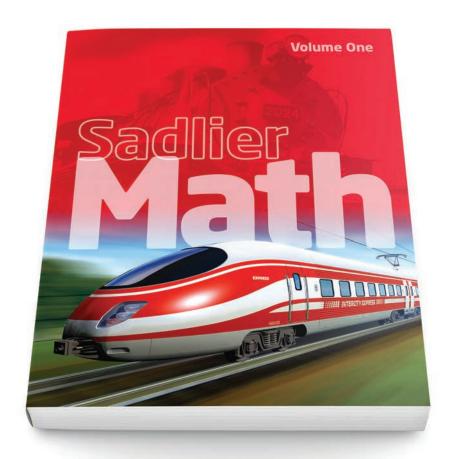
## Sadlier School

# Sadlier Math™

Correlation to the New York State Next Generation Mathematics Learning Standards (2017)

Grade 1



Learn more at www.SadlierSchool.com/SadlierMath

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### NY-1.OA OPERATIONS AND ALGEBRAIC THINKING

#### **Grade 1 Content Standards**

#### Sadlier Math, Grade 1

#### Represent and solve problems involving addition and subtraction.

**NY-1.OA.1** Use addition and subtraction within 20 to solve one step word problems involving situations of adding to, taking from, putting together, taking apart, and/or comparing, with unknowns in all positions.

Note: Problems should be *represented* using objects, drawings, *and* equations with a symbol for the unknown number. Problems should be *solved* using objects or drawings, and equations.

## **Chapter 1 Addition Facts and Strategies Within 10**

- 1-1 Sums Through 5-pp. 3-6
- 1-2 Sums Through 6-pp. 7-10
- 1-3 Sums of 7 and 8-pp. 11-14
- 1-4 Sums of 9 and 10-pp. 15-18
- 1-7 Problem Solving: The Four-Step Process pp. 29–34

#### **Chapter 2 More Addition Within 10**

- 2-5 Addition Practice—pp. 57-60
- 2-6 Problem Solving: Use a Number Sentence pp. 63-68
- 2-7 Solve for Unknown Addends—pp. 69-72

## Chapter 3 Subtraction Facts and Strategies Within 10

- 3-1 Subtract from 5 or Less—pp. 79-82
- 3-2 Subtract from 6 or Less—pp. 83-86
- 3-3 Subtract from 7 and 8—pp. 87-90
- 3-4 Subtract from 9 and 10-pp. 91-94
- 3-5 Problem Solving: Use a Model—pp. 97-102

## Chapter 4 Addition and Subtraction Relationships Within 10

- 4-6 Problem Solving: Use a Model—pp. 139-144
- 4-7 Find Missing Addends—pp. 145-148
- 4-8 Subtract to Compare—pp. 149-152
- 4-9 Solve Comparison Word Problems—pp. 153-156

#### **Chapter 8 Addition Facts Within 20**

- 8-2 Addition: Sums of 11 and 12—pp. 293-296
- 8-3 Addition: Sums Through 14—pp. 297-300
- 8-4 Addition: Sums Through 16-pp. 303-306
- 8-5 Addition: Sums Through 18—pp. 307-310
- 8-6 Addition: Sums Through 20-pp. 311-314
- 8-8 Problem Solving: Write and Solve an Equation—pp. 319–324

#### **Chapter 9 Subtraction Facts Within 20**

- 9-2 Subtract from 11 and 12—pp. 335-338
- 9-3 Subtract from 13 and 14—pp. 339-342

continued



NY-1.OA OPERATIONS AND ALGEBRAIC THINKING		
Grade 1 Content Standards	Sadlier Math, Grade 1	
	<ul> <li>9-4 Subtract from 16 or Less—pp. 345-348</li> <li>9-5 Subtract from 20 or Less—pp. 349-352</li> <li>9-7 Problem Solving: Use a Number Sentence—pp. 357-362</li> <li>9-9 Missing Part of an Equation—pp. 367-370</li> </ul>	
<b>NY-1.OA.2</b> Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20.	Chapter 2 More Addition Within 10  • 2-1 Add Three Numbers—pp. 41-44  • 2-2 Solve Addition Word Problems—pp. 45-48	
e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.	Chapter 8 Addition Facts Within 20 • 8-7 Three Addends—pp. 315–318	

## Understand and apply properties of operations and the relationship between addition and subtraction.

**NY-1.OA.3** Apply properties of operations as strategies to add and subtract.

e.g.,

- 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.)

Note: Students need not use formal terms for these properties.

## Chapter 1 Addition Facts and Strategies Within 10

• 1-5 Related Addition Facts-pp. 21-24

#### **Chapter 2 More Addition Within 10**

• 2-1 Add Three Numbers—pp. 41-44

## Chapter 3 Subtraction Facts and Strategies Within 10

• 3-7 All or Zero-pp. 107-110

## Chapter 4 Addition and Subtraction Relationships Within 10

• 4-3 Fact Families Through 10—pp. 125-128

#### **Chapter 8 Addition Facts Within 20**

- 8-2 Addition: Sums of 11 and 12-pp. 293-296
- 8-3 Addition: Sums Through 14—pp. 297-300
- 8-4 Addition: Sums Through 16-pp. 303-306
- 8-5 Addition: Sums Through 18—pp. 307-310
- 8-6 Addition: Sums Through 20-pp. 311-314
- 8-7 Three Addends—pp. 315-318

#### **Chapter 9 Subtraction Facts Within 20**

- 9-2 Subtract from 11 and 12—pp. 335-338
- 9-3 Subtract from 13 and 14—pp. 339-342
- 9-4 Subtract from 16 or Less—pp. 345-348
- 9-5 Subtract from 20 or Less—pp. 349-352
- 9-6 Fact Families Through 20—pp. 353-356

#### **NY-1.0A** OPERATIONS AND ALGEBRAIC THINKING **Grade 1 Content Standards** Sadlier Math, Grade 1 NY-1.OA.4 Understand subtraction as an **Chapter 3 Subtraction Facts and Strategies** Within 10 unknown addend problem within 20. • 3-5 Problem Solving: Use a Model—pp. 97-102 e.g., Subtract 10 - 8 by finding the number that makes **Chapter 4 Addition and Subtraction** 10 when added to 8. **Relationships Within 10** • 4-2 Relate Addition and Subtraction—pp. 121-124 4-4 Think Addition to Subtract—pp. 129-132

# Add and subtract within 20. NY-1.OA.5 Relate counting to addition and subtraction. e.g., by counting on 2 to add 2 Chapter 1 Addition Facts and Strategies Within 10 • 1-6 Count on to Add—pp. 25-28 Chapter 3 Subtraction Facts and Strategies Within 10 • 3-6 Count On to Subtract—pp. 103-106

#### NY-1.OA.6

**NY-1.OA.6a** Add and subtract within 20. Use strategies such as:

- counting on;
- making ten;
- decomposing a number leading to a ten;
- using the relationship between addition and subtraction; and
- creating equivalent but easier or known sums.

## **Chapter 1 Addition Facts and Strategies Within 10**

• 1-6 Count on to Add-pp. 25-28

## Chapter 3 Subtraction Facts and Strategies Within 10

• 3-6 Count On to Subtract-pp. 103-106

4-7 Find Missing Addends—pp. 145–148

## Chapter 4 Addition and Subtraction Relationships Within 10

- 4-1 Related Subtraction Facts—pp. 117-120
- 4-2 Relate Addition and Subtraction—pp. 121-124
- 4-3 Fact Families Through 10—pp. 125-128
- 4-4 Think Addition to Subtract—pp. 129-132
- 4-5 Check by Adding—pp. 133-136
- 4-6 Problem Solving: Use a Model—pp. 139-144
- 4-7 Find Missing Addends—pp. 145-148

#### **Chapter 8 Addition Facts Within 20**

- 8-1 Make 10 to Add—pp. 289-292
- 8-2 Addition: Sums of 11 and 12-pp. 293-296

continued



#### **OPERATIONS AND ALGEBRAIC THINKING NY-1.0A Grade 1 Content Standards** Sadlier Math, Grade 1 • 8-3 Addition: Sums Through 14-pp. 297-300 • 8-4 Addition: Sums Through 16-pp. 303-306 • 8-5 Addition: Sums Through 18—pp. 307-310 • 8-6 Addition: Sums Through 20-pp. 311-314 **Chapter 9 Subtraction Facts Within 20** 9-1 Make 10 to Subtract—pp. 331-334 9-2 Subtract from 11 and 12—pp. 335–338 • 9-3 Subtract from 13 and 14—pp. 339-342 9-4 Subtract from 16 or Less—pp. 345-348 • 9-5 Subtract from 20 or Less—pp. 349-352 9-6 Fact Families Through 20—pp. 353–356 NY-1.OA.6b Fluently add and subtract within **Chapter 1 Addition Facts and Strategies Within** 10 10. • 1-1 Sums Through 5—pp. 3-6 Note: Fluency involves a mixture of just knowing • 1-2 Sums Through 6-pp. 7-10 some answers, knowing some answers from • 1-3 Sums of 7 and 8-pp. 11-14 patterns, and knowing some answers from the use • 1-4 Sums of 9 and 10-pp. 15-18 of strategies. 1-5 Related Addition Facts—pp. 21-24 • 1-6 Count on to Add-pp. 25-28 **Chapter 2 More Addition Within 10** 2-1 Add Three Numbers—pp. 41-44 • 2-2 Solve Addition Word Problems—pp. 45-48 • 2-3 Doubles and Doubles Plus 1-pp. 49-52 • 2-4 Equivalent Sums-pp. 53-56 • 2-5 Addition Practice-pp. 57-60 **Chapter 3 Subtraction Facts and Strategies** Within 10 3-1 Subtract from 5 or Less—pp. 79–82 • 3-2 Subtract from 6 or Less-pp. 83-86 • 3-3 Subtract from 7 and 8-pp. 87-90 • 3-4 Subtract from 9 and 10-pp. 91-94 • 3-5 Problem Solving: Use a Model—pp. 97-102 • 3-6 Count On to Subtract—pp. 103-106 • 3-7 All or Zero-pp. 107-110 **Chapter 4 Addition and Subtraction Relationships Within 10** • 4-1 Related Subtraction Facts—pp. 117-120 • 4-2 Relate Addition and Subtraction—pp. 121-124 continued

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NY-1.OA OPERATIONS AND ALGEBRAIC THINKING		
Grade 1 Content Standards	Sadlier Math, Grade 1	
	<ul> <li>4-3 Fact Families Through 10—pp. 125-128</li> <li>4-4 Think Addition to Subtract—pp. 129-132</li> <li>4-5 Check by Adding—pp. 133-136</li> <li>4-6 Problem Solving: Use a Model—pp. 139-144</li> <li>4-7 Find Missing Addends—pp. 145-148</li> <li>4-8 Subtract to Compare—pp. 149-152</li> <li>4-9 Solve Comparison Word Problems—pp. 153-156</li> </ul>	
Work with addition and subtraction equations.		
NY-1.OA.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false.  e.g., Which of the following equations are true and which are false?  6 = 6 7 = 8 - 1 5 + 2 = 2 + 5 4 + 1 = 5 + 2	Chapter 1 Addition Facts and Strategies Within 10  • 1-1 Sums Through 5—pp. 3–6  Chapter 3 Subtraction Facts and Strategies Within 10  • 3-1 Subtract from 5 or Less—pp. 79–82  Chapter 9 Subtraction Facts Within 20  • 9-8 True and False Equations—pp. 363–366	
<b>NY-1.OA.8</b> Determine the unknown whole number in an addition or subtraction equation with the unknown in all positions.	Chapter 2 More Addition Within 10 • 2-7 Solve for Unknown Addends—pp. 69-72 Chapter 3 Subtraction Facts and Strategies	

Within 10

• 4-7 Find Missing Addends—pp. 145-148

• 3-1 Subtract from 5 or Less—pp. 79-82

#### **Chapter 9 Subtraction Facts Within 20**

• 9-9 Missing Part of an Equation—pp. 367-370

e.g., Determine the unknown number that makes the

equation true in each of the equations:



### NY-1.NBT NUMBER AND OPERATIONS IN BASE TEN

#### **Grade 1 Content Standards**

#### Sadlier Math, Grade 1

#### Extend the counting sequence.

**NY-1.NBT.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.

#### **Chapter 6 Place Value to 100**

- 6-3 Numbers 11 Through 19—pp. 209-212
- 6-4 Numbers 20 Through 39-pp. 213-216
- 6-5 Numbers 40 Through 59-pp. 219-222
- 6-6 Numbers 60 Through 89-pp. 223-226
- 6-7 Numbers 90 Through 100-pp. 227-230
- 6-8 Problem Solving: Use a Model—pp. 231-236
- 6-9 Count and Order Using Hundred Chart Patterns—pp. 237-240

#### **Chapter 7 Place Value to 120**

- 7-4 Numbers to 120-pp. 261-264
- 7-5 Number Patterns to 120-pp. 265-268
- 7-6 Compare Numbers—pp. 269-272
- 7-7 Order Numbers-pp. 273-276

#### Understand place value.

NY-1.NBT.2 Understand that the two digits of a two-digit number represent amounts of tens and ones.

**NY-1.NBT.2a** Understand 10 can be thought of as a bundle of ten ones, called a "ten".

#### **Chapter 6 Place Value to 100**

- 6-1 Tens and Ones-pp. 201-204
- 6-2 Tens Through One Hundred—pp. 205-208
- 6-3 Numbers 11 Through 19-pp. 209-212
- 6-4 Numbers 20 Through 39—pp. 213-216
- 6-5 Numbers 40 Through 59-pp. 219-222
- 6-6 Numbers 60 Through 89—pp. 223-226
- 6-7 Numbers 90 Through 100—pp. 227-230
- 6-8 Problem Solving: Use a Model—pp. 231-236

#### **Chapter 7 Place Value to 120**

- 7-1 Place Value of Digits—pp. 247-250
- 7-2 Expanded Form—pp. 251-254
- 7-3 Decompose Two-Digit Numbers—pp. 255–258

**NY-1.NBT.2b** Understand the numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.

#### **Chapter 6 Place Value to 100**

6-3 Numbers 11 Through 19—pp. 209-212



#### NY-1.NBT NUMBER AND OPERATIONS IN BASE TEN

#### **Grade 1 Content Standards**

#### Sadlier Math, Grade 1

**NY-1.NBT.2c** Understand 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).

#### **Chapter 6 Place Value to 100**

• 6-2 Tens Through One Hundred—pp. 205-208

#### **Chapter 7 Place Value to 120**

- 7-2 Expanded Form—pp. 251-254
- 7-3 Decompose Two-Digit Numbers—pp. 255-258

#### **Chapter 11 Addition: Two-Digit Numbers**

• 11-2 Add Tens—pp. 411-414

#### **Chapter 12 Subtraction: Two-Digit Numbers**

• 12-2 Subtract Tens-pp. 457-460

**NY-1.NBT.3** Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.

#### **Chapter 7 Place Value to 120**

- 7-6 Compare Numbers—pp. 269-272
- 7-7 Order Numbers—pp. 273-276
- 7-8 Problem Solving: Use Reasoning—pp. 277–282

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

#### NY-1.NBT.4 Add within 100, including

- a two-digit number and a one-digit number.
- a two-digit number and a multiple of 10.

Use concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

Understand that in adding two-digit numbers, one adds tens and tens, ones and ones, and sometimes it is necessary to compose a ten.

Relate the strategy to a written representation and explain the reasoning used.

Note: Students should be taught to use strategies based on place value, properties of operations, and the relationship between addition and subtraction; however, when solving any problem, students can choose any strategy.

continued

#### **Chapter 11 Addition: Two-Digit Numbers**

- 11-2 Add Tens-pp. 411-414
- 11-3 Add Two-Digit Numbers and Multiples of Ten—pp. 415-418
- 11-4 Add Two-Digit and One-Digit Numbers pp. 419-422
- 11-5 Make a 10 to Add Two-Digit and One-Digit Numbers—pp. 423-426
- 11-6 Add Two-Digit Numbers—pp. 429-432
- 11-7 Make a 10 to Add Two-Digit Numbers—pp. 433-436
- 11-8 Break Apart to Add-pp. 437-440
- 11-9 Problem Solving: Use a Model—pp. 441-446

NY-1.NBT NUMBER AND OPERATIONS IN BASE TEN		
Grade 1 Content Standards	Sadlier Math, Grade 1	
Note: A <i>written representation</i> is any way of showing a strategy using words, pictures, or numbers.		
<b>NY-1.NBT.5</b> Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.	Chapter 11 Addition: Two-Digit Numbers  • 11-1 Mental Math: Find 10 or More—pp. 407-410  Chapter 12 Subtraction: Two-Digit Numbers  • 12-1 Mental Math: Find 10 Less—pp. 453-456	
<ul> <li>NY-1.NBT.6 Subtract multiples of 10 from multiples of 10 in the range 10-90 using</li> <li>concrete models or drawings, and</li> <li>strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</li> </ul>	<ul> <li>Chapter 12 Subtraction: Two-Digit Numbers</li> <li>12-2 Subtract Tens—pp. 457-460</li> <li>12-3 Think Addition to Subtract Tens—pp. 461-464</li> <li>12-4 Subtract Multiples of Ten from Two-Digit Numbers—pp. 467-470</li> <li>12-5 Problem Solving: Guess and Test—pp. 471-476</li> </ul>	
Relate the strategy used to a written representation and explain the reasoning.  Note: Students should be taught to use concrete models and drawings; as well as strategies based on place value, properties of operations, and the relationship between addition and subtraction. When solving any problem, students can choose to use a concrete model or a drawing. Their strategy must be based on place value, properties of operations, or the relationship between addition and subtraction.		
Note: A <i>written representation</i> is any way of showing a strategy using words, pictures, or numbers.		

NY-1.MD	MEASUREMENT AND DATA

Grade 1 Content Standards Sadlier Math, Grade 1

#### Measure lengths indirectly and by iterating length units.

**NY-1.MD.1** Order three objects by length; compare the lengths of two objects indirectly by using a third object.

#### **Chapter 5 Measurement: Length**

- 5-1 Order by Length—pp. 163-166
- 5-2 Use Indirect Comparison—pp. 167-170



## NY-1.MD MEASUREMENT AND DATA

#### **Grade 1 Content Standards**

#### Sadlier Math, Grade 1

**NY-1.MD.2** Measure the length of an object using same-size "length units" placed end to end with no gaps or overlaps. Express the length of an object as a whole number of "length units."

Note: "Length units" could include cubes, paper clips, etc.

#### **Chapter 5 Measurement: Length**

- 5-3 Same-Size Length Units—pp. 171-174
- 5-4 Measure Length—pp. 175-178
- 5-5 Problem Solving: Use Logical Reasoning pp. 181–186
- 5-6 Make and Use a Ruler—pp. 187-190
- 5-7 Inches-pp. 191-194

#### Tell and write time and money.

#### NY-1.MD.3

**NY-1.MD.3a** Tell and write time in hours and half-hours using analog and digital clocks. Develop an understanding of common terms, such as, but not limited to, o'clock and half past.

#### **Chapter 15 Time**

- 15-1 Hour—pp. 563-566
- 15-2 Half Hour—pp. 567-570
- 15-3 Time Patterns—pp. 573-576
- 15-4 Day and Night-pp. 577-580
- 15-5 Problem Solving: Use Logical Reasoning pp. 581-586

**NY-1.MD.3b** Recognize and identify coins (penny, nickel, dime, and quarter) and their value and use the cent symbol (¢) appropriately.

**NY-1.MD.3c** Count a mixed collection of dimes and pennies and determine the cent value (total not to exceed 100 cents).

e.g., 3 dimes and 4 pennies is the same as 3 tens and 4 ones, which is 34¢.

#### **Chapter 16 Money**

- 16-1 Pennies and Nickels—pp. 593-596
- 16-2 Dimes and Quarters-pp. 597-600
- 16-3 Count On by Dimes and Pennies—pp. 601-604
- 16-4 Count On by Dimes and Nickels—pp. 605-608
- 16-5 One Dollar—pp. 611-614

#### Represent and interpret data.

**NY-1.MD.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.

#### **Chapter 10 Data and Graphical Displays**

- 10-1 Read Tally Charts—pp. 377-380
- 10-2 Make Tally Charts—pp. 381-384
- 10-3 Read Picture Graphs—pp. 387-390
- 10-4 Make Picture Graphs-pp. 391-394
- 10-5 Problem Solving: Use a Model—pp. 395-400

## Grade 1 Content Standards

#### Sadlier Math, Grade 1

#### Reason with shapes and their attributes.

**NY-1.G.1** Distinguish between defining attributes versus non-defining attributes for a wide variety of shapes. Build and/or draw shapes to possess defining attributes.

e.g.,

**NY-1.G** 

- A defining attribute may include, but is not limited to: triangles are closed and three-sided.
- Non-defining attributes include, but are not limited to: color, orientation, and overall size.

Note on and/or: Students should be taught to build and draw shapes to possess defining attributes; however, when answering questions, students can choose to build or draw the shape.

NY-1.G.2 Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) 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.

Note: Students do not need to learn formal names such as "right rectangular prism."

**NY-1.G.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.

#### **Chapter 13 Geometry**

**GEOMETRY** 

- 13-1 Two-Dimensional Shapes—pp. 483-486
- 13-2 Attributes of Two-Dimensional Shapes—pp. 487-490
- 13-3 Compose Two-Dimensional Shapes—pp. 491-494
- 13-4 Compose More Two-Dimensional Shapes pp. 495–498
- 13-5 Three-Dimensional Shapes—pp. 501– 504C124
- 13-6 Attributes of Three-Dimensional Shapes—pp. 505-508
- 13-7 Compare Two-Dimensional and Three-Dimensional Shapes—pp. 509-512
- 13-8 Sort Two-Dimensional and Three-Dimensional Shapes—pp. 513-516
- 13-10 Problem Solving: Use Logical Reasoning pp. 521–526

#### **Chapter 13 Geometry**

- 13-3 Compose Two-Dimensional Shapes—pp. 491–
- 13-4 Compose More Two-Dimensional Shapes pp. 495-498
- 13-9 Compose Three-Dimensional Shapes—pp. 517-520

#### **Chapter 14 Equal Shares**

- 14-1 Equal Shares—pp. 533-536
- 14-2 Make Halves-pp. 537-540
- 14-3 Make Fourths-pp. 541-544
- 14-4 Halves and Fourths—pp. 547-550
- 14-5 Problem Solving: Draw a Picture—pp. 551-556

