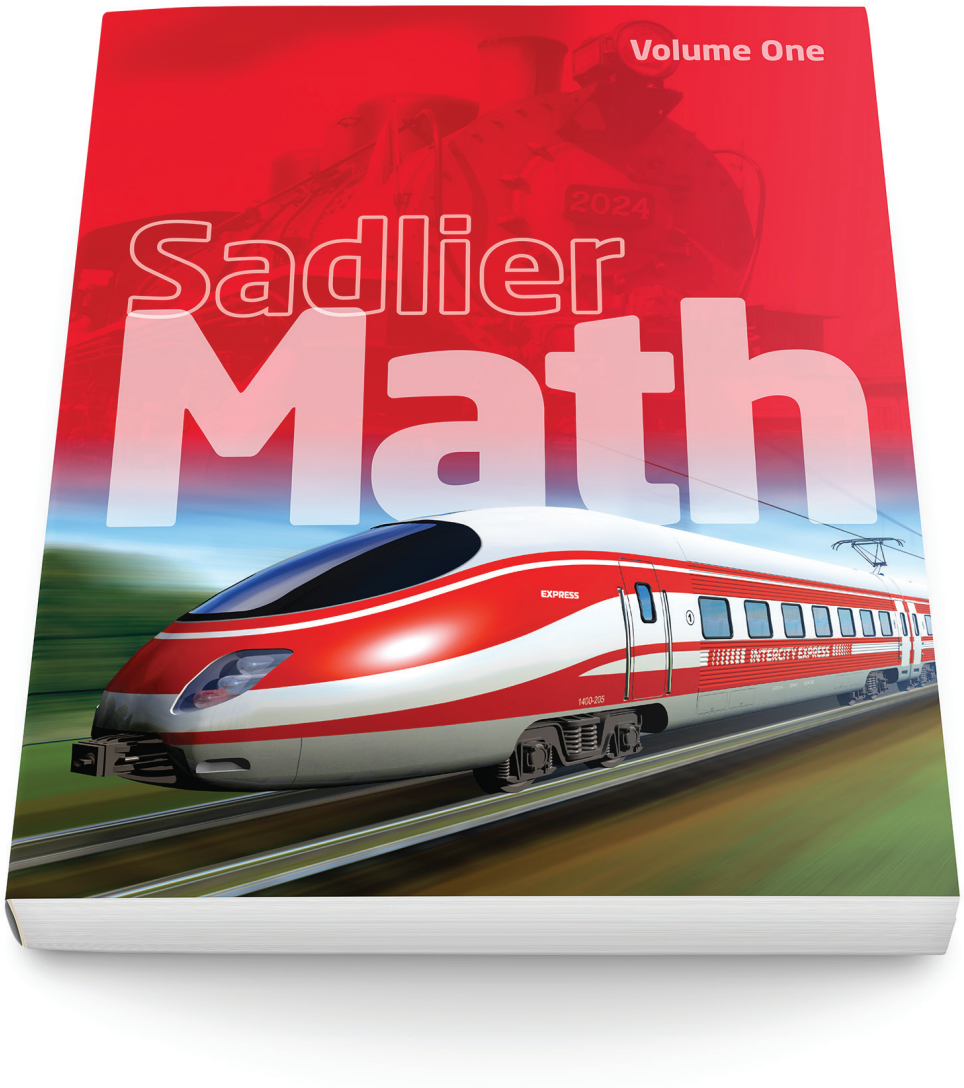
# *Sadlier Math™*

## Correlation to the Alabama 2019 Course of Study
## Mathematics

**Grade 1**

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# OPERATIONS AND ALGEBRAIC THINKING

| Grade 1 Content Standards | *Sadlier Math*, Grade 1 |
|---|---|
| **Represent and solve problems involving addition and subtraction.** | |
| **1. [1.OA.1]** Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and/or comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. | **Chapter 1: 1-1 through 1-4, 1-7**<br>• 1-1 Sums Through 5—pp. 3–6<br>• 1-2 Sums Through 6—pp. 7–10<br>• 1-3 Sums of 7 and 8—pp. 11–14<br>• 1-4 Sums of 9 and 10—pp. 15–18<br>• 1-7 Problem Solving: The Four-Step Process—pp. 29–34<br>**Chapter 2: 2-5 through 2-7**<br>• 2-5 Addition Practice—pp. 57–60<br>• 2-6 Problem Solving: Use a Number Sentence—pp. 63–68<br>• 2-7 Solve for Unknown Addends—pp. 69–72<br>**Chapter 3: 3-1 through 3-5**<br>• 3-1 Subtract from 5 or Less—pp. 79–82<br>• 3-2 Subtract from 6 or Less—pp. 83–86<br>• 3-3 Subtract from 7 and 8—pp. 87–90<br>• 3-4 Subtract from 9 and 10—pp. 91–94<br>• 3-5 Problem Solving: Use a Model—pp. 97–102<br>**Chapter 4: 4-6 through 4-9**<br>• 4-6 Problem Solving: Use a Model—pp. 139–144<br>• 4-7 Find Missing Addends—pp. 145–148<br>• 4-8 Subtract to Compare—pp. 149–152<br>• 4-9 Solve Comparison Word Problems—pp. 153–156<br>**Chapter 8: 8-2 through 8-6, 8-8**<br>• 8-2 Addition: Sums of 11 and 12—pp. 293–296<br>• 8-3 Addition: Sums Through 14—pp. 297–300<br>• 8-4 Addition: Sums Through 16—pp. 303–306<br>• 8-5 Addition: Sums Through 18—pp. 307–310<br>• 8-6 Addition: Sums Through 20—pp. 311–314<br>• 8-8 Problem Solving: Write and Solve an Equation—pp. 319–324<br>**Chapter 9: 9-2 through 9-5, 9-7 & 9-9**<br>• 9-2 Subtract from 11 and 12—pp. 335–338<br>• 9-3 Subtract from 13 and 14—pp. 339–342<br>• 9-4 Subtract from 16 or Less—pp. 345–348<br>• 9-5 Subtract from 20 or Less—pp. 349–352<br>• 9-7 Problem Solving: Use a Number Sentence—pp. 357–362<br>• 9-9 Missing Part of an Equation—pp. 367–370 |
| **2. [1.OA.2]** Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. | **Chapter 2: 2-1 & 2-2**<br>• 2-1 Add Three Numbers—pp. 41–44<br>• 2-2 Solve Addition Word Problems—pp. 45–48<br>**Chapter 8: 8-7**<br>• 8-7 Three Addends—pp. 315–318 |

# OPERATIONS AND ALGEBRAIC THINKING

| Grade 1 Content Standards | *Sadlier Math*, Grade 1 |
|---|---|
| **Understand and apply properties of operations and the relationship between addition and subtraction.** | |
| **3. [1.OA.3]** Apply properties of operations as strategies to add and subtract. (Students need not use formal terms for these properties.)<br>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). | **Chapter 1: 1-5**<br>• 1-5 Related Addition Facts—pp. 21–24<br>**Chapter 2: 2-1**<br>• 2-1 Add Three Numbers—pp. 41–44<br>**Chapter 3: 3-7**<br>• 3-7 All or Zero—pp. 107–110<br>**Chapter 4: 4-3**<br>• 4-3 Fact Families Through 10—pp. 125–128<br>**Chapter 8: 8-2 through 8-7**<br>• 8-2 Addition: Sums of 11 and 12—pp. 293–296<br>• 8-3 Addition: Sums Through 14—pp. 297–300<br>• 8-4 Addition: Sums Through 16—pp. 303–306<br>• 8-5 Addition: Sums Through 18—pp. 307–310<br>• 8-6 Addition: Sums Through 20—pp. 311–314<br>• 8-7 Three Addends—pp. 315–318<br>**Chapter 9: 9-2 through 9-6**<br>• 9-2 Subtract from 11 and 12—pp. 335–338<br>• 9-3 Subtract from 13 and 14—pp. 339–342<br>• 9-4 Subtract from 16 or Less—pp. 345–348<br>• 9-5 Subtract from 20 or Less—pp. 349–352<br>• 9-6 Fact Families Through 20—pp. 353–356 |
| **4. [1.OA.4]** Understand subtraction as an unknown-addend problem.<br>Example: Subtract 10 – 8 by finding the number that makes 10 when added to 8. | **Chapter 3: 3-6**<br>• 3-6 Count On to Subtract (find the difference)—pp. 103–106<br>**Chapter 4: 4-2, 4-4 & 4-7**<br>• 4-2 Relate Addition and Subtraction—pp. 121–124<br>• 4-4 Think Addition to Subtract (find the difference)—pp. 129–132<br>• 4-7 Find Missing Addends—pp. 145–148 |
| **Add and subtract within 20.** | |
| **5. [1.OA.5]** Relate counting to addition and subtraction (e.g., by counting on 2 to add 2). | **Chapter 1: 1-6**<br>• 1-6 Count On to Add (count on)—pp. 25–28<br>**Chapter 3: 3-6**<br>• 3-6 Count On to Subtract (find the difference)—pp. 103–106 |
| **6. [1.OA.6]** Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Using strategies such as: | |
| a. Counting on | **Chapter 1: 1-6**<br>• 1-6 Count On to Add—pp. 25–28<br>**Chapter 2: 2-5**<br>• 2-5 Addition Practice (count on)—pp. 57–60<br>*continued* |

## OPERATIONS AND ALGEBRAIC THINKING

| Grade 1 Content Standards | *Sadlier Math*, Grade 1 |
|---|---|
| | **Chapter 3: 3-6**<br>• 3-6 Count On to Subtract—pp. 103–106<br>**Chapter 4: 4-4**<br>• 4-4 Think Addition to Subtract (count on)—pp. 129–132<br>**Chapter 9: 9-8**<br>• 9-8 True and False Equations (count on)—pp. 363–366 |
| b. Making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14) | **Chapter 8: 8-1 through 8-8**<br>• 8-1 Make 10 to Add—pp. 289–292<br>• 8-2 Addition: Sums of 11 and 12 (make 10)—pp. 293–296<br>• 8-3 Addition: Sums Through 14 (make 10)—pp. 297–300<br>• 8-4 Addition: Sums Through 16 (make 10)—pp. 303–306<br>• 8-5 Addition: Sums Through 18 (make 10)—pp. 307–310<br>• 8-6 Addition: Sums Through 20 (make 10)—pp. 311–314<br>• 8-7 Three Addends (make 10)—pp. 315–318<br>• 8-8 Problem Solving: Write and Solve an Equation (make 10)—pp. 319–324 |
| c. Decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9) | **Chapter 9: 9-1 through 9-5, 9-8**<br>• 9-1 Make 10 to Subtract—pp. 331–334<br>• 9-2 Subtract from 11 and 12—pp. 335–338<br>• 9-3 Subtract from 13 and 14—pp. 339–342<br>• 9-4 Subtract from 16 or Less—pp. 345–348<br>• 9-5 Subtract from 20 or Less—pp. 349–352<br>• 9-8 True and False Equations (use a ten-frame)—pp. 363–366 |
| d. Using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4) | **Chapter 4: 4-1 through 4-7**<br>• 4-1 Related Subtraction Facts—pp. 117–120<br>• 4-2 Relate Addition and Subtraction—pp. 121–124<br>• 4-3 Fact Families Through 10—pp. 125–128<br>• 4-4 Think Addition to Subtract—pp. 129–132<br>• 4-5 Check by Adding—pp. 133–136<br>• 4-6 Problem Solving: Use a Model—pp. 139–144<br>• 4-7 Find Missing Addends—pp. 145–148<br>**Chapter 9: 9-6 & 9-8**<br>• 9-6 Fact Families Through 20—pp. 353–356<br>• 9-8 True and False Equations (count on)—pp. 363–366 |
| e. Creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13). | **Chapter 2: 2-3 through 2-5**<br>• 2-3 Doubles and Doubles Plus 1—pp. 49–52<br>• 2-4 Equivalent Sums—pp. 53–54<br>• 2-5 Addition Practice (doubles)—pp. 57–60<br>**Chapter 8: 8-4 through 8-8**<br>• 8-4 Addition: Sums Through 16 (double plus 1)—pp. 303–306<br>• 8-5 Addition: Sums Through 18 (double plus 1)—pp. 307–310<br>• 8-6 Addition: Sums Through 20 (double plus 1)—pp. 311–314<br>• 8-7 Three Addends (doubles)—pp. 315–318<br>• 8-8 Problem Solving: Write and Solve an Equation (double plus 1)—pp. 319–324 |

## OPERATIONS AND ALGEBRAIC THINKING

| Grade 1 Content Standards | *Sadlier Math*, Grade 1 |
|---|---|
| **Work with addition and subtraction equations.** | |
| **7. [1.OA.7]** Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false.<br>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. | **Chapter 1: 1-1**<br>• 1-1 Sums Through 5—pp. 3–6<br>**Chapter 3: 3-1**<br>• 3-1 Subtract from 5 or Less—pp. 79–82<br>**Chapter 8: 8-8**<br>• 8-8 Problem Solving: Write and Solve an Equation (make 10)—pp. 319–324<br>**Chapter 9: 9-8**<br>• 9-8 True and False Equations—pp. 363–366 |
| **8. [1.OA.8]** Determine the unknown whole number in an addition or subtraction equation relating three whole numbers.<br>Example: Determine the unknown number that makes the equation true in each of the equations, 8 + ? = 11, 5 = ? – 3, and 6 + 6 = ?. | **Chapter 2: 2-7**<br>• 2-7 Solve for Unknown Addends—pp. 69–72<br>**Chapter 3: 3-1**<br>• 3-1 Subtract from 5 or Less—pp. 79–82<br>**Chapter 4: 4-7**<br>• 4-7 Find Missing Addends—pp. 145–148<br>**Chapter 9: 9-9**<br>• 9-9 Missing Part of an Equation—pp. 367–370 |
| **Understand simple patterns.** | |
| **9. [1.OA.9]** Reproduce, extend, and create patterns and sequences of numbers using a variety of materials. | **Chapter 6: 6-9**<br>• 6-9 Count and Order Using Hundred Chart Patterns—pp. 237–240<br>**Chapter 7: 7-5**<br>• 7-5 Number Patterns to 120—pp. 265–268<br>**Chapter 15: 15-3**<br>• 15-3 Time Patterns—pp. 573–576 |

## NUMBER AND OPERATIONS IN BASE TEN

| Grade 1 Content Standards | *Sadlier Math*, Grade 1 |
|---|---|
| **Extend the counting sequence.** | |
| **10. [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: 6-3 through 6-9**<br>• 6-3 Numbers 11 Through 19—pp. 209–212<br>• 6-4 Numbers 20 Through 39—pp. 213–216<br>• 6-5 Numbers 40 Through 59—pp. 219–222<br>• 6-6 Numbers 60 Through 89—pp. 223–226<br>• 6-7 Numbers 90 Through 100—pp. 227–230<br>• 6-8 Problem Solving: Use a Model—pp. 231–236<br>• 6-9 Count and Order Using Hundred Chart Patterns—pp. 237–240<br>*continued* |

## NUMBER AND OPERATIONS IN BASE TEN

| Grade 1 Content Standards | *Sadlier Math*, Grade 1 |
|---|---|
| | **Chapter 7: 7-4 through 7-7**<br>• 7-4 Numbers to 120—pp. 261–264<br>• 7-5 Number Patterns to 120—pp. 265–268<br>• 7-6 Compare Numbers—pp. 269–272<br>• 7-7 Order Numbers—pp. 273–276 |
| **Understand place value.** | |
| **11. [1.NBT.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 10 pennies, also called a dime, and a bundle of ten ones, called a "ten." | **Chapter 6: 6-1 through 6-8**<br>• 6-1 Tens and Ones—pp. 201–204<br>• 6-2 Tens Through One Hundred—pp. 205–208<br>• 6-3 Numbers 11 Through 19—pp. 209–212<br>• 6-4 Numbers 20 Through 39—pp. 213–216<br>• 6-5 Numbers 40 Through 59—pp. 219–222<br>• 6-6 Numbers 60 Through 89—pp. 223–226<br>• 6-7 Numbers 90 Through 100—pp. 227–230<br>• 6-8 Problem Solving: Use a Model—pp. 231–236<br>**Chapter 7: 7-1 through 7-3**<br>• 7-1 Place Value of Digits—pp. 247–250<br>• 7-2 Expanded Form—pp. 251–254<br>• 7-3 Decompose Two-Digit Numbers—pp. 255–258 |
| b. 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: 6-3**<br>• 6-3 Numbers 11 Through 19—pp. 209–212 |
| 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). | **Chapter 6: 6-2**<br>• 6-2 Tens Through One Hundred—pp. 205–208<br>**Chapter 7: 7-2 & 7-3**<br>• 7-2 Expanded Form—pp. 251–254<br>• 7-3 Decompose Two-Digit Numbers—pp. 255–258<br>**Chapter 11: 11-2**<br>• 11-2 Add Tens—pp. 411–414<br>**Chapter 12: 12-2**<br>• 12-2 Subtract Tens—pp. 457–460 |
| **12. [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: 7-6 through 7-8**<br>• 7-6 Compare Numbers—pp. 269–272<br>• 7-7 Order Numbers—pp. 273–276<br>• 7-8 Problem Solving: Use Reasoning—pp. 277–282 |

## NUMBER AND OPERATIONS IN BASE TEN

| Grade 1 Content Standards | *Sadlier Math*, Grade 1 |
|---|---|
| **Use place value understanding and properties of operations to add and subtract.** | |
| **13. [1.NBT.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. | **Chapter 11: 11-2 through 11-9**<br>• 11-2 Add Tens—pp. 411–414<br>• 11-3 Add Two-Digit Numbers and Multiples of Ten—pp. 415–418<br>• 11-4 Add Two-Digit and One-Digit Numbers—pp. 419–422<br>• 11-5 Make a 10 to Add Two-Digit and One-Digit Numbers—pp. 423–426<br>• 11-6 Add Two-Digit Numbers—pp. 429–432<br>• 11-7 Make a 10 to Add Two-Digit Numbers—pp. 433–436<br>• 11-8 Break Apart to Add—pp. 437–440<br>• 11-9 Problem Solving: Use a Model—pp. 441–446<br>**Chapter 16: 16-6**<br>• 16-6 Problem Solving: Work Backward (add using bar models)—pp. 615–620 |
| **14. [1.NBT.5]** 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: 11-1**<br>• 11-1 Mental Math: Find 10 More—pp. 407–410<br>**Chapter 12: 12-1**<br>• 12-1 Mental Math: Find 10 Less—pp. 453–456 |
| **15. [1.NBT.6]** Subtract multiples of 10 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. | **Chapter 12: 12-2 through 12-5**<br>• 12-2 Subtract Tens—pp. 457–460<br>• 12-3 Think Addition to Subtract Tens—pp. 461–464<br>• 12-4 Subtract Multiples of Ten from Two-Digit Numbers—pp. 467–470<br>• 12-5 Problem Solving: Guess and Test—pp. 471–476 |

## MEASUREMENT AND DATA

| Grade 1 Content Standards | *Sadlier Math*, Grade 1 |
|---|---|
| **Measure lengths indirectly and by iterating length units.** | |
| **16. [1.MD.1]** Order three objects by length; compare the lengths of two objects indirectly by using a third object. | **Chapter 5: 5-1 & 5-2**<br>• 5-1 Order by Length—pp. 163–166<br>• 5-2 Use Indirect Comparison—pp. 167–170 |

## MEASUREMENT AND DATA

| Grade 1 Content Standards | *Sadlier Math*, Grade 1 |
|---|---|
| **17. [1.MD.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.* | **Chapter 5: 5-3 through 5-7**<br>• 5-3 Same-Size Length Units—pp. 171–174<br>• 5-4 Measure Length—pp. 175–178<br>• 5-5 Problem Solving: Use Logical Reasoning—pp. 181–186<br>• 5-6 Make and Use a Ruler—pp. 187–190<br>• 5-7 Inches—pp. 191–194 |
| **Work with time and money.** | |
| **18. [1.MD.3]** Tell and write time and money. | |
| a. Tell and write time to the 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: 15-1 through 15-5**<br>• 15-1 Hour—pp. 563–566<br>• 15-2 Half Hour—pp. 567–570<br>• 15-3 Time Patterns—pp. 573–576<br>• 15-4 Day and Night—pp. 577–580<br>• 15-5 Problem Solving: Use Logical Reasoning—pp. 581–586 |
| b. Identify pennies and dimes by name and value and use the ¢ symbol appropriately. | **Chapter 16: 16-1 through 16-6**<br>• 16-1 Pennies and Nickels—pp. 593–596<br>• 16-2 Dimes and Quarters—pp. 597–600<br>• 16-3 Count On by Dimes and Pennies—pp. 601–604<br>• 16-4 Count On by Dimes and Nickels—pp. 605–608<br>• 16-5 One Dollar—pp. 611–614 |
| c. Count a mixed collection of dimes and pennies and determine the cent value (total not to exceed 100 cents). | |
| **Represent and interpret data.** | |
| **19. [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: 10-1 through 10-5**<br>• 10-1 Read Tally Charts—pp. 377–380<br>• 10-2 Make Tally Charts—pp. 381–384<br>• 10-3 Read Picture Graphs—pp. 387–390<br>• 10-4 Make Picture Graphs—pp. 391–394<br>• 10-5 Problem Solving: Use a Model—pp. 395–400 |

## GEOMETRY

| Grade 1 Content Standards | *Sadlier Math*, Grade 1 |
|---|---|
| **Reason with shapes and their attributes.** | |
| **20. [1.G.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. | **Chapter 13: 13-1 through 13-8, 13-10**<br>• 13-1 Two-Dimensional Shapes—pp. 483–486<br>• 13-2 Attributes of Two-Dimensional Shapes—pp. 487–490<br>• 13-3 Compose Two-Dimensional Shapes—pp. 491–494<br>• 13-4 Compose More Two-Dimensional Shapes—pp. 495–498<br>• 13-5 Three-Dimensional Shapes—pp. 501–504<br>• 13-6 Attributes of Three-Dimensional Shapes—pp. 505–508<br>• 13-7 Compare Two-Dimensional and Three-Dimensional Shapes—pp. 509–512<br>• 13-8 Sort Two-Dimensional and Three-Dimensional Shapes—pp. 513–516<br>• 13-10 Problem Solving: Use Logical Reasoning—pp. 521–526 |
| **21. [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. (Students do not need to learn formal names such as "right rectangular prism.") | **Chapter 13: 13-3 & 13-9**<br>• 13-3 Compose Two-Dimensional Shapes—pp. 491–494<br>• 13-9 Compose Three-Dimensional Shapes—pp. 517–520 |
| **22. [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 14: 14-1 through 14-5**<br>• 14-1 Equal Shares—pp. 533–536<br>• 14-2 Make Halves—pp. 537–540<br>• 14-3 Make Fourths—pp. 541–544<br>• 14-4 Halves and Fourths—pp. 547–550<br>• 14-5 Problem Solving: Draw a Picture—pp. 551–556 |