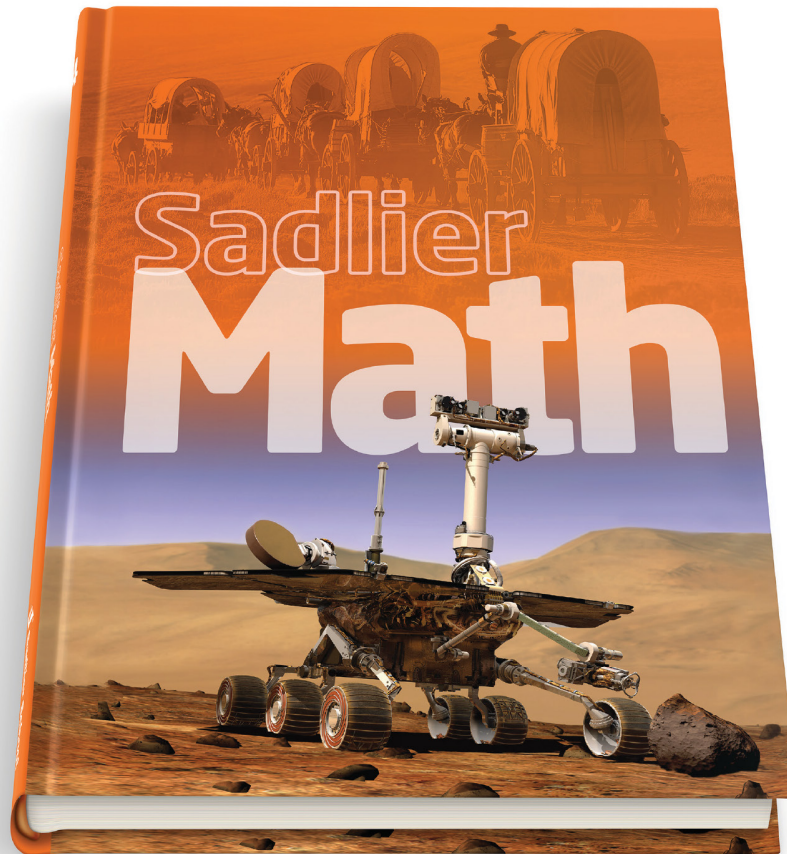


# *Sadlier Math*<sup>TM</sup>

Correlation to the South Dakota State Standards  
for Mathematics

Grade 4



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**OPERATIONS AND ALGEBRAIC THINKING**

**4.OA**

**Grade 4 Content Standards**

**Sadlier Math, Grade 4**

**A. Use the four operations with whole numbers to solve problems.**

**4.OA.1** Use and interpret multiplicative equations.

a. Interpret a multiplication equation as a comparison, e.g., interpret  $35 = 5 \times 7$  as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal or written statements of multiplicative comparisons as multiplication equations.

**Chapter 4 Multiplication Concepts**

- 4-5 Multiply to Compare Numbers—pp. 78-79

**Chapter 5 Multiply by One-Digit Numbers**

- 5-5 Multiplicative and Additive Comparisons—pp. 98-99

b. Know from memory (quick effortless recall of facts) all products of two one-digit numbers.

*See Grade 3*

**Chapter 5 Multiplication Facts**

- 5-1 Multiply by 2—pp. 88-89
- 5-2 Multiply by 5—pp. 90-91
- 5-3 Multiply by 9—pp. 92-93
- 5-4 Multiply by 1 and 0—pp. 96-97
- 5-5 Multiply by 10—pp. 98-99
- 5-6 Find Patterns in the Multiplication Table—pp. 100-101

**Chapter 6 Multiplication Facts**

- 6-1 Break Apart to Multiply—pp. 112-113
- 6-2 Multiply by 3—pp. 114-115
- 6-3 Multiply by 4—pp. 116-117
- 6-4 Multiply by 6—pp. 118-119
- 6-5 Multiply by 7—pp. 120-121
- 6-6 Multiply by 8—pp. 122-123
- 6-7 Use a Bar Model to Multiply—pp. 126-127
- 6-8 Problem Solving: Make a Table—pp. 128-129
- 6-9 Use the Associative Property to Multiply—pp. 130-131
- 6-10 Find More Multiplication Patterns—pp. 132-133
- 6-11 Multiply by Multiples of 10—pp. 134-135

**4.OA.2** Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, and distinguish multiplicative comparison from additive comparison.

**Chapter 4 Multiplication Concepts**

- 4-5 Multiply to Compare Numbers—pp. 78-79

**Chapter 5 Multiply by One-Digit Numbers**

- 5-5 Multiplicative and Additive Comparisons—pp. 98-99

**Chapter 7 Division Concepts**

- 7-6 Problem Solving: Work Backward—pp. 140-141

**Chapter 8 Divide by One-Digit Numbers**

- 8-8 Problem Solving: Use a Model—pp. 164-165

**OPERATIONS AND ALGEBRAIC THINKING**

**4.OA**

**Grade 4 Content Standards**

**Sadlier Math, Grade 4**

**4.OA.3** Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

**Chapter 2 Addition**

- 2-1 Mathematical Expressions—pp. 24–25
- 2-2 Addition Properties—pp. 26–27
- 2-3 Estimate Sums—pp. 28–29

**Chapter 3 Subtraction**

- 3-1 Estimate Differences—pp. 46–47
- 3-6 Multistep Problems Using Addition and Subtraction—pp. 58–59

**Chapter 4 Multiplication Concepts**

- 4-4 Estimate Products—pp. 76–77

**Chapter 7 Division Concepts**

- 7-3 Estimate Quotients—pp. 132–133

**Chapter 8 Divide by One-Digit Numbers**

- 8-1 One-Digit Quotients—pp. 148–149
- 8-3 Two-Digit Quotients—pp. 152–153

**B. Gain familiarity with factors and multiples.**

**4.OA.4** Using whole number in the range 1–100.

- Find all factor pairs for a given whole number.
- Recognize that a whole number is a multiple of each of its factors.
- Determine whether a given whole number is a multiple of each of a given one-digit number.
- Determine whether a given whole number is prime or composite.

**Chapter 9 Factors and Multiples**

- 9-1 Factors—pp. 172–173
- 9-2 Factor Pairs—pp. 174–175
- 9-3 Prime and Composite Numbers—pp. 176–177
- 9-4 Multiples—pp. 180–181
- 9-5 Common Multiples—pp. 182–183

**C. Generate and analyze patterns.**

**4.OA.5** Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule “Add 3” and the starting number is 1, generate terms in the resulting sequence and observe that the

*continued*

**Chapter 7 Division Concepts**

- 7-5 Number Patterns—pp. 138–139

**Chapter 17 Polygons**

- 17-5 Shape Patterns —pp. 380–381

**OPERATIONS AND ALGEBRAIC THINKING**

**4.OA**

**Grade 4 Content Standards**

**Sadlier Math, Grade 4**

terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.

**NUMBER AND OPERATION IN BASE TEN**

**4.NBT**

**Grade 4 Content Standards**

**Sadlier Math, Grade 4**

**A. Generalize place value understanding for multi-digit whole numbers.**

**4.NBT.1** Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. For example, recognize that the 7 in 700 is 10 times greater than the 7 in 70 because  $700 \div 70 = 10$  and  $70 \times 10 = 700$ .

**Chapter 1 Place Value**

- 1-1 Thousands—pp. 2-3
- 1-2 What Is One Million?—pp. 4-5

**4.NBT.2** Read and write multi-digit whole numbers..

a. Read and write multi-digit whole numbers using base-ten numerals (standard form), number names (word form), and expanded form.

**Chapter 1 Place Value**

- 1-1 Thousands—pp. 2-3
- 1-2 What Is One Million?—pp. 4-5
- 1-3 Millions—pp. 6-7
- 1-4 Expanded Form—pp. 8-9

b. Compare two multi-digit numbers based on values of the digits in each place, using  $<$ ,  $>$ , and  $=$  symbols to record the results of comparisons.

**Chapter 1 Place Value**

- 1-6 Compare and Order Whole Numbers—pp. 14-15

**4.NBT.3** Use place value understanding to round multi-digit whole numbers to any place.

**Chapter 1 Place Value**

- 1-5 Round Whole Numbers—pp. 12-13

**B. Use place value understanding and properties of operations to perform multi-digit arithmetic.**

**4.NBT.4** Fluently add and subtract multi-digit whole numbers using an algorithm including, but not limited to, the standard algorithm.

**Chapter 2 Addition**

- 2-2 Addition Properties—pp. 26-27
- 2-4 Add Thousands—pp. 30-31
- 2-5 Add Millions—pp. 34-35
- 2-6 Three or More Addends—pp. 36-37

*continued*

| <b>NUMBER AND OPERATION IN BASE TEN</b>   |   | <b>4.NBT</b> |
|---|---|--------------|
| <b>Grade 4 Content Standards</b>  | <b>Sadlier Math, Grade 4</b>  |              |
|   | <p><b>Chapter 3 Subtraction</b></p> <ul style="list-style-type: none"> <li>• 3-2 Subtract with One Regrouping—pp. 48-49</li> <li>• 3-3 Subtract with Two Regrouping—pp. 50-51</li> <li>• 3-4 Subtract Greater Numbers—pp. 54-55</li> <li>• 3-5 Zeros in Subtraction—pp. 56-57</li> </ul>  |              |
| <p><b>4.NBT.5</b> Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p>  | <p><b>Chapter 4 Multiplication Concepts</b></p> <ul style="list-style-type: none"> <li>• 4-1 Multiplication Properties—pp. 68-69</li> <li>• 4-2 Use Place-Value Models—pp. 70-71</li> <li>• 4-3 Multiply Tens, Hundreds, and Thousands—pp. 74-75</li> </ul> <p><b>Chapter 5 Multiply by One-Digit Numbers</b></p> <ul style="list-style-type: none"> <li>• 5-1 Multiply with Regrouping—pp. 88-89</li> <li>• 5-2 Use Properties to Multiply by One-Digit Numbers—pp. 90-91</li> <li>• 5-3 Use Area Models to Multiply by One-Digit Numbers—pp. 92-93</li> <li>• 5-4 Multiply Three- and Four-Digit Numbers—pp. 96-97</li> <li>• 5-5 Multiplicative and Additive Comparisons—pp. 98-99</li> </ul> <p><b>Chapter 6 Multiply by Two-Digit Numbers</b></p> <ul style="list-style-type: none"> <li>• 6-1 Use Area Models to Multiply by Two-Digit Numbers—pp. 108-109</li> <li>• 6-2 Break Apart Numbers to Multiply—pp. 110-111</li> <li>• 6-3 Multiply by Two-Digit Numbers: No Regrouping—pp. 114-115</li> <li>• 6-4 Multiply by Two-Digit Numbers: Regrouping—pp. 116-117</li> <li>• 6-5 Multiplication Patterns—pp. 118-119</li> </ul> <p><b>Chapter 8 Divide by One-Digit Numbers</b></p> <ul style="list-style-type: none"> <li>• 8-7 Multistep Problems Using Multiplication and Division—pp. 162-163</li> </ul> |              |
| <p><b>4.NBT.6</b> Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.</p> | <p><b>Chapter 7 Division Concepts</b></p> <ul style="list-style-type: none"> <li>• 7-1 Division Rules—pp. 128-129</li> <li>• 7-2 Relate Multiplication and Division—pp. 130-131</li> <li>• 7-4 Use Models to Divide—pp. 136-137</li> </ul> <p><b>Chapter 8 Divide by One-Digit Numbers</b></p> <ul style="list-style-type: none"> <li>• 8-1 One-Digit Quotients—pp. 148-149</li> <li>• 8-2 Divisibility—pp. 150-151</li> <li>• 8-3 Two-Digit Quotients—pp. 152-153</li> <li>• 8-4 Zeros in Quotients—pp. 154-155</li> <li>• 8-5 More Quotients—pp. 158-159</li> <li>• 8-6 Order of Operations—pp. 160-161</li> <li>• 8-7 Multistep Problems Using Multiplication and Division—pp. 162-163</li> </ul>  |              |

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**NUMBER AND OPERATIONS—FRACTIONS**

**4.NF**

**Grade 4 Content Standards**

**Sadlier Math, Grade 4**

**A. Extend understanding of fraction equivalence and ordering.**

**4.NF.1** Explain why a fraction  $a/b$  is equivalent to a fraction  $(n \times a)/(n \times b)$  by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.

**Chapter 10 Fraction Concepts**

- 10-1 Fractions of a Set—pp. 192-193
- 10-2 Equivalent Fractions: Number Line Diagrams—pp. 194-195
- 10-3 Write Equivalent Fractions: Use Models—pp. 196-197
- 10-4 Write Equivalent Fractions: Use Multiplication and Division—pp. 198-199
- 10-5 Fractions: Lowest Terms—pp. 200-201

**4.NF.2** Compare two fractions with different numerators and different denominators, by creating common denominators or numerators, or by comparing to a benchmark fraction such as  $1/2$ . Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols  $<$ ,  $>$ ,  $=$ , and justify the conclusions.

**Chapter 10 Fraction Concepts**

- 10-6 Compare Fractions: Use Benchmarks—pp. 204-205
- 10-7 Compare Fractions with the Same Denominator—pp. 206-207
- 10-8 Compare Fractions—pp. 208-209
- 10-9 Mixed Numbers—pp. 210-211
- 10-10 Compare Mixed Numbers—pp. 212-213

**B. Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.**

**4.NF.3** Understand a fraction  $a/b$  with  $a > 1$  as a sum of fractions  $1/b$ . For example,  $4/5 = 1/5 + 1/5 + 1/5 + 1/5$ .

a. Add and subtract of fractions e.g., joining and separating parts referring to the same whole.

**Chapter 11 Fractions: Addition and Subtraction**

- 11-1 Use Models to Add Fractions—pp. 224-225
- 11-2 Add Fractions: Like Denominators—pp. 226-227
- 11-3 Decompose Fractions as Sums of Unit Fractions—pp. 228-229
- 11-4 Use Models to Subtract Fractions—pp. 230-231
- 11-5 Subtract Fractions: Like Denominators—pp. 232-233

b. Decompose a fraction into a sum of fractions with like denominators in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model.

**Chapter 11 Fractions: Addition and Subtraction**

- 11-2 Add Fractions: Like Denominators—pp. 226-227
- 11-3 Decompose Fractions as Sums of Unit Fractions—pp. 228-229
- 11-6 Write Mixed Numbers as Equivalent Fractions—pp. 236-237

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**NUMBER AND OPERATIONS—FRACTIONS**

**4.NF**

| Grade 4 Content Standards   | Sadlier Math, Grade 4  |
|---|--|
| <p>c. Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.</p>  | <p><b>Chapter 10 Fraction Concepts</b></p> <ul style="list-style-type: none"> <li>10-9 Mixed Numbers—pp. 210-211</li> </ul> <p><b>Chapter 11 Fractions: Addition and Subtraction</b></p> <ul style="list-style-type: none"> <li>11-6 Write Mixed Numbers as Equivalent Fractions—pp. 236-237</li> <li>11-7 Add Mixed Numbers: Like Denominators—pp. 238-239</li> <li>11-8 Subtract Mixed Numbers: Like Denominators—pp. 240-241</li> </ul>                       |
| <p>d. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.</p>   | <p><b>Chapter 11 Fractions: Addition and Subtraction</b></p> <ul style="list-style-type: none"> <li>11-1 Use Models to Add Fractions—pp. 224-225</li> <li>11-2 Add Fractions: Like Denominators—pp. 226-227</li> <li>11-3 Decompose Fractions as Sums of Unit Fractions—pp. 228-229</li> <li>11-4 Use Models to Subtract Fractions—pp. 230-231</li> <li>11-5 Subtract Fractions: Like Denominators—pp. 232-233</li> </ul>  |
| <p><b>4.NF.4</b> Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.</p>   |  |
| <p>a. Understand a fraction <math>a/b</math> as a multiple of <math>1/b</math>. For example, use a visual fraction model to represent <math>5/4</math> as the product <math>5 \times (1/4)</math>, recording the conclusion by the equation <math>5/4 = 5 \times (1/4)</math>.</p>  | <p><b>Chapter 12 Fractions: Multiply by a Whole Number</b></p> <ul style="list-style-type: none"> <li>12-1 Add Unit Fractions to Multiply—pp. 250-251</li> <li>12-2 Model Multiplying a Unit Fraction and a Whole Number—pp. 252-253</li> <li>12-3 Multiply a Unit Fraction and a Whole Number—pp. 254-255</li> <li>12-4 Model Multiplying a Fraction and a Whole Number—pp. 258-259</li> </ul>  |
| <p>b. Understand a multiple of <math>a/b</math> as a multiple of <math>1/b</math>, and use this understanding to multiply a fraction by a whole number. For example, use a visual fraction model to express <math>3 \times (2/5)</math> as <math>6 \times (1/5)</math>, recognizing this product as <math>6/5</math>. (In general, <math>n \times (a/b) = (n \times a)/b = (n \times a) \times 1/b</math>.)</p> | <p><b>Chapter 12 Fractions: Multiply by a Whole Number</b></p> <ul style="list-style-type: none"> <li>12-1 Add Unit Fractions to Multiply—pp. 250-251</li> <li>12-2 Model Multiplying a Unit Fraction and a Whole Number—pp. 252-253</li> <li>12-3 Multiply a Unit Fraction and a Whole Number—pp. 254-255</li> <li>12-4 Model Multiplying a Fraction and a Whole Number—pp. 258-259</li> <li>12-5 Multiply a Fraction and a Whole Number—pp. 260-261</li> </ul> |

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**NUMBER AND OPERATIONS—FRACTIONS**

**4.NF**

| Grade 4 Content Standards  | Sadlier Math, Grade 4  |
|--|--|
| <p>c. Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. For example, if each person at a party will eat <math>\frac{3}{8}</math> of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?</p> | <p><b>Chapter 12 Fractions: Multiply by a Whole Number</b></p> <ul style="list-style-type: none"> <li>• 12-1 Add Unit Fractions to Multiply—pp. 250–251</li> <li>• 12-2 Model Multiplying a Unit Fraction and a Whole Number—pp. 252–253</li> <li>• 12-3 Multiply a Unit Fraction and a Whole Number—pp. 254–255</li> <li>• 12-4 Model Multiplying a Fraction and a Whole Number—pp. 258–259</li> <li>• 12-5 Multiply a Fraction and a Whole Number—pp. 260–261</li> <li>• 12-6 Represent Situations Involving Multiplying a Fraction and a Whole Number—pp. 262–263</li> <li>• 12-7 Problem Solving: Write an Equation—pp. 264–265</li> </ul> |
| <p><b>C. Understand decimal notation for fractions, and compare decimal fractions.</b></p>   |  |
| <p><b>4.NF.5</b> Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. For example, express <math>\frac{3}{10}</math> as <math>\frac{30}{100}</math>, and add <math>\frac{3}{10} + \frac{4}{100} = \frac{34}{100}</math>.</p>  | <p><b>Chapter 13 Fractions and Decimals</b></p> <ul style="list-style-type: none"> <li>• 13-1 Equivalent Fractions: Rename Tenths as Hundredths—pp. 272–273</li> <li>• 13-2 Add and Subtract Fractions with Denominators of 10 and 100—pp. 274–275</li> <li>• 13-3 Tenths and Hundredths as Fractions and Decimals—pp. 276–277</li> <li>• 13-4 Decimals Greater Than One—pp. 278–279</li> <li>• 13-5 Decimal Place value—pp. 280–281</li> </ul>  |
| <p><b>4.NF.6</b> Read and write decimal notation for fractions with denominators 10 or 100. Locate these decimals on a number line.</p>  | <p><b>Chapter 13 Fractions and Decimals</b></p> <ul style="list-style-type: none"> <li>• 13-3 Tenths and Hundredths as Fractions and Decimals—pp. 276–277</li> <li>• 13-4 Decimals Greater Than One—pp. 278–279</li> <li>• 13-5 Decimal Place value—pp. 280–281</li> </ul>   |
| <p><b>4.NF.7</b> Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols <math>&gt;</math>, <math>&lt;</math>, or <math>=</math>, and justify the conclusions.</p>   | <p><b>Chapter 13 Fractions and Decimals</b></p> <ul style="list-style-type: none"> <li>• 13-6 Compare Decimals with Models and Symbols—pp. 284–285</li> <li>• 13-7 Order Decimals—pp. 286–287</li> </ul>   |

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**MEASUREMENT AND DATA**

**4.MD**

**Grade 4 Content Standards**

**Sadlier Math, Grade 4**

**A. Solving problems involving measurement and conversion of measurements from a larger unit to a smaller unit.**

**4.MD.1** Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two column table. For example, know that 1ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36),...

**Chapter 14 Measurement**

- 14-1 Measure with Inches—pp. 296-297
- 14-2 Customary Units of Length—pp. 298-299
- 14-3 Customary Units of Capacity—pp. 300-301
- 14-4 Customary Units of Weight—pp. 302-303
- 14-5 Operations with Customary Units—pp. 304-305
- 14-6 Metric Units of Length—pp. 308-311
- 14-7 Metric Units of Capacity—pp. 310-313
- 14-8 Metric Units of Mass—pp. 312-313
- 14-9 Operations with Metric Units—pp. 314-315
- 14-10 Problem Solving: Make a Table—pp. 316-317

**4.MD.2** Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.

**Chapter 14 Measurement**

- 14-1 Measure with Inches—pp. 296-297
- 14-2 Customary Units of Length—pp. 298-299
- 14-3 Customary Units of Capacity—pp. 300-301
- 14-4 Customary Units of Weight—pp. 302-303
- 14-5 Operations with Customary Units—pp. 304-305
- 14-6 Metric Units of Length—pp. 308-311
- 14-7 Metric Units of Capacity—pp. 310-313
- 14-8 Metric Units of Mass—pp. 312-313
- 14-9 Operations with Metric Units—pp. 314-315
- 14-10 Problem Solving: Make a Table—pp. 316-317

**Chapter 15 Measurement and Data**

- 15-1 Represent Measures on a Number Line—pp. 324-325
- 15-2 Use Multiplication to Rename Measures—pp. 326-327
- 15-3 Elapsed Time—pp. 328-329

**4.MD.3** Apply the area and perimeter formulas for rectangles in real world and mathematical problems.

**Chapter 17 Polygons**

- 17-6 Use Perimeter Formulas—pp. 382-383
- 17-7 Use Area Formulas—pp. 384-385

**B. Represent and interpret data.**

**4.MD.4** Make a line plot to display a data set of measurements in fractions of a unit ( $\frac{1}{2}$ ,  $\frac{1}{4}$ ,  $\frac{1}{8}$ ). Solve problems involving addition and subtraction of fractions by using information presented in line plots.

**Chapter 15 Measurement and Data**

- 15-6 Line Plots—pp. 336-337
- 15-7 Surveys and Line Plots—pp. 338-339
- 15-8 Choose an Appropriate Display—pp. 340-341

| <b>MEASUREMENT AND DATA</b>   |   | <b>4.MD</b> |
|---|---|-------------|
| <b>Grade 4 Content Standards</b>  | <b>Sadlier Math, Grade 4</b>  |             |
| <b>C. Geometric measurement: understand concepts of angle and measure angles.</b>   |   |             |
| <b>4.MD.5</b> Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement.   |   |             |
| a. An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the circle. An angle that turns through $\frac{1}{360}$ of a circle is called a “one-degree angle,” and can be used to measure angles.   | <b>Chapter 16 Lines and Angles</b><br>• 16-2 Angle Measure—pp. 352–353  |             |
| b. An angle that turns through in one-degree angles is said to have an angle measure of $n$ degrees.  | <b>Chapter 16 Lines and Angles</b><br>• 16-1 Points, Lines, Line Segments, Rays and Angles—pp. 350–351<br>• 16-2 Angle Measure—pp. 352–353                                      |             |
| <b>4.MD.6</b> Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.  | <b>Chapter 16 Lines and Angles</b><br>• 16-1 Points, Lines, Line Segments, Rays and Angles—pp. 350–351<br>• 16-2 Angle Measure—pp. 352–353<br>• 16-3 Measure Angles—pp. 356–357 |             |
| <b>4.MD.7</b> Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure. | <b>Chapter 16 Lines and Angles</b><br>• 16-4 Unknown Angle Measures—pp. 358–359   |             |

| <b>GEOMETRY</b>  |  | <b>4.G</b> |
|--|--|------------|
| <b>Grade 4 Content Standards</b>   | <b>Sadlier Math, Grade 4</b>   |            |
| <b>A. Draw and identify lines and angles, and classify shapes by properties of their lines and angles.</b>   |  |            |
| <b>4.G.1</b> Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.  | <b>Chapter 16 Lines and Angles</b> <ul style="list-style-type: none"> <li>• 16-1 Points, Lines, Line Segments, Rays and Angles—pp. 350–351</li> <li>• 16-2 Angle Measure—pp. 352–353</li> <li>• 16-3 Measure Angles—pp. 356–357</li> <li>• 16-4 Unknown Angle Measures—pp. 358–359</li> <li>• 16-5 Parallel and Perpendicular Lines—pp. 360–361</li> </ul> |            |
| <b>4.G.2</b> Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize, and identify categories of right, acute, and obtuse triangles. | <b>Chapter 17 Polygons</b> <ul style="list-style-type: none"> <li>• 17-1 Polygons—pp. 370–371</li> <li>• 17-2 Quadrilaterals—pp. 372–373</li> <li>• 17-3 Triangles—pp. 374–375</li> </ul>  |            |
| <b>4.G.3</b> Recognize and draw lines of symmetry for two-dimensional figures.   | <b>Chapter 17 Polygons</b> <ul style="list-style-type: none"> <li>• 17-4 Symmetry—pp. 376–377</li> </ul>   |            |