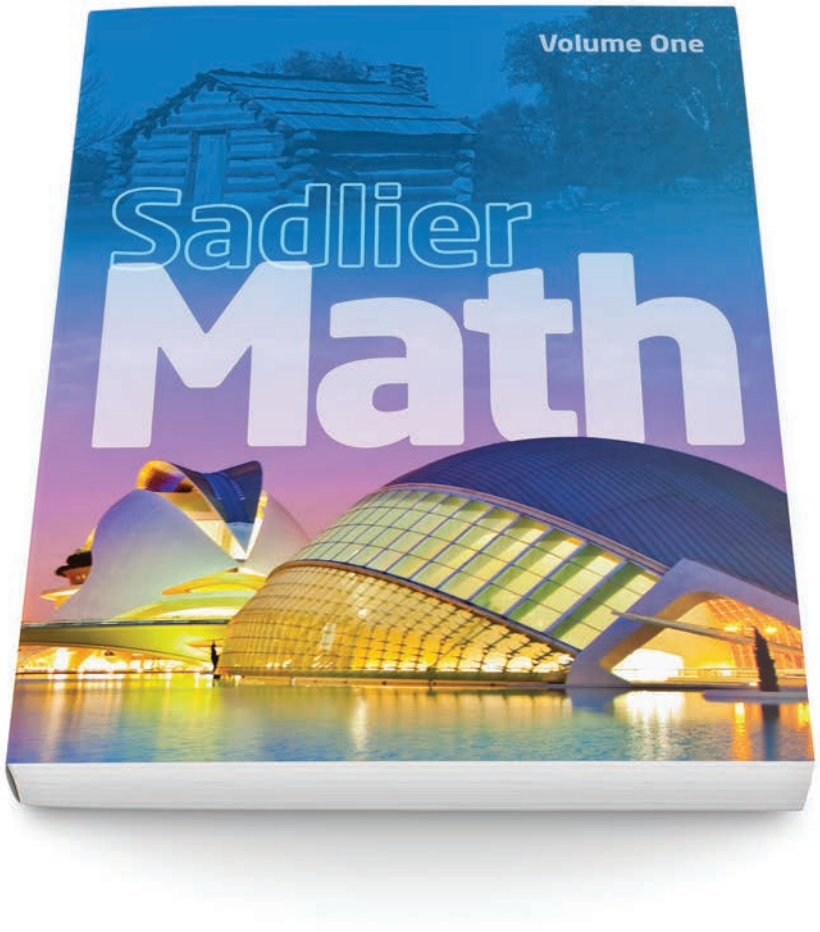
Sadlier Math™

Correlation to the Archdiocese of Louisville Mathematics Standards 2019

Grade 2



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OPERATIONS AND ALGEBRAIC THINKING (OA)

Grade 2 Content Standards	*Sadlier Math*, Grade 2
OCS.Math.2.1 Represent and solve problems involving addition and subtraction.	
***OCS.Math.2.1a** Add and subtract numbers up to 100 to solve one and two step word problems	**Chapter 1 Addition Within 20** • 1-1 Addition Concepts—pp. 3–6 • 1-2 Put Together—pp. 7–10 • 1-7 Three Addends—pp. 29–32 • 1-9 Solve for Unknown Addends—pp. 39–42 **Chapter 2 Subtraction Within 20** • 2-1 Subtraction Concepts—pp. 53–56 • 2-2 Take Apart—pp. 57–60 • 2-3 Subtract to Compare—pp. 61–64 • 2-10 Solve for Unknowns—pp. 91–94 • 2-12 Problem Solving: Work Backward—pp. 99–104 **Chapter 4 Addition: Two-Digit Numbers** • 4-8 Three Addends—pp. 175–178 • 4-9 Four Addends—pp. 179–182
***OCS.Math.2.1b** Use drawings and equations with a symbol for the unknown number to solve one and two step word problems.	**Chapter 1 Addition Within 20** • 1-1 Addition Concepts—pp. 3–6 • 1-2 Put Together—pp. 7–10 • 1-7 Three Addends—pp. 29–32 • 1-9 Solve for Unknown Addends—pp. 39–42 **Chapter 2 Subtraction Within 20** • 2-1 Subtraction Concepts—pp. 53–56 • 2-2 Take Apart—pp. 57–60 • 2-3 Subtract to Compare—pp. 61–64 • 2-10 Solve for Unknowns—pp. 91–94 • 2-12 Problem Solving: Work Backward—pp. 99–104 **Chapter 4 Addition: Two-Digit Numbers** • 4-8 Three Addends—pp. 175–178 • 4-9 Four Addends—pp. 179–182
OCS.Math.2.2 Add and subtract within 20.	
***OCS.Math.2.2a** Fluently add numbers up to the sum of 20 using mental strategies	**Chapter 1 Addition Within 20** • 1-3 Related Addition Facts—pp. 11–14 • 1-4 Count On to Add—pp. 15–18 • 1-5 Doubles and Near Doubles—pp. 19–22 • 1-6 Make 10 to Add—pp. 23–26 • 1-7 Three Addends—pp. 29–32 • 1-8 Problem Solving: The Four-Step Process—pp. 33–38 • 1-9 Solve for Unknown Addends—pp. 39–42 • 1-10 Patterns in Addition—pp. 43–46

*Essential Standard

OPERATIONS AND ALGEBRAIC THINKING (OA)

Grade 2 Content Standards	*Sadlier Math*, Grade 2
***OCS.Math.2.2b** Fluently subtract using numbers 0-20 with mental strategies	**Chapter 2 Subtraction Within 20** • 2-2 Take Apart—pp. 57–60 • 2-4 Count On to Subtract—pp. 65–68 • 2-5 Related Subtraction Facts—pp. 69–72 • 2-6 Relate Addition and Subtraction—pp. 73–76 • 2-7 Fact Families—pp. 77–80 • 2-8 Think Addition to Subtract—pp. 83–86 • 2-9 Use Addition to Check—pp. 87–90 • 2-10 Solve for Unknowns—pp. 91–94 • 2-11 Make 10 to Subtract—pp. 95–98 • 2-12 Problem Solving: Work Backward—pp. 99–104
OCS.Math.2.3 Work with equal groups of objects to gain foundations for multiplication.	
OCS.Math.2.3a Determine whether a group of 20 or fewer objects has an odd or even number of members	**Chapter 10 Foundations for Multiplication** • 10-1 Odd and Even Numbers—pp. 429–432
OCS.Math.2.3b Write an equation to express an even number as a sum of two equal addends	**Chapter 10 Foundations for Multiplication** • 10-2 Represent Even Numbers—pp. 433–436
OCS.Math.2.3c Add objects arranged in a rectangular array with up to 5 rows and 5 columns	**Chapter 10 Foundations for Multiplication** • 10-3 Arrays: Repeated Addition—pp. 439–442 • 10-4 Arrays: Show the Same Number—pp. 443–446 • 10-5 Problem Solving: Draw a Picture—pp. 447–452
OCS.Math.2.3d Represent repeated addition by writing an addition equation to express the total of a rectangular array with up to 5 rows and 5 columns as a sum of equal addends	**Chapter 10 Foundations for Multiplication** • 10-3 Arrays: Repeated Addition—pp. 439–442 • 10-4 Arrays: Show the Same Number—pp. 443–446 • 10-5 Problem Solving: Draw a Picture—pp. 447–452

NUMBER AND OPERATIONS IN BASE TEN (NBT)

Grade 2 Content Standards	*Sadlier Math*, Grade 2
OCS.Math.2.4 Understand place value.	
***OCS.Math.2.4a** Explain that the three digits of a three-digit number represent amounts of hundreds, tens and ones and model with base ten blocks and/or other representations	**Chapter 7 Place Value to 1000** • 7-1 Hundreds—pp. 299-302

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NUMBER AND OPERATIONS IN BASE TEN (NBT)

Grade 2 Content Standards	*Sadlier Math*, Grade 2
***OCS.Math.2.4b** Count forwards and backwards within 1000; skip-count by twos, fives, tens and hundreds from a given number	**Chapter 3 Place Value to 100** • 3-5 Counting Patterns by 2s, 5s, and 10s—pp. 129-132 **Chapter 7 Place Value to 1000** • 7-5 Skip Count Within 1000—pp. 317-320
OCS.Math.2.4c Read and write numbers up to 1000 using base-ten numerals, number names, and expanded form	**Chapter 3 Place Value to 100** • 3-1 Tens and Ones—pp. 111-114 • 3-2 Expanded Form—pp. 115-118 **Chapter 7 Place Value to 1000** • 7-2 Hundreds, Tens and Ones—pp. 307-310 • 7-3 Place Value in Three-Digit Numbers—pp. 307-310 • 7-4 Expanded Form with Hundreds, Tens, and Ones—pp. 311-314
OCS.Math.2.4d Round numbers up to 1000 to the nearest ten and hundred	*See also Grade 3* **Chapter 1 Number Sense** • 1-4 Round Numbers to the Nearest Ten—pp. 10–11 • 1-5 Round Numbers to the Nearest Hundred—pp. 12–13
***OCS.Math.2.4e** Order numbers within the range of 0-1000	**Chapter 3 Place Value to 100** • 3-4 Order Numbers Within 100—pp. 125–128 **Chapter 7 Place Value to 1000t** • 7-7 Order Numbers Within 1000—pp. 325–328
***OCS.Math.2.4f** Compare two three-digit numbers based on meanings of the hundreds, tens and ones digits, using >, =, and < symbols to record the results of comparisons	**Chapter 7 Place Value to 1000** • 7-6 Compare Numbers Within 1000—pp. 321-324 • 7-7 Order Numbers within 1000—pp. 325-328 *See also readiness* **Chapter 3 Place Value to 100** • 3-3 Compare Numbers—pp. 119–122

OCS.Math.2.5 Use place value understanding and properties of operations to add and subtract.

***OCS.Math.2.5a** Add 2 two-digit numbers using strategies based on place value	**Chapter 4 Addition: Two-Digit Numbers** • 4-1 Use Models: Add Tens and Ones—pp. 145–148 • 4-2 Add Tens and Ones—pp. 149–152 • 4-3 Regroup Ones as Tens—pp. 155–158 • 4-4 Use Models: Two-Digit Addition with Regrouping—pp. 159–162 • 4-5 Two-Digit Addition with Regrouping—pp. 163–166 • 4-6 Rewrite Two-Digit Addition—pp. 167–170 • 4-7 Break Apart to Add—pp. 171–174 • 4-8 Three Addends—pp. 175–178 • 4-9 Four Addends—pp. 179–182 • 4-10 Problem Solving: Find Needed Information—pp. 183–188

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NUMBER AND OPERATIONS IN BASE TEN (NBT)

Grade 2 Content Standards	*Sadlier Math*, Grade 2
***OCS.Math.2.5b** Subtract 2 two-digit numbers using strategies based on place value	**Chapter 5 Subtractions: Two-Digit Numbers** • 5-1 Use Models: Subtract Tens and Ones—pp. 195–198 • 5-2 Subtract Tens and Ones—pp. 199–202 • 5-3 Regroup Tens as Ones—pp. 205–208 • 5-4 Use Models: Two-Digit Subtraction with Regrouping—pp. 209–212 • 5-5 Two-Digit Subtraction with Regrouping—pp. 213–216 • 5-6 Rewrite Two-Digit Subtraction—pp. 217–220 • 5-7 Break Apart to Subtract—pp. 221–224 • 5-8 Add to Check—pp. 225–228 • 5-9 Problem Solving: Write and Solve an Equation—pp. 229–234
OCS.Math.2.5c Add up to four two-digit numbers	**Chapter 4 Addition: Two-Digit Numbers** • 4-8 Three Addends—pp. 175–178 • 4-9 Four Addends—pp. 179–182
OCS.Math.2.5d Add 2 three-digit numbers using strategies based on place value	**Chapter 8 Addition: Three-Digit Numbers** • 8-2 Add Hundreds, Tens, and Ones—pp. 345–348 • 8-3 Add: Regroup Ones as Tens—pp. 349–352 • 8-4 Regroup Tens as Hundreds Using Models—pp. 353–356 • 8-5 Add: Regroup Tens as Hundreds—pp. 357–360 • 8-6 Add: Regroup Twice—pp. 363–366
OCS.Math.2.5e Subtract 2 three-digit numbers using strategies based on place value	**Chapter 9 Subtraction: Three-Digit Numbers** • 9-2 Subtract Hundreds, Tens, and Ones—pp. 387–390 • 9-3 Subtract: Regroup Tens as Ones—pp. 391–394 • 9-4 Regroup Hundreds as Tens Using Models—pp. 395–398 • 9-5 Subtract: Regroup Hundreds as Tens—pp. 399–402 • 9-6 Subtract: Regroup Twice—pp. 405–408 • 9-7 Subtract: Regroup with Zeros—pp. 409–412
***OCS.Math.2.5f** Add 10 or 100 to a given number between 100-900 using mental strategies	**Chapter 8 Addition: Three-Digit Numbers** • 8-1 Mental Math: Add 1, 10, or 100—pp. 341–344
***OCS.Math.2.5g** Subtract 10 or 100 from a given number between 100-900 using mental strategies	**Chapter 9 Subtraction: Three-Digit Numbers** • 9-1 Mental Math: Subtract 1, 10, or 100—pp. 383–386
***OCS.Math.2.5h** Explain the process of adding and subtracting numbers up to 1000	**Chapter 4 Addition: Two-Digit Numbers** • 4-1 Use Models: Add Tens and Ones—pp. 145–148 • 4-2 Add Tens and Ones—pp. 149–152 • 4-3 Regroup Ones as Tens—pp. 155–158 • 4-4 Use Models: Two-Digit Addition with Regrouping—pp. 159–162 • 4-7 Break Apart to Add—pp. 171–174 **Chapter 5 Subtractions: Two-Digit Numbers** • 5-1 Use Models: Subtract Tens and Ones—pp. 195–198 • 5-2 Subtract Tens and Ones—pp. 199–202 *continued*

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NUMBER AND OPERATIONS IN BASE TEN (NBT)

Grade 2 Content Standards	*Sadlier Math*, Grade 2
	• 5-3 Regroup Tens as Ones—pp. 205–208 • 5-4 Use Models: Two-Digit Subtraction with Regrouping—pp. 209–212 • 5-7 Break Apart to Subtract—pp. 221–224 **Chapter 8 Addition: Three-Digit Numbers** • 8-2 Add Hundreds, Tens and Ones—pp. 345–348 • 8-3 Add: Regroup Ones as Tens—pp. 349–352 • 8-4 Regroup Tens as Hundreds Using Models—pp. 353–356 • 8-5 Add: Regroup Tens as Hundreds—pp. 357–360 • 8-6 Add: Regroup Twice—pp. 363–366 • 8-7 Problem Solving: Make an Organized List—pp. 367–372 • 8-8 Use Properties to Add—pp. 373–376 **Chapter 9 Subtraction: Three-Digit Numbers** • 9-2 Subtract Hundreds, Tens and Ones—pp. 387–390 • 9-3 Subtract: Regroup Tens as Ones—pp. 391–394 • 9-4 Regroup Hundreds as Tens Using Models—pp. 395–398 • 9-5 Subtract: Regroup Hundreds as Tens—pp. 399–402 • 9-6 Subtract: Regroup Twice—pp. 405–408 • 9-7 Subtract: Regroup with Zeros—pp. 409–412 • 9-8 Problem Solving: More Than One Way—pp. 413–418 • 9-9 Use Addition to Check Subtraction: Three-Digit Numbers—pp. 419–422

MEASUREMENT AND DATA (MD)

Grade 2 Content Standards	*Sadlier Math*, Grade 2
OCS.Math.2.6 Apply appropriate techniques, tools, and formulas to determine measurement.	
OCS.Math.2.6a Use repetition of the same standard unit to measure something larger than the unit	**Chapter 6 Measurement** • 6-1 Inches—pp. 241–244 • 6-2 Feet and Yards—pp. 245–248 • 6-4 Centimeters—pp. 253–256 • 6-5 Meters—pp. 257–260 *See also Grade 1* **Chapter 5 Measurement: Length** • 5-3 Same-Size Length Units—pp. 171–174 • 5-4 Measure Length—pp. 175–178 • 5-6 Make and Use a Ruler—pp. 187–190 • 5-7 Inches—pp. 191–194
OCS.Math.2.6b Recognize that different measuring systems will yield different numerical measurements of the same object	**Chapter 6 Measurement** • 6-7 Measure Using Different Units—pp. 267–270

*Essential Standard

MEASUREMENT AND DATA (MD)

Grade 2 Content Standards	*Sadlier Math*, Grade 2
OCS.Math.2.6c Identify real world situations where estimated measurements of attributes are appropriate	**Chapter 6 Measurement** • 6-1 Inches—pp. 241–244 • 6-2 Feet and Yards—pp. 245–248 • 6-3 Customary: Choose Tools and Units of Measure—pp. 249–252 • 6-4 Centimeters—pp. 253–256 • 6-5 Meters—pp. 257–260 • 6-6 Metric: Choose Tools and Units of Measure—pp. 261–264 • 6-7 Measure Using Different Units—pp. 267–270
OCS.Math.2.7 Measure and estimate lengths in standard units.	
OCS.Math.2.7a Measure the length of an object by selecting and using appropriate tools	**Chapter 6 Measurement** • 6-1 Inches—pp. 241–244 • 6-2 Feet and Yards—pp. 245–248 • 6-3 Customary: Choose Tools and Units of Measure—pp. 249–252 • 6-4 Centimeters—pp. 253–256 • 6-5 Meters—pp. 257–260 • 6-6 Metric: Choose Tools and Units of Measure—pp. 261–264
***OCS.Math.2.7b** Measure the length of an object twice, using two different standards of measurement	**Chapter 6 Measurement** • 6-7 Measure Using Different Units—pp. 267–270
OCS.Math.2.7c Explain how two measurements relate to the size of the unit	**Chapter 6 Measurement** • 6-7 Measure Using Different Units—pp. 267–270
***OCS.Math.2.7d** Estimate lengths using units of inches, feet, yards, centimeters and meters	**Chapter 6 Measurement** • 6-1 Inches—pp. 241–244 • 6-2 Feet and Yards—pp. 245–248 • 6-4 Centimeters—pp. 253–256 • 6-5 Meters—pp. 257–260
OCS.Math.2.7e Measure to determine how much longer one object is than another	**Chapter 6 Measurement** • 6-8 Compare Lengths—pp. 271–274 • 6-9 Add and Subtract Lengths—pp. 275–278
OCS.Math.2.8 Relate addition and subtraction to length.	
***OCS.Math.2.8a** Add and subtract within 100 to solve word problems involving lengths of the same units	**Chapter 6 Measurement** • 6-9 Add and Subtract Lengths—pp. 275–278 • 6-10 Problem Solving: More Than One Way—pp. 279–284

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MEASUREMENT AND DATA (MD)

Grade 2 Content Standards	*Sadlier Math*, Grade 2
OCS.Math.2.8b Represent whole numbers up to 100 as lengths on a number line	**Chapter 6 Measurement** • 6-11 Represent Whole Numbers on a Number Line Diagram—pp. 285–288 • 6-12 Add and Subtract on a Number Line Diagram—pp. 289–292
OCS.Math.2.9 Tell and write time.	
***OCS.Math.2.9a** Tell and write time from analog and digital clocks to the nearest five minutes	**Chapter 12 Money and Time** • 12-9 Hour and Half Hour—pp. 531–534 • 12-10 Five Minutes—pp. 535–538
***OCS.Math.2.9b** Determine whether a given time is a.m. or p.m.	**Chapter 12 Money and Time** • 12-11 A.M. and P.M.—pp. 539–542
OCS.Math.2.9c Calculate time intervals to the nearest 30 minutes on an analog and digital clock	**Chapter 12 Money and Time** • 12-12 Problem Solving: Work Backward—pp. 543–548 *See also Grade 3* **Chapter 13 Time** • 13-2 Measure Elapsed Time—pp. 278–279 • 13-3 Find Start and End Times—pp. 282–283 • 13-4 Operations with Time—pp. 284–285
OCS.Math.2.10 Work with money.	
***OCS.Math.2.10a** Create and count coin combinations for values up to one dollar	**Chapter 12 Money and Time** • 12-1 Pennies, Nickels, and Dimes—pp. 497–500 • 12-2 Quarters—pp. 501–504 • 12-3 Equal Amounts—pp. 505–508 • 12-5 Make Change—pp. 513–516 • 12-7 One Dollar—pp. 521–524
***OCS.Math.2.10b** Identify different coin combinations for the same value	**Chapter 12 Money and Time** • 12-1 Pennies, Nickels, and Dimes—pp. 497–500 • 12-2 Quarters—pp. 501–504 • 12-3 Equal Amounts—pp. 505–508 • 12-5 Make Change—pp. 513–516 • 12-7 One Dollar—pp. 521–524
***OCS.Math.2.10c** Solve word problems with adding and subtracting within 100 cents	**Chapter 12 Money and Time** • 12-6 Add and Subtract Money—pp. 517–520 • 12-12 Problem Solving: Work Backward—pp. 543–548

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MEASUREMENT AND DATA (MD)

Grade 2 Content Standards	*Sadlier Math*, Grade 2
***OCS.Math.2.10d** Use $ and ¢ symbols appropriately	**Chapter 12 Money and Time** • 12-1 Pennies, Nickels, and Dimes—pp. 497–500 • 12-2 Quarters—pp. 501–504 • 12-3 Equal Amounts—pp. 505–508 • 12-4 Compare Money—pp. 509–512 • 12-5 Make Change—pp. 513–516 • 12-6 Add and Subtract Money—pp. 517–520 • 12-7 One Dollar—pp. 521–524 • 12-8 Paper Money—pp. 525–528
OCS.Math.2.11 Understand and apply the statistics process.	
***OCS.Math.2.11a** Identify questions that can be investigated by collecting data	**Chapter 11 Data and Graphical Displays** • 11-2 Make Line Plots (measure to collect data)—pp. 463–466 • 11-3 Read Picture Graphs (surveys)—pp. 467–470 • 11-4 Make Picture Graphs (record data)—pp. 471–474 • 11-7 Problem Solving: Choose a Model (survey questions)—pp. 485–490
***OCS.Math.2.11b** Collect and record statistics (up to four categories) with bar graphs, pictographs, and tally charts	**Chapter 11 Data and Graphical Displays** • 11-2 Make Line Plots (tally chart)—pp. 463–466 • 11-4 Make Picture Graphs—pp. 471–474 • 11-6 Make Bar Graphs—pp. 481–484 • 11-7 Problem Solving: Choose a Model—pp. 485–490 *See also Grade 1* **Chapter 10 Data and Graphical Displays** • 10-2 Make Tally Charts—pp. 381–384 • 10-4 Make Picture Graphs—pp. 391–394 *See also Grade 3* **Chapter 12 Data** • 12-2 Make Picture Graphs—pp. 254–255 • 12-4 Make Bar Graphs—pp. 258–259
***OCS.Math.2.11c** Interpret statistics (up to four categories) by solving simple word problems using bar graphs, pictographs, and tally charts	**Chapter 11 Data and Graphical Displays** • 11-3 Read Picture Graphs—pp. 467–470 • 11-5 Read Bar Graphs—pp. 477–480 • 11-7 Problem Solving: Choose a Model—pp. 485–490 *See also Grade 1* **Chapter 10 Data and Graphical Displays** • 10-1 Read Tally Charts—pp. 377–380 • 10-3 Read Picture Graphs—pp. 387–390 *See also Grade 3* **Chapter 12 Data** • 12-1 Read Picture Graphs—pp. 252–253 • 12-3 Read Bar Graphs—pp. 256–257

*Essential Standard

MEASUREMENT AND DATA (MD)

Grade 2 Content Standards	*Sadlier Math*, Grade 2
OCS.Math.2.11d Interpret statistics to predict probability	N/A
OCS.Math.2.11e Describe the likelihood of an event using mathematical language (impossible, unlikely, less likely, equally likely, more likely, certain, etc.)	N/A
OCS.Math.2.11f Compare the likelihood of events using mathematical language	N/A

GEOMETRY (G)

Grade 2 Content Standards	*Sadlier Math*, Grade 2
OCS.Math.2.12 Reason with shapes and their attributes.	
OCS.Math.2.12a Recognize and draw shapes having specified attributes, such as a given number of angles or sides	**Chapter 13 Geometry** • 13-1 Identify Two-Dimensional Shapes—pp. 555–558 • 13-2 Draw Two-Dimensional Shapes—pp. 559–562 • 13-3 Identify Three-Dimensional Shapes—pp. 565–568 • 13-4 Faces, Edges and Vertices—pp. 569–572
***OCS.Math.2.12b** Identify the number of sides and angles in two-dimensional shapes (quadrilaterals, triangles, pentagons, and hexagons)	**Chapter 13 Geometry** • 13-1 Identify Two-Dimensional Shapes—pp. 555–558 • 13-2 Draw Two-Dimensional Shapes—pp. 559–562
***OCS.Math.2.12c** Identify the number of vertices, faces and edges of three-dimensional shapes (cubes, rectangular prisms, cones, cylinders, pyramids and spheres)	**Chapter 13 Geometry** • 13-3 Identify Three-Dimensional Shapes—pp. 565–568 • 13-4 Faces, Edges and Vertices—pp. 569–572
OCS.Math.2.12d Partition a rectangle into rows and columns of same-size squares and count to find the total number of them	**Chapter 14 Equal Shares** • 14-1 Partition Rectangles into Rows and Columns—pp. 585–588
***OCS.Math.2.12e** Partition circles and rectangles into halves, thirds, fourths, and eighths	**Chapter 14 Equal Shares** • 14-2 Halves—pp. 589–592 • 14-3 Thirds—pp. 595–598 • 14-4 Fourths—pp. 599–602
OCS.Math.2.12f Recognize that equal shares of identical wholes need not have the same shape	**Chapter 14 Equal Shares** • 14-2 Halves—pp. 589–592 • 14-3 Thirds—pp. 595–598 • 14-4 Fourths—pp. 599–602

*Essential Standard

GEOMETRY (G)

Grade 2 Content Standards	*Sadlier Math*, Grade 2
***OCS.Math.2.12g** Identify symmetry and congruence of two-dimensional shapes	*See Grade 4* **Chapter 17 Polygons** • 17-4 Symmetry—pp. 376–377 **No congruence of two-dimensional shapes.*