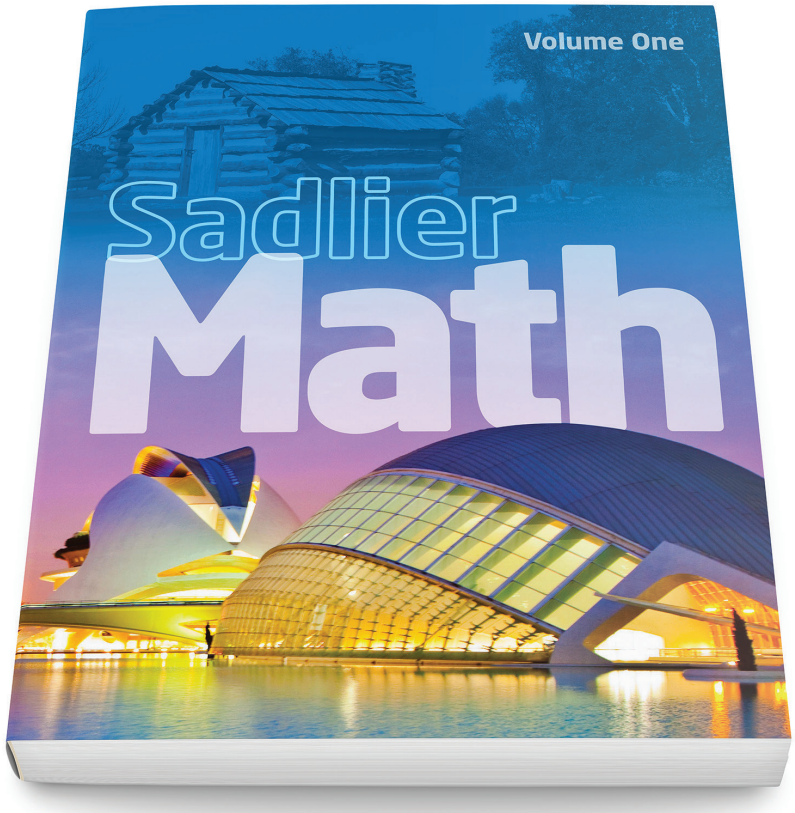
Sadlier Math™

Correlation to the Indiana Academic Standards for Mathematics

Grade 2



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THE NUMBER SYSTEM

Grade 2 Content Standards	*Sadlier Math*, Grade 2
MA.2.NS.1 Count by ones, twos, fives, tens, and hundreds up to at least 1,000 from any given number.	**Chapter 3: 3-5** • 3-5 Counting Patterns by 2s, 5s, and 10s—pp. 129–132 (TE Develop Concepts: Using Patterns to Count) **Chapter 7: 7-5** • 7-5 Skip Count Within 1000—pp. 317–320 (Skip count by 5s, 10s, and 100s within 1000; TE Develop Concepts: Patterns in Skip Counting)
MA.2.NS.2 Read and write whole numbers up to 1,000. Use words, models, standard form and expanded form to represent and show equivalent forms of whole numbers up to 1,000.	**Chapter 3: 3-1 & 3-2** • 3-1 Tens and Ones—pp. 111–114 • 3-2 Expanded Form—pp. 115–118 **Chapter 7: 7-2 through 7-4** • 7-2 Hundreds, Tens, and Ones—pp. 303–306 • 7-3 Place Value in Three-Digit Numbers—pp. 307–310 • 7-4 Expanded Form with Hundreds, Tens, and Ones—pp. 311–314
MA.2.NS.3 Plot and compare whole numbers up to 1,000 on a number line.	**Chapter 6: 6-11 & 6-12** • 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 See also **Chapter 3: 3-4** • 3-4 Order Numbers Within 100—pp. 125–128 (Order numbers within 100; TE Develop Concepts: What Is Counting Order?) **Chapter 7: 7-5 through 7-7** • 7-5 Skip Count Within 1000—pp. 317–320 (Number line) • 7-6 Compare Numbers Within 1000—pp. 321–324 (Compare numbers within 1000; TE Develop Concepts: Comparing Numbers) • 7-7 Order Numbers Within 1000—pp. 325–328 (Compare/order numbers within 1000; TE Develop Concepts: Ordering Numbers)
MA.2.NS.4 Match the ordinal numbers first, second, third, etc., with an ordered set up to 30 items.	See Kindergarten **Chapter 3: 3-7** • 3-7 Ordinals: First to Fifth—pp. 101–104 **Chapter 5: 5-7** • 5-7 Ordinals: First to Tenth—pp. 173–176
MA.2.NS.5 Determine whether a group of objects (up to 20) has an odd or even number of members (e.g., by placing that number of objects in two groups of the same size and recognizing that for even numbers no object will be left over and for odd numbers one object will be left over, or by pairing objects or counting them by 2s).	**Chapter 10: 10-1 & 10-2** • 10-1 Odd and Even Numbers—pp. 429–432 • 10-2 Represent Even Numbers—pp. 433–436

THE NUMBER SYSTEM

Grade 2 Content Standards	*Sadlier Math*, Grade 2
MA.2.NS.6 Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones (e.g., 706 equals 7 hundreds, 0 tens, and 6 ones). Understand that 100 can be thought of as a group of ten tens — called a "hundred." Understand that the numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).	**Chapter 7: 7-1** • 7-1 Hundreds—pp. 299–302
MA.2.NS.7 Use place value understanding to 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: 7-6 & 7-7** • 7-6 Compare Numbers Within 1000—pp. 321–324 • 7-7 Order Numbers Within 1000—pp. 325–328

COMPUTATION AND ALGEBRAIC THINKING

Grade 2 Content Standards	*Sadlier Math*, Grade 2
MA.2.CA.1 Add and subtract fluently within 100.	**Chapter 1: 1-3 through 1-10** • 1-1 Addition Concepts—pp. 3–6 • 1-2 Put Together—pp. 7–10 • 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: Make and Use a Plan—pp. 33–38 • 1-9 Solve for Unknown Addends—pp. 39–42 • 1-10 Patterns in Addition—pp. 43–46 **Chapter 2: 2-2, 2-4 through 2-12** • 2-1 Subtraction Concepts—pp. 53–56 • 2-2 Take Apart—pp. 57–60 • 2-3 Subtract to Compare—pp. 61–64 • 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 *continued*

COMPUTATION AND ALGEBRAIC THINKING

Grade 2 Content Standards	*Sadlier Math*, Grade 2
	• 2-11 Make 10 to Subtract—pp. 95–98 • 2-12 Problem Solving: Work Backward—pp. 99–104 **Chapter 4: 4-1 through 4-10** • 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: Read and Understand—pp. 183–188 **Chapter 5: 5-1 through 5-9** • 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
MA.2.CA.2 Solve real-world problems involving addition and subtraction within 100 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using drawings and equations with a symbol for the unknown number to represent the problem). Use estimation to decide whether answers are reasonable in addition problems.	**Chapter 1: 1-1, 1-2, 1-7 & 1-9** • 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: 2-1 through 2-3, 2-10 & 2-12** • 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. 99–10 **Chapter 4: 4-8 & 4-9** • 4-8 Three Addends—pp. 175–178 • 4-9 Four Addends—pp. 179–182
MA.2.CA.3 Solve real-world problems involving addition and subtraction within 100 in situations involving lengths that are given in the same units (e.g., by using drawings, such as drawings of rulers, and equations with a symbol for the unknown number to represent the problem).	**Chapter 6: 6-9 & 6-10** • 6-9 Add and Subtract Lengths—pp. 275–278 • 6-10 Problem Solving: Choose a Strategy—pp. 279–284

COMPUTATION AND ALGEBRAIC THINKING

Grade 2 Content Standards	*Sadlier Math*, Grade 2
MA.2.CA.4 Add and subtract within 1000, using models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; describe the strategy and explain the reasoning used. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones, and that sometimes it is necessary to compose or decompose tens or hundreds.	**Chapter 1: 1-1 through 1-10** • 1-1 Addition Concepts—pp. 3–6 • 1-2 Put Together—pp. 7–10 • 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: Make and Use a Plan—pp. 33–38 • 1-9 Solve for Unknown Addends—pp. 39–42 • 1-10 Patterns in Addition—pp. 43–46 **Chapter 2: 2-2 through 2-11** • 2-2 Take Apart—pp. 57–60 • 2-3 Subtract to Compare—pp. 61–64 • 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. 95–9 **Chapter 4: 4-1 through 4-10** • 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: Read and Understand—pp. 183–18 **Chapter 5: 5-1 through 5-8** • 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 **Chapter 7: 7-8** • 7-8 Problem Solving: Use a Table—pp. 329–334 **Chapter 8: 8-1 through 8-8** • 8-1 Mental Math: Add 1, 10, or 100—pp. 341–344 • 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 *continued*

COMPUTATION AND ALGEBRAIC THINKING

Grade 2 Content Standards	*Sadlier Math*, Grade 2
	• 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: 9-1 through 9-9** • 9-1 Mental Math: Subtract 1, 10, or 100—pp. 383–386 • 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: Represent the Situation—pp. 413–418 • 9-9 Use Addition to Check Subtraction: Three-Digit Numbers—pp. 419–422
MA.2.CA.5 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal groups.	**Chapter 10: 10-3 through 10-5** • 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
MA.2.CA.6 Show that the order in which two numbers are added (commutative property) and how the numbers are grouped in addition (associative property) will not change the sum. These properties can be used to show that numbers can be added in any order.	**Chapter 1: 1-8** • 1-7 Three Addends—pp. 29–32 (Commutative Property) • 1-8 Problem Solving: Make and Use a Plan—pp. 33–38 (Associative Property) **Chapter 4: 4-7 & 4-8** • 4-7 Break Apart to Add—pp. 171–174 (Associative Property, Commutative Property) • 4-8 Three Addends (Commutative Property)—pp. 175–178 **Chapter 5: 5-7** • 5-7 Break Apart to Subtract—pp. 221–224 **Chapter 8: 8-2 through 8-8** • 8-8 Use Properties to Add—pp. 373–376 (Use strategies based on properties of operations to add three-digit numbers)
MA.2.CA.7 Create, extend, and give an appropriate rule for number patterns using addition and subtraction within 1000.	**Chapter 1: 1-10** • 1-10 Patterns in Addition—pp. 43–46 (Complete and explain patterns found in addition sentences; TE Develop Concepts: Look for Patterns) **Chapter 3: 3-5** • 3-5 Counting Patterns by 2s, 5s, and 10s—pp. 129–132 (Count by 2s, 5s, and 10s; TE Develop Concepts: Using Patterns to Count) **Chapter 4: 4-1** • 4-1 Use Models: Add Tens and Ones—pp. 145–148 (TE Early Finishers: discuss addition patterns; write the next addition) **Chapter 7: 7-5** • 7-5 Skip Count Within 1000—pp. 317–320 (Skip count by 5s, 10s, and 100s within 1000; TE Develop Concepts: Patterns in Skip Counting)

GEOMETRY

Grade 2 Content Standards	*Sadlier Math*, Grade 2
MA.2.G.1 Identify, describe, and classify two- and three-dimensional shapes (triangle, square, rectangle, cube, right rectangular prism) according to the number and shape of faces and the number of sides and/or vertices. Draw two-dimensional shapes.	**Chapter 13: 13-1 through 13-4** • 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, Vertices—pp. 569–572
MA.2.G.2 Create squares, rectangles, triangles, cubes, and right rectangular prisms using appropriate materials.	**Chapter 13: 13-2** • 13-2 Draw Two-Dimensional Shapes—pp. 559–562 (Draw triangles, quadrilaterals, pentagons, and hexagons; TE Develop Concepts: Creating Polygons)
MA.2.G.3 Investigate and predict the result of composing and decomposing two- and three-dimensional shapes.	See Grade 1 **Chapter 13: 13-3, 13-4 & 13-9** • 13-3 Compose Two-Dimensional Shapes—pp. 491–494 (Compose two-dimensional shapes using triangles, trapezoids, rhombuses, and hexagons; TE Develop Concepts: Composing Shapes) • 13-4 Compose More Two-Dimensional Shapes—pp. 495–498 (Compose two-dimensional shapes using rectangles, squares, circles, and parts of circles; TE Develop Concepts: Rectangles, Squares, and Circles) • 13-9 Compose Three-Dimensional Shapes—pp. 517–520 (Compose three-dimensional shapes using cubes, cones, cylinders, and rectangular prisms; TE Develop Concepts: Exploring New Three-Dimensional Shapes)
MA.2.G.4 Partition a rectangle into rows and columns of same-size (unit) squares and count to find the total number of same-size squares.	**Chapter 14: 14-1** • 14-1 Partition Rectangles into Rows and Columns—pp. 585–588
MA.2.G.5 Partition circles and rectangles into two, three, or four equal parts; describe the shares using the words halves, thirds, half of, a third of, etc.; and describe the whole as two halves, three thirds, four fourths. Recognize that equal parts of identical wholes need not have the same shape.	**Chapter 14: 14-2 through 14-4** • 14-2 Halves—pp. 589–592 • 14-3 Thirds—pp. 595–598 • 14-4 Fourths—pp. 599–602

MEASUREMENT

Grade 2 Content Standards	*Sadlier Math*, Grade 2
MA.2.M.1 Describe the relationships among inch, foot, and yard. Describe the relationship between centimeter and meter.	**Chapter 6: 6-1 through 6-6** • 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
MA.2.M.2 Estimate and measure the length of an object by selecting and using appropriate tools, such as rulers, yardsticks, meter sticks, and measuring tapes to the nearest inch, foot, yard, centimeter and meter.	**Chapter 6: 6-1 through 6-6, 6-8 & 6-9** • 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 • 6-8 Compare Lengths—pp. 271–274 • 6-9 Add and Subtract Lengths—pp. 275–278 **Chapter 11: 11-1 & 11-2** • 11-1 Read Line Plots—pp. 459–462 • 11-2 Make Line Plots—pp. 463–466
MA.2.M.3 Understand that the length of an object does not change regardless of the units used. Measure the length of an object twice using length units of different lengths for the two measurements. Describe how the two measurements relate to the size of the unit chosen.	**Chapter 6: 6-7** • 6-7 Measure Using Different Units—pp. 267–270
MA.2.M.4 Estimate and measure volume (capacity) using cups and pints.	See Grade 3 **Chapter 11: 11-2 & 11-3** • 11-2 Estimate and Measure Liquid Volume—pp. 234–235 (Estimate liquid volumes in the metric system; TE Develop Concepts: Use Measures of Length to Describe Objects) • 11-3 Operations with Liquid Volume—pp. 236–237 (Solve one-step problems involving liquid volumes that are given in the same units; TE Develop Concepts: Uses of Tables)
MA.2.M.5 Tell and write time to the nearest five minutes from analog clocks, using a.m. and p.m. Solve real-world problems involving addition and subtraction of time intervals on the hour or half hour.	**Chapter 12: 12-9 through 12-12** • 12-9 Hour and Half Hour—pp. 531–534 • 12-10 Five Minutes—pp. 535–538 • 12-11 a.m. and p.m.—pp. 539–542 • 12-12 Problem Solving: Work Backward—pp. 543–548

MEASUREMENT

Grade 2 Content Standards	*Sadlier Math*, Grade 2
2.M.6 Describe relationships of time, including: seconds in a minute; minutes in an hour; hours in a day; days in a week; and days, weeks, and months in a year.	**Chapter 12: 12-9** • 12-9 Hour and Half Hour—pp. 531–534 See also Kindergarten (days, weeks, months) **Chapter 17: 17-2** • 17-2 Calendar—pp. 623–626 See also Grade 4 (seconds) **Chapter 15: 15-3** • 15-3 Elapsed Time—pp. 328–329 (Solve capacity problems using customary units of measure; TE Develop Concepts: Modeling Elapsed Time)
2.M.7 Find the value of a collection of pennies, nickels, dimes, quarters and dollars.	**Chapter 12: 12-1 through 12-8** • 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

DATA ANALYSIS

Grade 2 Content Standards	*Sadlier Math*, Grade 2
2.DA.1 Draw a picture graph (with single-unit scale) and a bar graph (with single-unit scale) to represent a data set with up to four choices (What is your favorite color? red, blue, yellow, green). Solve simple put-together, take-apart, and compare problems using information presented in the graphs.	**Chapter 11: 11-3 through 11-7** • 11-3 Read Picture Graphs—pp. 467–470 • 11-4 Make Picture Graphs—pp. 471–474 • 11-5 Read Bar Graphs—pp. 477–480 • 11-6 Make Bar Graphs—pp. 481–484 • 11-7 Problem Solving: Choose a Model—pp. 485–490