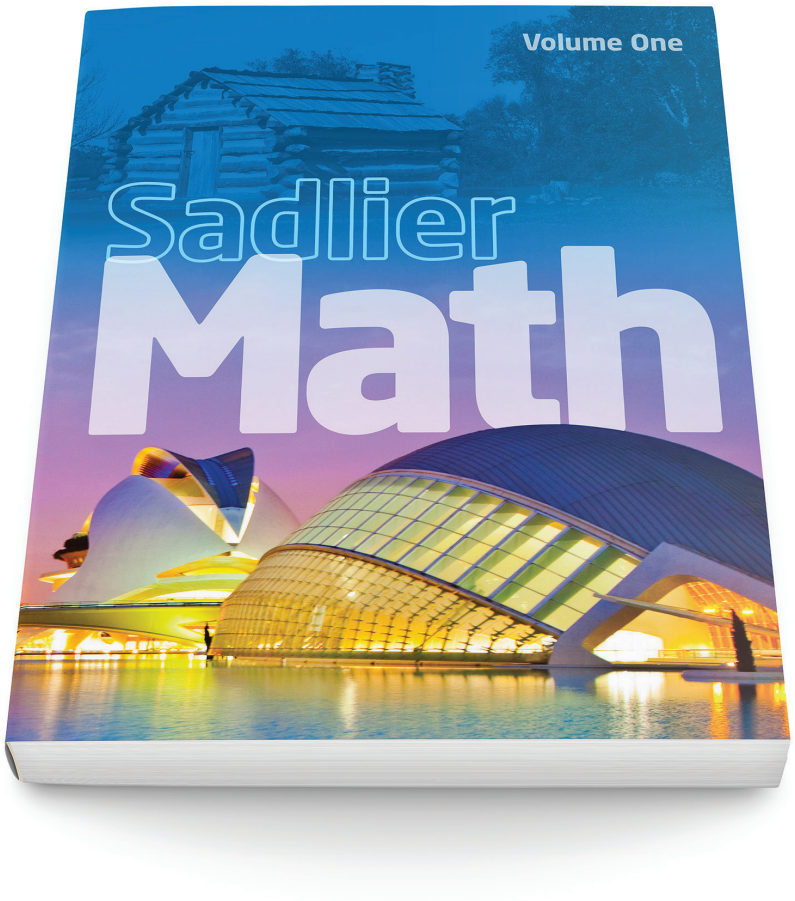
Sadlier Math™

Correlation to the Mathematics Standards for the Archdiocese of Detroit

Grade 2



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OPERATIONS AND ALGEBRAIC THINKING

Grade 2 Content Standards	*Sadlier Math*, Grade 2
Represent and solve problems involving addition and subtraction.	
2.OA.A.1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	**Chapter 1: 1-1, 1-2, 1-7 & 1-9** **Chapter 2: 2-1 through 2-3, 2-10 & 2-12** **Chapter 4: 4-8 & 4-9**
Add and subtract within 20.	
2.OA.B.2 Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.	**Chapter 1: 1-3 through 1-10** **Chapter 2: 2-2, 2-4 through 2-12**
Work with equal groups of objects to gain foundations for multiplication.	
2.OA.C.3 Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.	**Chapter 10: 10-1 & 10-2**
2.OA.C.4 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 addends.	**Chapter 10: 10-3 through 10-5**
2.OA.C.5 Understand division as another way of expressing multiplication, using fact families.	**See Grade 3** **Chapter 7: 7-1**
2.OA.C.6 Given a situation involving groups of equal size or of sharing equally, represent with objects, words, symbols; solve ...	**Chapter 14: 14-1 through 14-5**
2.OA.C.7 Develop strategies for fluently multiplying numbers up to 5x5.	**See Grade 3** **Chapter 5: 5-1, 5-2 & 5-4**

NUMBER AND OPERATIONS IN BASE TEN

Grade 2 Content Standards	*Sadlier Math*, Grade 2
Understand place value.	
2.NBT.A.1 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 the following as special cases:	
2.NBT.A.1a 100 can be thought of as a bundle of ten tens — called a "hundred."	**Chapter 7: 7-1**
2.NBT.A.1b 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**
2.NBT.A.2 Count within 1000; skip-count by 5s, 10s, and 100s.	**Chapter 3: 3-5** **Chapter 7: 7-5**
2.NBT.A.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.	**Chapter 3: 3-1 & 3-2** **Chapter 7: 7-2 through 7-4**
2.NBT.A.4 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**
2.NBT.A.5 Round numbers to hundreds place.	**See Grade 3** **Chapter 1: 1-5**
2.NBT.A.6 Count orally by 3's and 4's starting with 0, and by 2's, 5's, and 10's starting from any whole number.	**Chapter 3: 3-5**
Use place value understanding and properties of operations to add and subtract.	
2.NBT.B.7 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	**Chapter 1: 1-1 through 1-10** **Chapter 2: 2-1 through 2-12** **Chapter 4: 4-1 through 4-10** **Chapter 5: 5-1 through 5-9**

NUMBER AND OPERATIONS IN BASE TEN

Grade 2 Content Standards	*Sadlier Math*, Grade 2
2.NBT.B.8 Add up to four two-digit numbers using strategies based on place value and properties of operations.	**Chapter 4: 4-1 through 4-10**
2.NBT.B.9 Add and subtract within 1000, 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. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.	**Chapter 1: 1-1 through 1-10** **Chapter 2: 2-1 through 2-11** **Chapter 4: 4-1 through 4-9** **Chapter 5: 5-1 through 5-8** **Chapter 7: 7-8** **Chapter 8: 8-1 through 8-8** **Chapter 9: 9-1 through 9-9**
2.NBT.B.10 Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.	**Chapter 8: 8-1** **Chapter 9: 9-1**
2.NBT.B.11 Explain why addition and subtraction strategies work, using place value and the properties of operations.	**Chapter 5: 5-7** **Chapter 8: 8-2 through 8-8** **Chapter 9: 9-2 through 9-9**
2.NBT.B.12 Calculate mentally sums and differences involving: three-digit number and ones, three-digit numbers and tens; three-digit numbers and hundreds.	**Chapter 8: 8-1** **Chapter 9: 9-1**
2.NBT.B.13 Estimate the sum of two numbers with three digits.	**See Grade 3** **Chapter 2: 2-3** **Chapter 3: 3-1**
2.NBT.B.14 Find the missing values in open sentences (42 +_ = 57); use relationship between addition and subtraction.	**Chapter 1: 1-9** **Chapter 2: 2-10**

NUMBER AND OPERATIONS IN BASE TEN

Grade 2 Content Standards	*Sadlier Math*, Grade 2
Work with unit fractions.	
2.NBT.C.15 Recognize, name and represent commonly used unit fractions with denominators 12 or less.	**See Grade 3** **Chapter 9: 9-2**
2.NBT.C.16 Recognize, name and write commonly used fractions: 1/2, 1/3, 2/3 , etc.	**See Grade 3** **Chapter 9: 9-2 & 9-4**
2.NBT.C.17 Place 0 and halves on the number line; relate to a ruler.	**See Grade 3** **Chapter 9: 9-3 & 9-5** **Chapter 11: 11-1**
2.NBT.C.18 For unit fractions from 1/12 to 1/2 understand the inverse relationship between the size of a unit fractions and size of the denominator; compare unit fractions from 1/12 to 1/2.	**See Grade 3** **Chapter 9: 9-3 & 9-5**
2.NBT.C.19 Recognize that fractions such as 2/2, 3/3, 4/4 are equal to the whole (one).	**See Grade 3** **Chapter 9: 9-6**

MEASUREMENT AND DATA

Grade 2 Content Standards	*Sadlier Math*, Grade 2
Measure and estimate lengths in standard units	
2.MD.A.1 Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.	**Chapter 6: 6-1 through 6-6**
2.MD.A.2 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**

MEASUREMENT AND DATA

Grade 2 Content Standards	*Sadlier Math*, Grade 2
2.MD.A.3 Estimate lengths using units of inches, feet, centimeters, and meters.	**Chapter 6: 6-1 through 6-5**
2.MD.A.4 Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.	**Chapter 6: 6-8 & 6-9**
2.MD.A.5 Distinguish between length, width, height, and weight.	**Chapter 6: 6-1 through 6-5**
Relate addition and subtraction to length.	
2.MD.B.6 Use addition and subtraction within 100 to solve word problems 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**
2.MD.B.7 Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.	**Chapter 6: 6-11 & 6-12**
Understand the concept of area and perimeter.	
2.MD.C.8 Measure area using non-standard units to the nearest whole unit.	**See Grade 3** **Chapter 15: 15-1**
2.MD.C.9 Find the area of a rectangle with whole number side lengths by covering with unit squares and counting, or by using a grid of unit squares; write area as a product.	**See Grade 3** **Chapter 15: 15-1 & 15-2**
2.MD.C.10 Determine perimeter of rectangles and triangles by adding lengths of sides.	**See Grade 3** **Chapter 16: 16-1 through 16-5**

MEASUREMENT AND DATA

Grade 2 Content Standards	*Sadlier Math*, Grade 2
Work with time and money.	
2.MD.C.11 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	**Chapter 12: 12-9 through 12-12**
2.MD.C.12 Using both a.m. and p.m., tell time from the clock face in 1 minute intervals and from digital clocks to the minute; including reading time 9:15 as nine-fifteen and 9:50 as nine-fifty. Interpret time as both minutes after the hour and minutes before the next hour. Show times by drawing hands on clock faces.	**Chapter 12: 12-11** **See also Grade 3** **Chapter 13: 13-1**
2.MD.C.13 Use the concept of duration of time to the quarter hour.	**See Grade 3** **Chapter 13: 13-2**
2.MD.C.14 Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?.	**Chapter 12: 12-1 through 12-8**
Read thermometers.	
2.MD.D.16 Read temperature using the scale on a thermometer in degrees Fahrenheit.	**See Grade 4** **Chapter 15: 15-4**
Represent and interpret data.	
2.MD.E.17 Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.	**Chapter 11: 11-1 & 11-2**

MEASUREMENT AND DATA

Grade 2 Content Standards	*Sadlier Math*, Grade 2
2.MD.E.18 Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems[1] using information presented in a bar graph.	**Chapter 11: 11-3 through 11-7**

GEOMETRY

Grade 2 Content Standards	*Sadlier Math*, Grade 2
Reason with shapes and their attributes.	
2.G.A.1 Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.	**Chapter 13: 13-1 through 13-4**
2.G.A.2 Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.	**Chapter 14: 14-1**
2.G.A.3 Partition circles and rectangles into two, three, or four equal shares, 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 shares of identical wholes need not have the same shape.	**Chapter 14: 14-2 through 14-4**
2.G.A.4 Identify, describe and compare familiar three-dimensional shapes, such as spheres and rectangular prisms.	**Chapter 13: 13-3**
2.G.A.5 Explore and predict the results of putting together and taking apart two-dimensional and three-dimensional shapes.	**See Grade 3 Chapter 14: 14-4**

GEOMETRY

Grade 2 Content Standards	*Sadlier Math*, Grade 2
2.G.A.6 Distinguish between curves and straight lines and between curved surfaces and flat surfaces.	**Chapter 13: 13-1 & 13-3**
2.G.A.7 Classify familiar plane and solid objects.	**Chapter 13: 13-1 & 13-3**
2.G.A.8 Recognize that shapes that have been slid, turned, or flipped are the same shape.	**See Grade 6** **Chapter 9: 9-8**
Use coordinate systems.	
2.G.B.9 Find and name locations using simple coordinate systems such as maps and first quadrant grids.	**See Grade 5** **Chapter 17: 17-3**