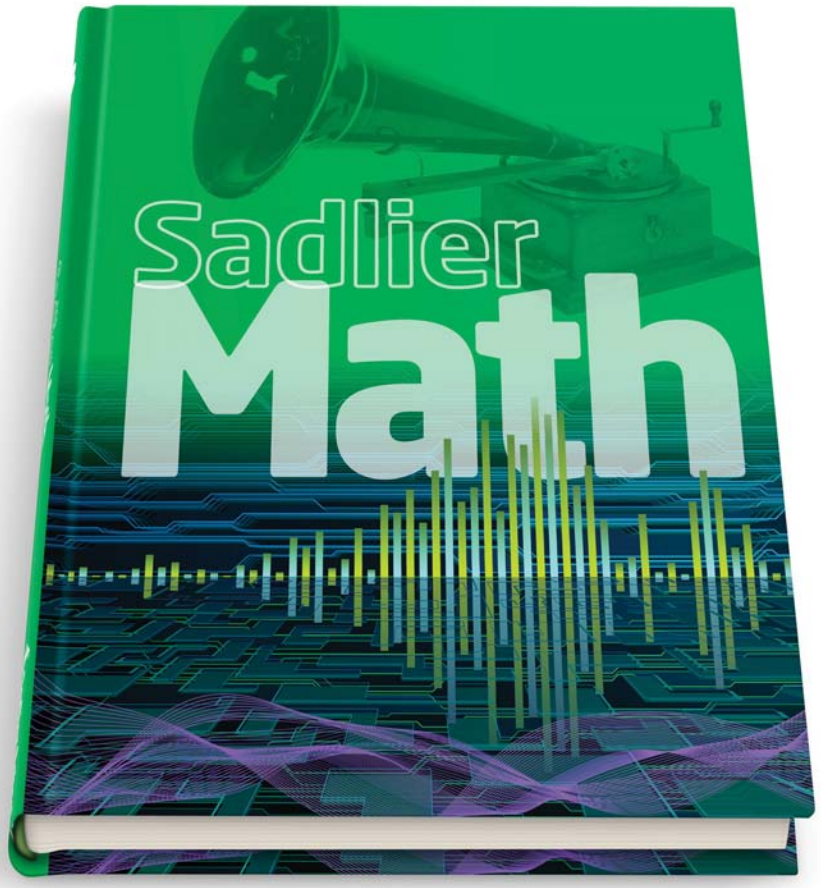
Sadlier Math™

Correlation to the Archdiocese of Newark Catholic Schools Curriculum Map for Mathematics

Grade 3



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FIRST TRIMESTER: SEPTEMBER - NOVEMBER

Grade 3 Content Standards	*Sadlier Math*, Grade 3
Place Value	
3.NBT.S1 Represent, order, and compare large numbers (to at least 10,000) using various equivalent forms (e.g., expanded notation).	**Chapter 1: 1-1 through 1-3** See also Grade 4 **Chapter 1: 1-1 through 1-3**
3.NBT.1 Use place value understanding to round whole numbers to the nearest 10 or 100.	**Chapter 1: 1-4 & 1-5**
3.OA.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. *Example: Observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.*	**Chapter 2: 2-2** **Chapter 5: 5-5 & 5-6** **Chapter 6: 6-10**
3.OA.S1 Represent and analyze patterns and functions, using words and tables (e.g., input-output tables).	See Grade 4 **Chapter 7:5**
Addition and Subtraction	
3.NBT.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.	**Chapter 1: 1-6** **Chapter 2: 2-1, 2-3 through 2-7** **Chapter 3: 3-1 through 3-6**
3.OA.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. *For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.*	**Chapter 2: 2-2** **Chapter 5: 5-5 & 5-6** **Chapter 6: 6-10**

FIRST TRIMESTER: SEPTEMBER - NOVEMBER

Grade 3 Content Standards	*Sadlier Math*, Grade 3
Money	
3.MD.S2 Determine the value of sets of coins and bills and determine if the value is enough to cover the cost of specific items	See Grade 2 **Chapter 12:1 through 12-8**
Problem Solving	
3.OA.8 Solve two-step word problems using the four operations. 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: 2-8** **Chapter 6: 6-8** **Chapter 8: 8-6**
Multiplication	
3.OA.1 Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. *Example: Describe a context in which a total number of objects can be expressed as 5 × 7.*	**Chapter 4: 4-1 through 4-3, 4-7** **Chapter 5: 5-1 through 5-4** **Chapter 6: 6-2 through 6-6** **Chapter 8: 8-7 & 8-8**
3.OA.3 Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	**Chapter 4: 4-1 through 4-7** **Chapter 5: 5-1 through 5-5, 5-7 & 5-8** **Chapter 6: 6-1 through 6-9** **Chapter 7: 7-1 through 7-6** **Chapter 8: 8-1 through 8-5, 8-8**
3.OA.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.	**Chapter 5: 5-1 through 5-7** **Chapter 6: 6-1 through 6-11** **Chapter 7: 7-1 through 7-5** **Chapter 8: 8-1 through 8-9**

FIRST TRIMESTER: SEPTEMBER - NOVEMBER

Grade 3 Content Standards	*Sadlier Math*, Grade 3
3.OA.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. *Example: Observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.*	**Chapter 2: 2-2** **Chapter 5: 5-5 & 5-6** **Chapter 6: 6-10**

SECOND TRIMESTER: DECEMBER - FEBRUARY

Grade 3 Content Standards	*Sadlier Math*, Grade 3
Multiplication / Division	
3.OA.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.	**Chapter 5: 5-1 through 5-7** **Chapter 6: 6-1 through 6-11** **Chapter 7: 7-1 through 7-5** **Chapter 8: 8-1 through 8-9**
3.OA.5 Apply properties of operations as strategies to multiply and divide. *Examples: If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15, then 15 × 2 = 30, or by 5 × 2 = 10, then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.)*	**Chapter 4: 4-4** **Chapter 5: 5-4** **Chapter 6: 6-1 through 6-9**
3.OA.4 Determine the unknown whole number in a multiplication or division equation relating three whole numbers. *Example: Determine the unknown number that makes the equation true in each of the equations 8 × ? = 48, 5 = □ ÷ 3, 6 × 6 = ?*	**Chapter 5: 5-7** **Chapter 6: 6-6 & 6-9** **Chapter 7: 7-1**

SECOND TRIMESTER: DECEMBER - FEBRUARY

Grade 3 Content Standards	*Sadlier Math*, Grade 3
3.OA.2 Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. *Example: Describe a context in which a number of shares or a number of groups can be expressed as 56 ÷ 8.*	**Chapter 4: 4-5 & 4-6** **Chapter 7: 7-2 through 7-5** **Chapter 8: 8-1 through 8-8**
Fractions	
3.NF.1 Understand a fraction 1/*b* as the quantity formed by 1 part when a whole is partitioned into *b* equal parts; understand a fraction *a*/*b* as the quantity formed by a parts of size 1/*b*.	**Chapter 9: 9-1, 9-2 & 9-4**
3.NF.2 Understand a fraction as a number on the number line; represent fractions on a number line diagram.	
a. Represent a fraction 1/*b* on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into *b* equal parts. Recognize that each part has size 1/*b* and that the endpoint of the part based at 0 locates the number 1/*b* on the number line.	**Chapter 9: 9-3**
b. Represent a fraction *a*/*b* on a number line diagram by marking off a lengths 1/*b* from 0. Recognize that the resulting interval has size *a*/*b* and that its endpoint locates the number *a*/*b* on the number line.	**Chapter 9: 9-5**
3.NF.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.	
a. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.	**Chapter 10: 10-2 & 10-3**

SECOND TRIMESTER: DECEMBER - FEBRUARY

Grade 3 Content Standards	*Sadlier Math*, Grade 3
b. Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.	**Chapter 10: 10-4 through 10-6**
Measurement	
3.MD.S1 Carry out simple unit conversions within a system of measurement (e.g., hours to minutes, cents to dollars, yards to feet or inches, meters to centimeters).	See Grade 4 **Chapter 14: 14-2 through 14-4** **Chapter 15: 15-2**
Time	
3.MD.1 Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.	**Chapter 13: 13-1 through 13-4**
Problem Solving	
3.OA.8 Solve two-step word problems using the four operations. 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: 2-8** **Chapter 6: 6-8** **Chapter 8: 8-6**

SECOND TRIMESTER: DECEMBER - FEBRUARY

Grade 3 Content Standards	*Sadlier Math*, Grade 3
3.MD.8 Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.	**Chapter 16: 16-1 through 16-6**
Data / Graphing	
3.MD.3 Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs. *Example: Draw a bar graph in which each square in the bar graph might represent 5 pets.*	**Chapter 12: 12-1 through 12-5**
Geometry	
3.G.S1 Recognize, identify and draw congruent and similar figures.	N/A
3.G.S2 Recognize lines of symmetry.	See Grade 4 **Chapter 17: 17-4** • 17-4 Symmetry—pp. 376–377 (Identify line symmetry in figures and draw lines of symmetry.)
3.G.S3 Identify transformations of shapes and objects as reflections (flips), rotations (turns), and translations (slides).	N/A

SECOND TRIMESTER: DECEMBER - FEBRUARY

Grade 3 Content Standards	*Sadlier Math*, Grade 3
3.G.1 Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.	**Chapter 14: 14-1 through 14-3**
Geometric Measurement	
3.MD.8 Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.	**Chapter 16: 16-1 through 16-6**
3.MD.5 Recognize area as an attribute of plane figures and understand concepts of area measurement.	
a. A square with side length 1 unit, called "a unit square," is said to have "one square unit" of area, and can be used to measure area.	**Chapter 15: 15-1**
b. A plane figure which can be covered without gaps or overlaps by *n* unit squares is said to have an area of *n* square units.	**Chapter 15: 15-1**
3.MD.6 Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).	**Chapter 15: 15-1 through 15-3**

SECOND TRIMESTER: DECEMBER - FEBRUARY

Grade 3 Content Standards	*Sadlier Math*, Grade 3
3.MD.7 Relate area to the operations of multiplication and addition.	
a. Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths.	**Chapter 15: 15-3**
b. Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.	**Chapter 15: 15-3**

THIRD TRIMESTER: MARCH - JUNE

Grade 3 Content Standards	*Sadlier Math*, Grade 3
Multiplication	
3.OA.5 Apply properties of operations as strategies to multiply and divide. *Examples: If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15, then 15 × 2 = 30, or by 5 × 2 = 10, then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.)*	**Chapter 4: 4-4** **Chapter 5: 5-4** **Chapter 6: 6-1 through 6-9**
3.NBT.3 Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9 × 80, 5 × 60) using strategies based on place value and properties of operations.	**Chapter 6: 6-11**

THIRD TRIMESTER: MARCH - JUNE

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Division	
3.OA.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.	**Chapter 5: 5-1 through 5-7** **Chapter 6: 6-1 through 6-11** **Chapter 7: 7-1 through 7-5** **Chapter 8: 8-1 through 8-9**
Probability / Statistics	
3.MD.S3 Represent the possible outcomes for a simple probability situation (e.g., the probability of drawing a red marble from a bag containing three red marbles and four green marbles).	N/A
3.MD.S4 Classify outcomes as certain, likely, unlikely, or impossible by designing and conducting experiments using concrete objects such as counters, number cubes, spinners, or coins.	N/A
Fractions / Decimals	
3.NF.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.	
c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. *Examples: Express 3 in the form 3 = 3/1; recognize that 6/1 = 6; locate 4/4 and 1 at the same point of a number line diagram.*	**Chapter 9: 9-6** **Chapter 10: 10-1**

THIRD TRIMESTER: MARCH - JUNE

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Problem Solving	
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