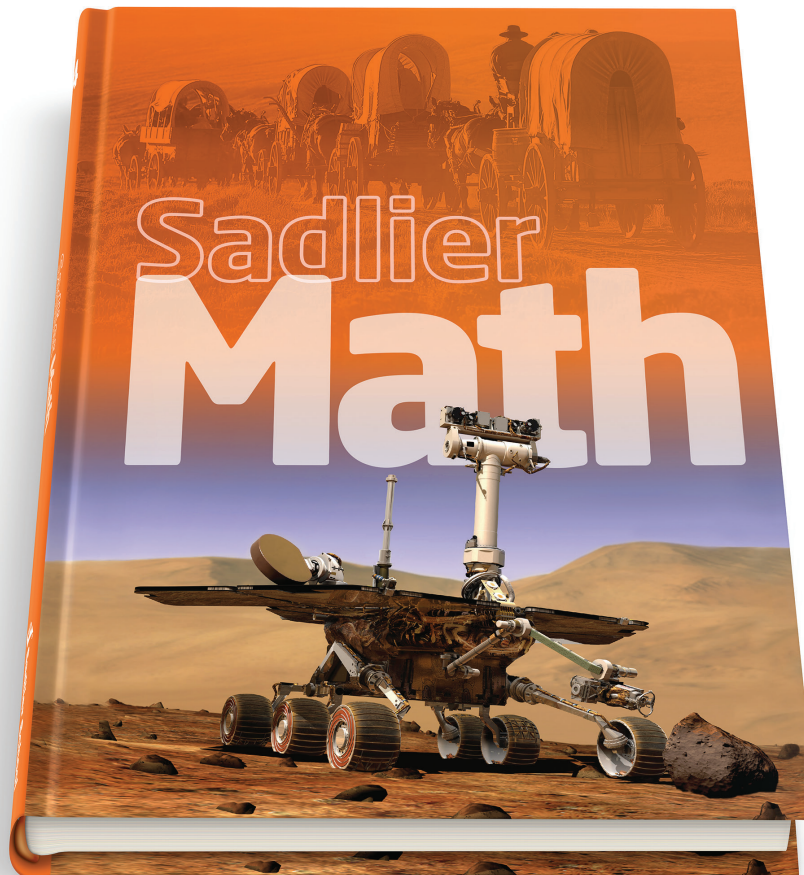


Sadlier Math™

Correlation to the Archdiocese of Cincinnati
Graded Course of Study for Mathematics 2012

Grade 4



Learn more at www.SadlierSchool.com/SadlierMath

STANDARD 1 – BASIC FACTS AND ALGEBRAIC THINKING

Grade 4 Content Standards	Sadlier Math, Grade 4
M.4.1.1 Use and describe various models for multiplication in problem-solving situations and demonstrate recall of basic multiplication and related division facts with ease.	Chapter 4: 4-1 through 4-3, 4-5 & 4-6
M.4.1.2 Generate algebraic rules and use all four operations to describe patterns including non-numeric growing or repeating patterns.	Chapter 6: 6-5 Chapter 7: 7-1 & 7-5 Chapter 13: 13-8 Chapter 17: 17-5
M.4.1.3 Describe mathematics relationships using expressions, equations and visual representations.	Chapter 3: 3-6 & 3-7 Chapter 4: 4-2 Chapter 5: 5-3 Chapter 6: 6-1 & 6-6 Chapter 7: 7-4 Chapter 8: 8-8 Chapter 10: 10-3 Chapter 11: 11-1 & 11-4 Chapter 12: 12-2 & 12-4
M.4.1.4 Recognize and write algebraic expressions for functions with two operations.	Chapter 2: 2-1 Chapter 7: 7-5
M.4.1.5 Use and represent numbers through millions in various contexts including estimation of relative sizes of amounts of distances.	Chapter 1: 1-1 through 1-3, 1-5 See Grade 2 Chapter 6: 6-1, 6-2, 6-4 & 6-5 (estimate lengths)
M.4.1.6 Estimate and describe reasonable estimates; determine an appropriate estimate versus an exact answer.	Chapter 1: 1-5 (round when exact answer is not necessary) Chapter 2: 2-3 Chapter 3: 3-1 Chapter 4: 4-4 Chapter 7: 7-3

STANDARD 1 – BASIC FACTS AND ALGEBRAIC THINKING

Grade 4 Content Standards	<i>Sadlier Math, Grade 4</i>
<p>M.4.1.7 Solve multi-step word problems with whole numbers and having whole number answers using the four operations including problems in which remainders must be interpreted as word problems.</p>	<p>Chapter 3: 3-6 & 3-7 Chapter 4: 4-6 Chapter 5: 5-5 & 5-6 Chapter 6: 6-4 Chapter 7: 7-6 Chapter 8: 8-7</p>

STANDARD 3 – FRACTIONS AND DECIMALS

Grade 4 Content Standards	<i>Sadlier Math, Grade 4</i>
<p>M.4.3.1 Compare, order and estimate fraction and decimal amounts in real-world problems.</p>	<p>Chapter 10: 10-7 through 10-11 Chapter 13: 13-6 & 13-7</p>
<p>M.4.3.2 Generate and explain why a fraction is equivalent to another fraction by using visual models and simplify fractions.</p>	<p>Chapter 10: 10-2 through 10-5</p>
<p>M.4.3.3 Determine factors and multiples for a whole number in the range of 1-100.</p>	<p>Chapter 9: 9-1 through 9-5</p>
<p>M.4.3.4 Use decimals through the thousandths place to name numbers between whole numbers.</p>	<p>Chapter 13: 13-5</p>
<p>M.4.3.5 Describe decimals as an extension of the base ten number system.</p>	<p>Chapter 13: 13-5</p>
<p>M.4.3.6 Relate equivalent fractions and decimals with and without models including location on a number line.</p>	<p>Chapter 13: 13-1 through 13-5</p>
<p>M.4.3.7 Compare and order decimals and estimate fraction and decimal amounts in real-world problems.</p>	<p>Chapter 13: 13-6 & 13-7</p>
<p>M.4.3.8 Relate halves, fourths, tenths and hundredths to decimals and percents.</p>	<p>Chapter 13: 13-1 See Grade 6 Chapter 11: 11-2 through 11-4 (relate fractions, decimals, and percents)</p>

STANDARD 3 – FRACTIONS AND DECIMALS

Grade 4 Content Standards	<i>Sadlier Math, Grade 4</i>
<p>M.4.3.9 Add, subtract, and multiply fractions and mixed numbers with like denominators.</p>	<p>Chapter 11: 11-2, 11-5, 11-7 & 11-8 See Grade 5 Chapter 8: 8-2 (multiply fractions) , 8-6 (rename mixed numbers) & 8-8 (multiply fractions and mixed numbers)</p>

STANDARD 4 – MEASUREMENT/DATA

Grade 4 Content Standards	<i>Sadlier Math, Grade 4</i>
<p>M.4.4.1 Compare relative sizes of measurement units within one system of units and record measurement equivalents on a two-column table (i.e., 4 feet as 48 inches).</p>	<p>Chapter 14: 14-1 through 14-10</p>
<p>M.4.4.2 Use the four operations to solve word problems involving distance intervals of time, liquid volumes, masses of objects and money. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.</p>	<p>Chapter 14: 14-1 through 14-9 Chapter 15: 15-1 through 15-3</p>
<p>M.4.4.3 Describe and determine area as the number of same-sized units that cover a region in the plane, recognizing that a unit is the standard unit for measuring area.</p>	<p>See Grade 3 Chapter 15: 15-1 through 15-4</p>
<p>M.4.4.4 Solve problems involving addition and subtraction of fractions by using information presented in line plots.</p>	<p>Chapter 15: 15-6 & 15-7</p>
<p>M.4.4.5 Recognize angles as geometric shapes that are formed by a common-shared endpoint and understand concepts of angle measurement.</p>	<p>Chapter 16: 16-1 through 16-4</p>

STANDARD 4 – MEASUREMENT/DATA

Grade 4 Content Standards	Sadlier Math, Grade 4
M.4.4.6 Measure angles in whole number degrees using a protractor. Sketch angles of specified measure and solve problems to find unknown angles.	Chapter 16: 16-3 & 16-4
M.4.4.7 Apply the area and perimeter formulas for rectangles for real-world mathematical problems.	Chapter 17: 17-6 & 17-7

STANDARD 5 – GEOMETRY

Grade 4 Content Standards	Sadlier Math, Grade 4
M.4.5.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse) and perpendicular and parallel lines. Identify these in two-dimensional figures	Chapter 16: 16-1 through 16-6
M.4.5.2 Classify angles of two-dimensional shapes using benchmarks (45° , 90° , 180° and 360°).	See Grade 5 Chapter 15: 15-2 (triangles)
M.4.5.3 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 right triangles as a category and identify right triangles.	Chapter 17: 17-1 through 17-3
M.4.5.4 Identify and describe the results of translations, reflections and rotations of 45, 90, 180, 270 and 360 degrees including figures with line and rotational symmetry.	n/a
M.4.5.5 Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetry figures and draw lines of symmetry.	Chapter 17: 17-4

STANDARD 5 – GEOMETRY

Grade 4 Content Standards

Sadlier Math, Grade 4

M.4.5.6 Identify and build a three-dimensional object from a two-dimensional representation of that object and vice versa.

See Grade 5
Chapter 16: 16-1 (nets)