## Sadlier School

## Sadlier Math

Correlation to the Missouri Learning Standards:
Grade-Level Expectations for Mathematics

## Grade 3



## Sadlier School

## NUMBER SENSE AND OPERATIONS IN BASE TEN

Sadlier Math, Grade 3

| Use place value understanding and properties of operations to perform multi-digit arithmetic. |  |
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| 3.NBT.A.1 Round whole numbers to the nearest <br> 10 or 100. | Chapter 1: 1-4 \& 1-5 |
| 3.NBT.A.2 Read, write and identify whole <br> numbers within 100,000 using base ten <br> numerals, number names and expanded form. | Chapter 1: 1-1 |
| 3.NBT.A.3 Demonstrate fluency with addition and <br> subtraction within 1000. | Chapter 1: 1-6 <br> Chapter 2: 2-1, 2-3 through 2-7 <br> Chapter 3: 3-1 through 3-6 |
| 3.NBT.A.4 Multiply whole numbers by multiples <br> of 10 in the range 10-90. | Chapter 6: 6-11 |

## NUMBER SENSE AND OPERATIONS IN FRACTIONS

## Grade 3 Content Standards

Develop understanding of fractions as numbers.
3.NF.A. 1 Understand a unit fraction as the

Chapter 9: 9-1, 9-2, 9-4, 9-6 \& 9-7 quantity formed by one part when a whole is partitioned into equal parts.
3.NF.A. 2 Understand that when a whole is partitioned equally, a fraction can be used to represent a portion of the whole.
3.NF.A.2a Describe the numerator as

Chapter 9: 9-2, 9-4 \& 9-5
representing the number of pieces being considered.
3.NF.A.2b Describe the denominator as the number of pieces that make the whole.

Chapter 9: 9-2 \& 9-4
3.NF.A. 3 Represent fractions on a number line.
3.NF.A.3a Understand the whole is the interval

Chapter 9: 9-3 \& 9-5 from 0 to 1 .

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## NUMBER SENSE AND OPERATIONS IN FRACTIONS

## Grade 3 Content Standards

## Sadlier Math, Grade 3

| 3.NF.A.3b Understand the whole is partitioned <br> into equal parts. | Chapter 9: 9-3 \& 9-5 |
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| 3.NF.A.3c Understand a fraction represents <br> the endpoint of the length a given number of <br> partitions from 0. | Chapter 9: 9-3 \& 9-5 |
| 3.NF.A.4 Demonstrate that two fractions are <br> equivalent if they are the same size, or the <br> same point on a number line. | Chapter 10: 10-1 \& 10-3 |
| 3.NF.A.5 Recognize and generate equivalent <br> fractions using visual models, and justify why <br> the fractions are equivalent. | Chapter 10: 10-2, 10-3 \& 10-7 |
| 3.NF.A.6 Compare two fractions with the same <br> numerator or denominator using the symbols >, <br> = or <, and justify the solution. | Chapter 10: 10-4 through 10-6 |
| 3.NF.A.7 Explain why fraction comparisons are <br> only valid when the two fractions refer to the <br> same whole. | Chapter 10: 10-4 through 10-7 |

## RELATIONSHIPS AND ALGEBRAIC THINKING

Grade 3 Content Standards

## Sadlier Math, Grade 3

| Represent and solve problems involving multiplication and division. |  |
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| 3.RA.A.1 Interpret products of whole numbers. | Chapter 4: 4-1 through 4-4, 4-7 <br> Chapter 5: 5-1 through 5-8 <br> Chapter 6: 6-2 through 6-7, 6-9 <br> Chapter 8: 8-7 \& 8-8 |
| 3.RA.A.2 Interpret quotients of whole numbers. | Chapter 4: 4-5 \& 4-6 <br> Chapter 7: 7-2 through 7-5 <br> Chapter 8: 8-1 through 8-8 |

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## RELATIONSHIPS AND ALGEBRAIC THINKING

Grade 3 Content Standards
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| 3.RA.A.3 Describe in words or drawings a <br> problem that illustrates a multiplication or <br> division situation. | Chapter 4: 4-1 through 4-7 <br> Chapter 5: 5-1 through 5-4 <br> Chapter 6: 6-2 through 6-6 <br> Chapter 7: 7-2 through 7-5 <br> Chapter 8: 8-1 through 8-8 |
| :--- | :--- |
| 3.RA.A.4 Use multiplication and division within <br> 100 to solve problems. | Chapter 4: 4-1 through 4-3, 4-7 <br> Chapter 5: 5-1 through 5-5, 5-7 \& 5-8 <br> Chapter 6: 6-1 through 6-9 <br> Chapter 7: 7-1 through 7-6 <br> Chapter 8: 8-1 through 8-5, 8-8 |
| 3.RA.A.5 Determine the unknown number in |  |
| a multiplication or division equation relating |  |
| three whole numbers. | Chapter 5: 5-7 <br> Chapter 6: 6-6 \& 6-9 <br> Chapter 7: 7-1 |
| Understand properties of multiplication and the relationship between multiplication and division. |  |
| 3.RA.B.6 Apply properties of operations as |  |
| strategies to multiply and divide. | Chapter 4: 4-4 <br> Chapter 5: 5-4 <br> Chapter 6: 6-1 through 6-9 <br> Chapter 7: 7-1 through 7-6 <br> Chapter 8: 8-1 through 8-8 |

## Multiply and divide within 100.

3.RA.C. 7 Multiply and divide with numbers and results within 100 using strategies such as the relationship between multiplication and division or properties of operations. Know all products of two one-digit numbers.
3.RA.C. 8 Demonstrate fluency with products within 100.

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

Chapter 5: 5-1 through 5-7
Chapter 6: 6-1 through 6-11

Use the four operations to solve word problems.
3.RA.D. 9 Write and solve two-step problems involving variables using any of the four operations.

Chapter 2: 2-8
Chapter 6: 6-8
Chapter 8: 8-6

## RELATIONSHIPS AND ALGEBRAIC THINKING

Grade 3 Content Standards
3.RA.D. 10 Interpret the reasonableness of answers using mental computation and estimation strategies including rounding.

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| Identify and explain arithmetic patterns. |  |
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| 3.RA.E.11 Identify arithmetic patterns and explain |  |
| the patterns using properties of operations. |  | | Chapter 2: 2-2 |
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| Chapter 5: 5-5 \& 5-6 |
| Chapter 6: 6-10 \& 6-11 |

## GEOMETRY AND MEASUREMENT

## Grade 3 Content Standards

| Reason with shapes and their attributes. |  |
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| 3.GM.A.1 Understand that shapes in different <br> categories may share attributes and that the <br> shared attributes can define a larger category. | Chapter 14: 14-1 through 14-3 |
| 3.GM.A.2 Distinguish rhombuses and rectangles <br> as examples of quadrilaterals, and draw <br> examples of quadrilaterals that do not belong <br> to these subcategories. | Chapter 14: 14-2 \& 14-3 |
| 3.GM.A.3 Partition shapes into parts with equal <br> areas, and express the area of each part as a <br> unit fraction of the whole. | Chapter 9: 9-1 <br> Chapter 15: 15-2 |


| Solve problems involving the measurement of time, liquid volumes and weights of objects. |  |
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| 3.GM.B.4 Tell and write time to the nearest <br> minute. | Chapter 13: 13-1 through 13-4 |
| 3.GM.B.5 Estimate time intervals in minutes. | Related content <br> Chapter 13: 13-1 through 13-4 |
| 3.GM.B.6 Solve problems involving addition and <br> subtraction of minutes. | Chapter 13: 13-1 through 13-4 |

## GEOMETRY AND MEASUREMENT

## Grade 3 Content Standards

## Sadlier Math, Grade 3

| 3.GM.B.7 Measure or estimate length, liquid <br> volume and weight of objects. | Chapter 11: 11-1 through 11-5 |
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| 3.GM.B.8 Use the four operations to solve <br> problems involving lengths, liquid volumes or <br> weights given in the same units. | Chapter 11: 11-1 through 11-6 |


| Understand concepts of area. |  |
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| 3.GM.C.9 Calculate area by using unit squares to <br> cover a plane figure with no gaps or overlaps. | Chapter 15: 15-1 through 15-4 |
| 3.GM.C.10 Label area measurements with squared <br> units. | Chapter 15: 15-1 through 15-4 |
| 3.GM.C.11 Demonstrate that tiling a rectangle to <br> find the area and multiplying the side lengths <br> result in the same value. | Chapter 15: 15-3 |
| 3.GM.C. 12 Multiply whole-number side lengths to <br> solve problems involving the area of rectangles. | Chapter 15: 15-3 |
| 3.GM.C. 13 <br> can be formed rectangular arrangements that | Chapter 15: 15-4 |
| 3.GM.C. 14 <br> rectangles Decompose area. find the area of the original <br> rectangle. | Chapter 15: 15-4 |


| Understand concepts of perimeter. |  |
| :--- | :--- |
| 3.GM.D.15 Solve problems involving perimeters of <br> polygons. | Chapter 16: 16-1 through 16-6 |
| 3.GM.D.16 Understand that rectangles can <br> have equal perimeters but different areas, or <br> rectangles can have equal areas but different <br> perimeters. | Chapter 16: 16-5 \& 16-6 |

## Sadlier School

## DATA AND STATISTICS

## Grade 3 Content Standards

| Represent and analyze data. |  |
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| 3.DS.A.1 Create frequency tables, scaled picture <br> graphs and bar graphs to represent a data set <br> with several categories. | Chapter 12: 12-1 through 12-5 |
| 3.DS.A. 2 Solve one- and two-step problems using <br> information presented in bar and/or picture <br> graphs. | Chapter 12: 12-1 through 12-5 |
| 3.DS.A. 3 Create a line plot to represent data. | Chapter 12: 12-8 |
| 3.DS.A. 4 Use data shown in a line plot to answer <br> questions. | Chapter 12: 12-7 \& 12-8 |

