



# SuccessMaker®

## Arkansas Mathematics Curriculum Framework 2016 Grade 5

**Alignments to SuccessMaker**  
**Providing rigorous intervention**  
**for K-8 learners with unparalleled precision**

| Arkansas Standards Codes  | Arkansas Mathematics Curriculum Framework 2016 Grade 5                                                                                                                                               | SuccessMaker Item Description                                                                                             | Item ID       |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|---------------|
| AR.Math.Content.5.OA      | Operations and Algebraic Thinking                                                                                                                                                                    |                                                                                                                           |               |
| AR.Math.Content.5.OA.A    | Write and interpret numerical expressions.                                                                                                                                                           |                                                                                                                           |               |
| AR.Math.Content.5.OA.A.1  | Use grouping symbols including parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.                                                               | Ratios and Equations Targeted Lesson 19: Parentheses and Order of Operations                                              |               |
|                           |                                                                                                                                                                                                      | Ratios and Equations Targeted Lesson 10: Determining the Sign                                                             |               |
| AR.Math.Content.5.OA.B    | Analyze patterns and relationships.                                                                                                                                                                  |                                                                                                                           |               |
| AR.Math.Content.5.OA.B.3a | Generate two numerical patterns, each using a given rule. Note: Terms of the numerical patterns will be limited to whole number coordinates.                                                         | Generate two numerical patterns using two given rules and identify apparent relationships between corresponding terms.    | SMMA_LO_02197 |
| AR.Math.Content.5.OA.B.3b | Identify apparent relationships between corresponding terms by completing a function table or input/output table. Note: Terms of the numerical patterns will be limited to whole number coordinates. | Determine the output of one-function machine, given an input and sample inputs and outputs (combinations 2 x 2 to 9 x 9). | SMMA_LO_00358 |
|                           |                                                                                                                                                                                                      | Given a set of graphs of relations, identify which graphs represent functions.                                            | SMMA_LO_01835 |
|                           |                                                                                                                                                                                                      | Generate a table of values given a two-step rule.                                                                         | SMMA_LO_01756 |
|                           |                                                                                                                                                                                                      | Complete a table given a two-step rule (whole numbers).                                                                   | SMMA_LO_01751 |
|                           |                                                                                                                                                                                                      | Complete an input/output table given a two-step rule; then plot the ordered pairs on coordinate grid.                     | SMMA_LO_01758 |

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|                           |                                                                                                                                                                                         | Determine if a table values represents a linear or exponential function.                                | SMMA_LO_01881 |
|                           |                                                                                                                                                                                         | Complete an input/output table given a one-step rule; then plot the ordered pairs on a coordinate grid. | SMMA_LO_01757 |
|                           |                                                                                                                                                                                         | Complete a table given a two-step rule (single-digit whole numbers).                                    | SMMA_LO_01750 |
|                           |                                                                                                                                                                                         | Generate a table of values given a one-step rule.                                                       | SMMA_LO_01755 |
|                           |                                                                                                                                                                                         | Determine if a table values represents a linear or quadratic function.                                  | SMMA_LO_01882 |
|                           |                                                                                                                                                                                         | Identify the function that is represented by a table of values (linear and nonlinear).                  | SMMA_LO_01883 |
| AR.Math.Content.5.OA.B.3c | Using the terms created, form and graph ordered pairs in the first quadrant of the coordinate plane. Note: Terms of the numerical patterns will be limited to whole number coordinates. | Ratios and Equations Targeted Lesson 30: What's My Rule?                                                |               |
|                           |                                                                                                                                                                                         | Graph a point on a coordinate grid (Quadrant I).                                                        | SMMA_LO_01735 |
|                           |                                                                                                                                                                                         | Graph a set of ordered pairs from a table on a coordinate plane (Quadrant I).                           | SMMA_LO_01808 |
|                           |                                                                                                                                                                                         | Graph a set of ordered pairs from a table on a coordinate plane (Quadrant I).                           | SMMA_LO_01809 |
| AR.Math.Content.5.NBT     | Number and Operations in Base Ten                                                                                                                                                       |                                                                                                         |               |

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| AR.Math.Content.5.NBT.A     | Understand the place value system.                                                                                                                                                           |                                                                                                                                               |               |
| AR.Math.Content.5.NBT.A.1   | Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left. | Identify the place and the value of a digit in a number; for that value, identify the number 10 times as much and the number 1/10 as much.    | SMMA_LO_02045 |
|                             |                                                                                                                                                                                              | Addition and Subtraction Targeted Lesson 29: Place Value of Numbers Up to Six Digits                                                          |               |
| AR.Math.Content.5.NBT.A.2   | Students understand why multiplying or dividing by a power of 10 shifts the value of the digits of a whole number or decimal.                                                                |                                                                                                                                               |               |
| AR.Math.Content.5.NBT.A.2.A | Explain patterns in the number of zeros of the product when multiplying a whole number by powers of 10.                                                                                      | Find the missing exponent for a number written in scientific notation (the exponent is 1 to 6).                                               | SMMA_LO_01122 |
|                             |                                                                                                                                                                                              | Fractions and Decimals Targeted Lesson 28: Powers of Ten                                                                                      |               |
| AR.Math.Content.5.NBT.A.2.B | Explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10.                                                                             | Multiply decimals by 10, 100, or 1000.                                                                                                        | SMMA_LO_00235 |
|                             |                                                                                                                                                                                              | Explain patterns in the number of zeroes of the product and in the placement of the decimal point when multiplying a number by powers of ten. | SMMA_LO_02046 |
|                             |                                                                                                                                                                                              | Fractions and Decimals Targeted Lesson 35: Multiplying Decimals                                                                               |               |

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|                             |                                                                                                                                                             | Fractions and Decimals Targeted Lesson 28: Powers of Ten                                        |               |
| AR.Math.Content.5.NBT.A.2.C | Use whole-number exponents to denote powers of 10.                                                                                                          | Find the missing exponent for a number written in scientific notation (the exponent is 1 to 6). | SMMA_LO_01122 |
| AR.Math.Content.5.NBT.A.3   | Read, write, and compare decimals to thousandths.                                                                                                           |                                                                                                 |               |
| AR.Math.Content.5.NBT.A.3.a | Read and write decimals to thousandths using base-ten numerals, number names, and expanded form(s)                                                          | Match a decimal number to its word name (to thousandths).                                       | SMMA_LO_00227 |
|                             |                                                                                                                                                             | Match the word name with the decimal number (0.10 to 9.99).                                     | SMMA_LO_00204 |
| AR.Math.Content.5.NBT.A.3.b | Compare two decimals to thousandths based on the value of the digits in each place, using $>$ , $=$ , and $<$ symbols to record the results of comparisons. | Compare decimal numbers (to thousandths).                                                       | SMMA_LO_00225 |
|                             |                                                                                                                                                             | Compare decimal numbers (0.1 to 9.9).                                                           | SMMA_LO_00191 |
|                             |                                                                                                                                                             | Compare two decimal numbers (10.01 to 99.99).                                                   | SMMA_LO_00216 |
|                             |                                                                                                                                                             | Fractions and Decimals Targeted Lesson 30: Comparing Decimals                                   |               |
|                             |                                                                                                                                                             | Find a decimal number that is either greater than or less than two decimal numbers.             | SMMA_LO_01118 |
| AR.Math.Content.5.NBT.A.4   | Apply place value understanding to round decimals to any place.                                                                                             | Round a decimal to the nearest tenth, hundredth, or whole number.                               | SMMA_LO_00230 |

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| AR.Math.Content.5.NBT.B   | Perform operations with multi-digit whole numbers and with decimals to hundredths.                                                                                                                                                                                                                               |                                                                                                  |               |
| AR.Math.Content.5.NBT.B.5 | Fluently (efficiently, accurately and with some degree of flexibility) multiply multi-digit whole numbers using a standard algorithm. Note: A “standard algorithm” can be viewed as, but should not be limited to, the traditional recording system. A “standard algorithm” denotes any valid base-ten strategy. | Multiply a two-digit number by a two-digit number (student choice, products 16 x 11 to 19 x 99). | SMMA_LO_00901 |
|                           |                                                                                                                                                                                                                                                                                                                  | Multiplication and Division Targeted Lesson 32: Multiplying by Two-Digit Numbers                 |               |
|                           |                                                                                                                                                                                                                                                                                                                  | Multiply whole numbers (student choice, products 10,000 x 2 to 99,999 x 9).                      | SMMA_LO_00900 |
|                           |                                                                                                                                                                                                                                                                                                                  | Multiply (student choice, products 1000 x 20 to 9999 x 90, multiples of 10).                     | SMMA_LO_00906 |
|                           |                                                                                                                                                                                                                                                                                                                  | Multiply whole numbers (student choice, products 21 x 11 to 99 x 99).                            | SMMA_LO_00903 |
|                           |                                                                                                                                                                                                                                                                                                                  | Multiplication and Division Targeted Lesson 31: Multiplying Multi-digit Numbers                  |               |
|                           |                                                                                                                                                                                                                                                                                                                  | Multiply by a multiple of 10 (student choice, 10,000 x 20 to 99,999 x 90).                       | SMMA_LO_00908 |
|                           |                                                                                                                                                                                                                                                                                                                  | Multiply whole numbers (student choice, 10,000 x 21 to 99,999 x 99).                             | SMMA_LO_00910 |

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|                              |                                                                                                                                 | Multiply whole numbers (student choice, products 1000 x 21 to 9999 x 99).                                           | SMMA_LO_00909 |
| AR.Math.Content.5.NBT.B.6a   | Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on: |                                                                                                                     |               |
| AR.Math.Content.5.NBT.B.6a.d | The relationship between multiplication and division.                                                                           | Estimate the missing factor in a number sentence (round to the nearest ten, products 2,010 to 81,090).              | SMMA_LO_00913 |
|                              |                                                                                                                                 | Multiplication and Division Targeted Lesson 33: Relating Division to Multiplication                                 |               |
|                              |                                                                                                                                 | Find the missing factor and quotient in two related number sentences (products 0.2 x 2 to 0.9 x 5).                 | SMMA_LO_00219 |
| AR.Math.Content.5.NBT.B.6b   | Illustrate and explain calculations by using equations, rectangular arrays, and/or area models.                                 | Identify equivalent arrays with different factors.                                                                  | SMMA_LO_01715 |
|                              |                                                                                                                                 | Identify and solve an expression that represents a multiplication problem in context (model shown, products to 32). | SMMA_LO_01570 |
|                              |                                                                                                                                 | Identify four arrays for a given product (products 6 to 30).                                                        | SMMA_LO_01858 |
|                              |                                                                                                                                 | Use an area model to solve a multiplication problem (two-digit factors).                                            | SMMA_LO_01734 |
|                              |                                                                                                                                 | Create arrays for a given product (products 6 to 30).                                                               | SMMA_LO_01859 |

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| AR.Math.Content.5.NBT.B.7   | Perform basic operations on decimals to the hundredths place. Note: Division of decimals will remain consistent with AR.Math.Content.5.NF.B.7.                                                     |                                                                                                    |               |
| AR.Math.Content.5.NBT.B.7.a | Add and subtract decimals to hundredths using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. | Subtract decimal numbers (minuends and subtrahends 0.1 to 9.9, no regrouping).                     | SMMA_LO_00195 |
|                             |                                                                                                                                                                                                    | Add decimals numbers using mental math (sums 1.0 to 99.8, regrouping).                             | SMMA_LO_00217 |
|                             |                                                                                                                                                                                                    | Add decimal numbers (sums less than 10.0, regrouping).                                             | SMMA_LO_00199 |
|                             |                                                                                                                                                                                                    | Align the decimal numbers in a vertical subtraction problem; then solve (decimals to thousandths). | SMMA_LO_00233 |
|                             |                                                                                                                                                                                                    | Add two decimal numbers using mental math (sums 10.1 to 99.9, no regrouping).                      | SMMA_LO_00196 |
|                             |                                                                                                                                                                                                    | Add decimals using addition facts (sums 0.02-0.99).                                                | SMMA_LO_00206 |
|                             |                                                                                                                                                                                                    | Subtract decimal numbers (minuends and subtrahends 0.1 to 99.9, with or without regrouping).       | SMMA_LO_00203 |
|                             |                                                                                                                                                                                                    | Subtract decimal numbers (minuends 2.0 to 9.9, subtrahends 0.1 to 0.9, regrouping).                | SMMA_LO_00198 |
|                             |                                                                                                                                                                                                    | Subtract decimals numbers (minuends and subtrahends 0.01 to 9.99).                                 | SMMA_LO_00207 |

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|                          |                                                        | Align the decimal numbers for a vertical addition problem; then solve (to thousandths).        | SMMA_LO_00226 |
|                          |                                                        | Align the decimal numbers for a vertical subtraction problem; then solve (to thousandths).     | SMMA_LO_00228 |
|                          |                                                        | Subtract decimals with regrouping (to ten-thousandths).                                        | SMMA_LO_00243 |
|                          |                                                        | Align the decimal numbers in a vertical addition problem; then solve (hundredths, regrouping). | SMMA_LO_00211 |
|                          |                                                        | Add two decimal numbers (sums 1.0 to 98.9, regrouping).                                        | SMMA_LO_00201 |
|                          |                                                        | Add the decimal numbers provided on a data table.                                              | SMMA_LO_01785 |
|                          |                                                        | Add or subtract decimals using mental math (sums less than 1.00, with or without regrouping).  | SMMA_LO_00210 |
|                          |                                                        | Subtract the decimal numbers provided on a data table.                                         | SMMA_LO_01786 |
|                          |                                                        | Add two decimal numbers using mental math (sums 1.1 to 9.9, no regrouping).                    | SMMA_LO_00193 |
|                          |                                                        | Fractions and Decimals Targeted Lesson 34: Adding and Subtracting Decimals                     |               |
|                          |                                                        | Add two decimal numbers (tenths, sums 1.0 to 2.0, regrouping).                                 | SMMA_LO_00192 |

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|                             |                                                                                                                                                                                                          | Subtract decimal numbers using mental math (minuends and subtrahends 10.1 to 99.9, no regrouping).                 | SMMA_LO_00197 |
| AR.Math.Content.5.NBT.B.7.b | Multiply and divide decimals to hundredths using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between multiplication and division. | Move the decimal point in the divisor and dividend in a long division problem.                                     | SMMA_LO_00247 |
|                             |                                                                                                                                                                                                          | Fractions and Decimals Targeted Lesson 36: Multiplying and Dividing Decimals                                       |               |
|                             |                                                                                                                                                                                                          | Fractions and Decimals Targeted Lesson 35: Multiplying Decimals                                                    |               |
|                             |                                                                                                                                                                                                          | Move the decimal point in the divisor and dividend in a long division problem; then find the quotient.             | SMMA_LO_00249 |
|                             |                                                                                                                                                                                                          | Find the missing factor and quotient in two related number sentences (products $0.2 \times 2$ to $0.9 \times 5$ ). | SMMA_LO_00219 |
|                             |                                                                                                                                                                                                          | Determine the missing factor in the multiplication number sentence (decimals, to ten-thousandths).                 | SMMA_LO_00240 |
|                             |                                                                                                                                                                                                          | Identify the decimal number with a 0 to 9 in the tenths or hundredths place.                                       | SMMA_LO_00202 |
| AR.Math.Content.5.NF        | Number and Operations-Fractions                                                                                                                                                                          |                                                                                                                    |               |

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| AR.Math.Content.5.NF.A   | Use equivalent fractions as a strategy to add and subtract fractions.                                                                                                                                                                                                                                                                                   |                                                                                                      |               |
| AR.Math.Content.5.NF.A.1 | Efficiently, accurately and with some degree of flexibility add and subtract fractions with unlike denominators (including mixed numbers) using equivalent fractions and common denominators. Note: The focus of this standard is applying equivalent fractions, not necessarily finding least common denominators or putting results in simplest form. | Subtract fractions; simplify if necessary (unlike denominators).                                     | SMMA_LO_00474 |
|                          |                                                                                                                                                                                                                                                                                                                                                         | Add fractions; simplify if necessary (unlike denominators).                                          | SMMA_LO_00473 |
|                          |                                                                                                                                                                                                                                                                                                                                                         | Subtract fractions; no simplifying (unlike denominators).                                            | SMMA_LO_00466 |
|                          |                                                                                                                                                                                                                                                                                                                                                         | Add fractions; no simplifying (unlike denominators).                                                 | SMMA_LO_00467 |
|                          |                                                                                                                                                                                                                                                                                                                                                         | Subtract fractions; simplify if necessary (unlike denominators).                                     | SMMA_LO_00472 |
|                          |                                                                                                                                                                                                                                                                                                                                                         | Fractions and Decimals Targeted Lesson 17: Adding and Subtracting Fractions with Unlike Denominators |               |
|                          |                                                                                                                                                                                                                                                                                                                                                         | Add fractions; simplify if necessary (unlike denominators).                                          | SMMA_LO_00471 |
|                          |                                                                                                                                                                                                                                                                                                                                                         | Subtract fractions; no simplifying (unlike denominators).                                            | SMMA_LO_00468 |
|                          |                                                                                                                                                                                                                                                                                                                                                         | Add fractions; no simplifying (unlike denominators).                                                 | SMMA_LO_00465 |

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| AR.Math.Content.5.NF.A.2a | Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators. | Subtract fractions; simplify if necessary (unlike denominators).                                     | SMMA_LO_00474 |
|                           |                                                                                                                                          | Add fractions; simplify if necessary (unlike denominators).                                          | SMMA_LO_00473 |
|                           |                                                                                                                                          | Subtract fractions; no simplifying (unlike denominators).                                            | SMMA_LO_00466 |
|                           |                                                                                                                                          | Add fractions; no simplifying (unlike denominators).                                                 | SMMA_LO_00467 |
|                           |                                                                                                                                          | Subtract fractions; simplify if necessary (unlike denominators).                                     | SMMA_LO_00472 |
|                           |                                                                                                                                          | Fractions and Decimals Targeted Lesson 17: Adding and Subtracting Fractions with Unlike Denominators |               |
|                           |                                                                                                                                          | Add fractions; simplify if necessary (unlike denominators).                                          | SMMA_LO_00471 |
|                           |                                                                                                                                          | Subtract fractions; no simplifying (unlike denominators).                                            | SMMA_LO_00468 |
|                           |                                                                                                                                          | Add two fractional parts of whole numbers in context.                                                | SMMA_LO_01640 |
|                           |                                                                                                                                          | Add fractions; no simplifying (unlike denominators).                                                 | SMMA_LO_00465 |
|                           |                                                                                                                                          | Subtract two fractions from a whole within a context.                                                | SMMA_LO_01634 |
| AR.Math.Content.5.NF.A.2b | Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers.                     | Estimate the difference of two fractions.                                                            | SMMA_LO_01707 |

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| AR.Math.Content.5.NF.B     | Apply and extend previous understandings of multiplication and division.                                                                                                                                                                                                       |                                                                                                                                                     |               |
| AR.Math.Content.5.NF.B.3a  | Interpret a fraction as division of the numerator by the denominator ( $a/b = a \div b$ ). Where $a$ and $b$ are natural numbers.                                                                                                                                              | Fractions and Decimals Targeted<br>Lesson 1:<br>Identifying Fractions Using Sets                                                                    |               |
| AR.Math.Content.5.NF.B.3b  | Solve word problems involving division of natural numbers leading to answers in the form of fractions or mixed numbers.                                                                                                                                                        | Identify the equivalent expression for a fraction, whole number, or a mixed numbers being divided by a fraction, a whole number, or a mixed number. | SMMA_LO_00511 |
|                            |                                                                                                                                                                                                                                                                                | Fractions and Decimals Targeted<br>Lesson 24: Dividing by Unit Fractions                                                                            |               |
| AR.Math.Content.5.NF.B.4   | Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.                                                                                                                                                               |                                                                                                                                                     |               |
| AR.Math.Content.5.NF.B.4.b | Find the area of a rectangle with fractional (less than and/or greater than 1) side lengths, by tiling it with unit squares of the appropriate unit fraction side lengths, by multiplying the fractional side lengths, and then show that both procedures yield the same area. | Find the area of a rectangle with fractional side lengths in two ways: by multiplying its side lengths and by tiling it with smaller rectangles.    | SMMA_LO_02049 |
|                            |                                                                                                                                                                                                                                                                                | Multiplication and Division Targeted<br>Lesson 23:<br>Counting and Calculating the Area of Rectangles                                               |               |
|                            |                                                                                                                                                                                                                                                                                | Count squares and half squares to find the area of a figure in square centimeters.                                                                  | SMMA_LO_00783 |

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|                            |                                                                                                                                                                                                                                                                                                                                                                         | Multiply mixed numbers to determine the area of a rectangle or triangle; simplify if necessary.                                                      | SMMA_LO_00508 |
|                            |                                                                                                                                                                                                                                                                                                                                                                         | Multiplication and Division Targeted Lesson 24: Matching Areas of Rectangles                                                                         |               |
|                            |                                                                                                                                                                                                                                                                                                                                                                         | Find the area of a rectangle by tiling it; complete an equation to show that the area is the same as would be found by multiplying the side lengths. | SMMA_LO_02029 |
| AR.Math.Content.5.NF.B.5   | Interpret multiplication as scaling (resizing), by:                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                      |               |
| AR.Math.Content.5.NF.B.5.b | Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number. Explain why multiplying a given number by a fraction less than 1 results in a product smaller than the given number. Relate the principle of fraction equivalence $a/b = (n \times a)/(n \times b)$ to the effect of multiplying $a/b$ by 1. | Multiply with fractions to calculate the weight in campers' backpacks.                                                                               | SMMA_LO_02507 |
| AR.Math.Content.5.NF.B.6   | Solve real world problems involving multiplication of fractions and mixed numbers.                                                                                                                                                                                                                                                                                      | Fractions and Decimals Targeted Lesson 25: Fraction Operations Word Problems                                                                         |               |
|                            |                                                                                                                                                                                                                                                                                                                                                                         | Solve a two-step equation (fractions, multiplication).                                                                                               | SMMA_LO_01850 |
|                            |                                                                                                                                                                                                                                                                                                                                                                         | Solve a one-step equation (fractions, multiplication and division).                                                                                  | SMMA_LO_01847 |
|                            |                                                                                                                                                                                                                                                                                                                                                                         | Solve a one-step equation (fractions, addition and subtraction).                                                                                     | SMMA_LO_01848 |

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| AR.Math.Content.5.NF.B.7   | Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions. Note: Students able to multiply fractions in general can develop strategies to divide fractions in general, by reasoning about the relationship between multiplication and division. But division of a fraction by a fraction is not a requirement at this grade. |                                                                                                        |               |
| AR.Math.Content.5.NF.B.7.a | Interpret division of a unit fraction by a natural number, and compute such quotients.                                                                                                                                                                                                                                                                                                                | Fractions and Decimals Targeted Lesson 23: Dividing Unit Fractions                                     |               |
|                            |                                                                                                                                                                                                                                                                                                                                                                                                       | Divide a fraction by a whole number; simplify if necessary.                                            | SMMA_LO_00489 |
|                            |                                                                                                                                                                                                                                                                                                                                                                                                       | Model the division of a unit fraction by a nonzero whole number, and compute the quotient.             | SMMA_LO_02052 |
|                            |                                                                                                                                                                                                                                                                                                                                                                                                       | Use models to solve real-world problems involving division of unit fractions by nonzero whole numbers. | SMMA_LO_02156 |
| AR.Math.Content.5.NF.B.7.b | Interpret division of a whole number by a unit fraction, and compute such quotients.                                                                                                                                                                                                                                                                                                                  | Use models to solve real-world problems involving division of whole numbers by unit fractions.         | SMMA_LO_02053 |
|                            |                                                                                                                                                                                                                                                                                                                                                                                                       | Divide a whole number by a fraction; simplify if necessary.                                            | SMMA_LO_01787 |
|                            |                                                                                                                                                                                                                                                                                                                                                                                                       | Divide a whole number by a fraction.                                                                   | SMMA_LO_00492 |

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|                            |                                                                                                                                    | Fractions and Decimals Targeted Lesson 24: Dividing by Unit Fractions                                  |               |
| AR.Math.Content.5.NF.B.7.c | Solve real world problems involving division of unit fractions by natural numbers and division of whole numbers by unit fractions. | Fractions and Decimals Targeted Lesson 23: Dividing Unit Fractions                                     |               |
|                            |                                                                                                                                    | Use models to solve real-world problems involving division of whole numbers by unit fractions.         | SMMA_LO_02053 |
|                            |                                                                                                                                    | Divide a fraction by a whole number; simplify if necessary.                                            | SMMA_LO_00489 |
|                            |                                                                                                                                    | Model the division of a unit fraction by a nonzero whole number, and compute the quotient.             | SMMA_LO_02052 |
|                            |                                                                                                                                    | Divide a whole number by a fraction; simplify if necessary.                                            | SMMA_LO_01787 |
|                            |                                                                                                                                    | Divide a whole number by a fraction.                                                                   | SMMA_LO_00492 |
|                            |                                                                                                                                    | Fractions and Decimals Targeted Lesson 24: Dividing by Unit Fractions                                  |               |
|                            |                                                                                                                                    | Use models to solve real-world problems involving division of unit fractions by nonzero whole numbers. | SMMA_LO_02156 |
| AR.Math.Content.5.MD       | Measurement and Data                                                                                                               |                                                                                                        |               |
| AR.Math.Content.5.MD.A     | Convert like measurement units within a given measurement system.                                                                  |                                                                                                        |               |
| AR.Math.Content.5.MD.A.1a  | Convert among different-sized standard measurement units within the metric system.                                                 | Convert metric units of length (mm, cm, m, and km; whole numbers).                                     | SMMA_LO_00814 |

| Arkansas Standards Codes  | Arkansas Mathematics Curriculum Framework 2016 Grade 5                                                                           | SuccessMaker Item Description                                                                                    | Item ID       |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|---------------|
| AR.Math.Content.5.MD.A.1b | Convert among different-sized standard measurement units within the customary system.                                            | Calculate the volume of a rectangular prism; then convert the cubic feet or cubic meters into gallons or liters. | SMMA_LO_01819 |
| AR.Math.Content.5.MD.A.1c | Use these conversions in solving multi-step, real world problems.                                                                | Convert linear Measurements to the same unit in order to fill orders for solar panels.                           | SMMA_LO_02505 |
| AR.Math.Content.5.MD.B    | Represent and interpret data.                                                                                                    |                                                                                                                  |               |
| AR.Math.Content.5.MD.B.2a | Make a line plot to display a data set of measurements in fractions of a unit ( $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{1}{8}$ ). | Read and interpret a line plot.                                                                                  | SMMA_LO_01764 |
|                           |                                                                                                                                  | Make a line plot to show measurement data in fractions of a unit.                                                | SMMA_LO_02196 |
|                           |                                                                                                                                  | Solve problems using fractional units of measurement data displayed in line plots.                               | SMMA_LO_02198 |
|                           |                                                                                                                                  | Make a line plot to show measurement data in whole number units.                                                 | SMMA_LO_02158 |
|                           |                                                                                                                                  | Choose a title for a line plot and label the units.                                                              | SMMA_LO_01643 |
|                           |                                                                                                                                  | Analyze a line plot to find the total number of items that fall at, above, or below a given value.               | SMMA_LO_01156 |
|                           |                                                                                                                                  | Identify the most frequent value (mode) using a line plot.                                                       | SMMA_LO_01164 |
| AR.Math.Content.5.MD.B.2b | Use operations on fractions for this grade to solve problems involving information presented in line plots.                      | Solve problems using fractional units of measurement data displayed in line plots.                               | SMMA_LO_02198 |

| Arkansas Standards Codes   | Arkansas Mathematics Curriculum Framework 2016 Grade 5                                                                               | SuccessMaker Item Description                                                                                    | Item ID       |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|---------------|
| AR.Math.Content.5.MD.C     | Understand concepts of volume.                                                                                                       |                                                                                                                  |               |
| AR.Math.Content.5.MD.C.3   | Recognize volume as an attribute of solid figures and understand concepts of volume measurement.                                     |                                                                                                                  |               |
| AR.Math.Content.5.MD.C.3.a | A cube with side length 1 unit, called a 'unit cube,' is said to have 'one cubic unit' of volume, and can be used to measure volume. | Identify a unit cube and what attribute it is used to measure.                                                   | SMMA_LO_02041 |
|                            |                                                                                                                                      | Determine side lengths and areas in squares, and side lengths and volumes in cubes.                              | SMMA_LO_02217 |
| AR.Math.Content.5.MD.C.3.b | A solid figure, which can be packed without gaps or overlaps using $n$ unit cubes, is said to have a volume of $n$ cubic units.      | Identify a unit cube and what attribute it is used to measure.                                                   | SMMA_LO_02041 |
| AR.Math.Content.5.MD.C.4   | Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.                                    | Identify a unit cube and what attribute it is used to measure.                                                   | SMMA_LO_02041 |
|                            |                                                                                                                                      | Find the volume of a prism by packing the prism with unit cubes.                                                 | SMMA_LO_02042 |
|                            |                                                                                                                                      | Find the volume of a rectangular solid by counting cubes.                                                        | SMMA_LO_00833 |
|                            |                                                                                                                                      | Calculate the volume of a rectangular prism; then convert the cubic feet or cubic meters into gallons or liters. | SMMA_LO_01819 |

| Arkansas Standards Codes   | Arkansas Mathematics Curriculum Framework 2016 Grade 5                                                                                                                                                                                                                 | SuccessMaker Item Description                                                                                  | Item ID       |
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| AR.Math.Content.5.MD.C.5   | Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.                                                                                                                                        |                                                                                                                |               |
| AR.Math.Content.5.MD.C.5.a | Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base (B). | Determine the volume of a box given the height, width, and length (60 to 480 customary or metric cubic units). | SMMA_LO_00174 |
|                            |                                                                                                                                                                                                                                                                        | Find the volume of a prism by packing the prism with unit cubes.                                               | SMMA_LO_02042 |
|                            |                                                                                                                                                                                                                                                                        | Find the volume of a rectangular solid by counting cubes.                                                      | SMMA_LO_00833 |
|                            |                                                                                                                                                                                                                                                                        | Find the volume of concrete needed to build a life-size model of Stonehenge                                    | SMMA_LO_02508 |
|                            |                                                                                                                                                                                                                                                                        | Find the volume of a right rectangular prism with fractional edge lengths.                                     | SMMA_LO_02169 |
|                            |                                                                                                                                                                                                                                                                        | Find the volume of a rectangular solid by counting cubes.                                                      | SMMA_LO_00829 |
| AR.Math.Content.5.MD.C.5.c | Apply the formulas $V = l \times w \times h$ and $V = B \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems.                                    | Compute the volume of right rectangular prisms using formulas.                                                 | SMMA_LO_02043 |
|                            |                                                                                                                                                                                                                                                                        | Determine the volume of a box given the height, width, and length (60 to 480 customary or metric cubic units). | SMMA_LO_00174 |

| Arkansas Standards Codes   | Arkansas Mathematics Curriculum Framework 2016 Grade 5                                                                                                                                           | SuccessMaker Item Description                                                                                                                     | Item ID       |
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|                            |                                                                                                                                                                                                  | Find the volume of concrete needed to build a life-size model of Stonehenge                                                                       | SMMA_LO_02508 |
|                            |                                                                                                                                                                                                  | Find the volume of a rectangular or triangular prism.                                                                                             | SMMA_LO_00838 |
|                            |                                                                                                                                                                                                  | Find the volume of a right rectangular prism with fractional edge lengths.                                                                        | SMMA_LO_02169 |
|                            |                                                                                                                                                                                                  | Solve for a variable in the formula for volume of a rectangular prism (whole numbers and mixed numbers).                                          | SMMA_LO_01817 |
|                            |                                                                                                                                                                                                  | Calculate the volume of a rectangular prism; then convert the cubic feet or cubic meters into gallons or liters.                                  | SMMA_LO_01819 |
|                            |                                                                                                                                                                                                  | Find the volume of a rectangular solid by counting cubes.                                                                                         | SMMA_LO_00829 |
| AR.Math.Content.5.MD.C.5.d | Recognize volume as additive.                                                                                                                                                                    | Find the volume of concrete needed to build a life-size model of Stonehenge                                                                       | SMMA_LO_02508 |
|                            |                                                                                                                                                                                                  | Find the volume of a three-dimensional figure by decomposing that figure into two right rectangular prisms and then adding those prisms' volumes. | SMMA_LO_02044 |
| AR.Math.Content.5.MD.C.5.e | Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems. | Find the volume of concrete needed to build a life-size model of Stonehenge                                                                       | SMMA_LO_02508 |
| AR.Math.Content.5.G        | Geometry                                                                                                                                                                                         |                                                                                                                                                   |               |

| Arkansas Standards Codes | Arkansas Mathematics Curriculum Framework 2016 Grade 5                                                                                                                                                                                                                                                                                        | SuccessMaker Item Description                                                                                                                 | Item ID       |
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| AR.Math.Content.5.G.A    | Graph points on the coordinate plane to solve real-world and mathematical problems. Note: Graphing will be limited to the first quadrant and the non-negative x- and y-axes only.                                                                                                                                                             |                                                                                                                                               |               |
| AR.Math.Content.5.G.A.1b | Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate). | Identify a point on a coordinate grid given the ordered pair.                                                                                 | SMMA_LO_01092 |
|                          |                                                                                                                                                                                                                                                                                                                                               | Identify a point on a grid given an ordered pair, or identify the ordered pair for a point shown on the grid.                                 | SMMA_LO_01057 |
|                          |                                                                                                                                                                                                                                                                                                                                               | Ratios and Equations Targeted<br>Lesson 29:<br>Coordinates                                                                                    |               |
| AR.Math.Content.5.G.A.2a | Represent real world and mathematical problems by graphing points in the first quadrant and on the non-negative x- and y-axes of the coordinate plane.                                                                                                                                                                                        | Ratios and Equations Targeted<br>Lesson 30: What's My Rule?                                                                                   |               |
|                          |                                                                                                                                                                                                                                                                                                                                               | Given a coordinate grid to represent outcomes of tossing a pair of number cubes, identify the point that represents a given pair of outcomes. | SMMA_LO_01218 |
|                          |                                                                                                                                                                                                                                                                                                                                               | Graph a point on a coordinate grid (Quadrant I).                                                                                              | SMMA_LO_01735 |

| Arkansas Standards Codes | Arkansas Mathematics Curriculum Framework 2016 Grade 5                 | SuccessMaker Item Description                                                                                                                             | Item ID       |
|--------------------------|------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
|                          |                                                                        | Given a coordinate grid to represent outcomes of tossing a pair of number cubes, identify all points that represent the sum given for a pair of outcomes. | SMMA_LO_01219 |
|                          |                                                                        | Graph a set of ordered pairs from a table on a coordinate plane (Quadrant I).                                                                             | SMMA_LO_01808 |
|                          |                                                                        | Graph a set of ordered pairs from a table on a coordinate plane (Quadrant I).                                                                             | SMMA_LO_01809 |
| AR.Math.Content.5.G.A.2b | Interpret coordinate values of points in the context of the situation. | Given a coordinate grid to represent outcomes of tossing a pair of number cubes, identify the point that represents a given pair of outcomes.             | SMMA_LO_01218 |
|                          |                                                                        | Given a coordinate grid to represent outcomes of tossing a pair of number cubes, identify all points that represent the sum given for a pair of outcomes. | SMMA_LO_01219 |