## Standards Correlation: <br> Symphony Math® and Missouri Learning Standards (MLS)

| Missouri Learning Standards |  | Symphony Math |  |
| :---: | :---: | :---: | :---: |
| MLS CODE | Description | Stage References | Concepts |
| K.NS.A. 1 | Count to 100 by ones and tens. | 1.1 | Sequencing |
| K.NS.A. 2 | Count forward beginning from a given number between 1 and 20. | 1.3 | Counting Forward |
| K.NS.A. 3 | Count backward from a given number between 10 and 1. | 1.4 | Counting Backward |
| K.NS.A. 4 | Read and write numerals and represent a number of objects from 0 to 20. | 1.2 | Identifying Numbers |
| K.NS.B. 5 | Say the number names when counting objects, in the standard order, pairing each object with one and only one number name and each number name with one and only one object. | 1.2 | Identifying Numbers |
| K.NS.B. 6 | Demonstrate that the last number name said tells the number of objects counted and the number of objects is the same regardless of their arrangement or the order in which they were counted. | 1.2 | Identifying Numbers |
| K.NS.B. 7 | Demonstrate that each successive number name refers to a quantity that is one larger than the previous number. | 2.1 | Find 'One More' |
| K.NS.B. 8 | Recognize, without counting, the quantity of groups up to 5 objects arranged in common patterns. | 1.2 | Identifying Numbers |
| K.NS.B. 9 | Demonstrate that a number can be used to represent "how many" are in a set. | 1.2 | Identifying Numbers |


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| MLS CODE | Description | Stage References | Concepts |
| K.NS.C. 10 | Compare two or more sets of objects and identify which set is equal to, more than or less than the other. | 2.3, 2.4, 2.5 | Find 'More', Find 'Less', Same' |
| K.NS.C. 11 | Compare two numerals, between 1 and 10, and determine which is more than or less than the other. | $5.1,5.2,5.3$ | Comparing Numbers: Equals, Greater, \& Less Than |
| K.NBT.A. 1 | Compose and decompose numbers from 11 to 19 into sets of tens with additional ones. | 4.3 | 10 Plus |
| K.RA.A. 1 | Represent addition and subtraction within 10. | $\begin{gathered} 3.1,3.2,3.3,3.4 \\ 4.2 \end{gathered}$ | Beginning Add. \& Sub., Making 10 |
| K.RA.A. 2 | Demonstrate fluency for addition and subtraction within 5. | MR 1, MR 2 | Fluency: Add and Subtract within 5 |
| K.RA.A. 3 | Decompose numbers less than or equal to 10 in more than one way. | 4.1, 4.2, 4.4 | Introducing 10,Making 10, Subtracting with 10 |
| K.RA.A. 4 | Make 10 for any number from 1 to 9. | 4.1, 4.2,4.4 | Introducing 10,Making 10, Subtracting with 10 |
| 1.NS.A. 2 | Read and write numerals and represent a number of objects with a written numeral. | Stage 1; <br> Extensions Stage 1 | Identifying Numbers |
| 1.NS.A. 3 | Count backward from a given number between 20 and 1. | 1.4, 2.2, <br> Extensions Stage 2 | Count Backwards, Find 'One Less' |
| 1.NS.A. 4 | Count by 5 s to 100 starting at any multiple of five. |  |  |
| 1.NBT.A. 1 | Understand that 10 can be thought of as a bundle of 10 ones - called a "ten". | 4.1, 4.2 | Introducing 10,Making 10 |
| 1.NBT.A. 2 | Understand two-digit numbers are composed of ten (s) and ones (s). | 4.3 | 10 Plus |
| 1.NBT.A. 3 | Compare two two-digit numbers using the symbols $>$, $=$ or $<$. | 5.1, 5.2, 5.3 | Equals, Greater Than, Less Than |
| 1.NBT.A. 4 | Count by 10 s to 120 starting at any number. | 7.2 | Ordering 10s |

## Missouri Learning Standards

## MLS CODE

## Description

Add within 100.
Calculate 10 more or 10 less than a given number mentally without having to count.
Add or subtract a multiple of 10 from another two-digit number, and justify the solution.

Use addition and subtraction within 20 to solve problems.

| 1.RA.A. 2 | Solve problems that call for addition of three whole numbers whose sum |
| :--- | :--- |
| is within 20. |  |

1.RA.A. 3

Develop the meaning of the equal sign and determine if equations involving addition and subtraction are true or false.

| 1.RA.A.4 | Determine the unknown whole number in an addition or subtraction <br> equation relating three whole numbers. |
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| 1.RA.B. 5 | Use properties as strategies to add and subtract. <br> problem. |
| 1.RA.B. 6 | Add and subtract within 20. |
| 1.RA.C. 7 | Demonstrate fluency with addition and subtraction within 10. <br> 1.RA.C. 8 |
| ones. |  |

## Symphony Math

## Concepts

Advanced Addition, Add \& Subtract with 10s

Find "Ten More," Find "Ten Less"

Related 1s and 10s
Add \& Subtract to 20 using models, number sentence construction, and math language describing parts-whole relationships.

Three-part Addition \& Subtraction
All program content mixes orientation of equals sign to ensure that students attend to the true meaning of the equals sign, rather than understanding it as a procedural mechanism.

Three-part Add \& Sub with Missing Change\& Result

Commutative Property, Fact Families
Advanced Add. And Sub: Missing Change
3.1-3.7 6.1-6.6 Addition and Subtraction, with missing whole, part, and parts.

MR 3, MR 4 Fluency: Add \& Subtract Within 10
9.1, 9.6, 9.7 Identifying Hundreds, Related 1s, 10s, 100s, Add \& Sub. Hundreds \& Tens

Identifying Hundreds
Ordering 10s, Ordering 100s, Part to Whole (1s, 10, 100s)

| Missouri Learning Standards |  | Symphony Math |  |
| :---: | :---: | :---: | :---: |
| MLS CODE | Description | Stage References | Concepts |
| 2.NBT.A. 4 | Read and write numbers to 1000 using number names, base-ten numerals and expanded form. | 9.7, 10.5 | Add/Subtract Hundreds \& Tens, Part to Whole (1s, 10, 100s) |
| 2.NBT.A. 5 | Compare two three-digit numbers using the symbols $>$, $=$ or $<$. | 9.8 | Compare Hundreds |
| 2.NBT.B. 6 | Demonstrate fluency with addition and subtraction within 100. | MR 7, MR 8 | Fluency: Add \& Subtract Within [200]* |
| 2.NBT.B. 7 | Add up to four two-digit numbers. | 8.5, 8.8 | Part-Whole with 1s and 10s Adding With Multiples of 10 |
| 2.NBT.B. 8 | Add or subtract within 1000, and justify the solution. | $\begin{aligned} & 10.1-10.7 \\ & 12.1-12.5 \end{aligned}$ | Addition \& Subtraction with 100s. Regrouping with 2- and 3-digits. |
| 2.NBT.B. 9 | Use the relationship between addition and subtraction to solve problems. | All Content with Add. \& Sub. | Program emphasis on the underlying structure of numbers supports number composing and decomposing |
| 2.NBT.B. 10 | Add or subtract mentally 10 or 100 to or from a given number within 1000. | $\begin{gathered} 8.6,8.7,10.6 \\ 10.7 \end{gathered}$ | Part-to-Whole with 1 s and 10s, 100s (+10, $-10,+100,-100)$ |
| 2.NBT.C. 11 | Write and solve problems involving addition and subtraction within 100. | All Content with Add. \& Sub. | Opportunities with contextual problems throughout |
| 2.RA.A. 1 | Demonstrate fluency with addition and subtraction within 20. | MR 5, MR 6 | Fluency: Add \& Subtract Within 20 |
| 2.RA.B. 3 | Find the total number of objects arranged in a rectangular array with up to 5 rows and 5 columns, and write an equation to represent the total as a sum of equal addends. | 11.3, 13.1-13.5 | Equal Groupings/Visual Model, Mult. \& Div. With Area Model |
| 2.GM.A.3a | Partition circles and rectangles into two, three or four equal shares, and describe the shares and the whole. | 14.1 | Dividing a Whole |
| 2.GM.C. 9 | Represent whole numbers as lengths on a number line, and represent whole-number sums and differences within 100 on a number line. | $\begin{array}{r} 10.1-10.7 \\ 12.1-12.5 \end{array}$ | Addition \& Subtraction within 100s on a Number Line, Regrouping with 2- and 3-digits on a Number Line |
| 3.NBT.A. 3 | Demonstrate fluency with addition and subtraction within 1000. | MR 7, MR 8 | Fluency: Add \& Subtract Within [200]* |
| 3.NBT.A. 4 | Multiply whole numbers by multiples of 10 in the range 10-90. | 16.1, 16.2 | Mult. by 1, 10, [100] |


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| MLS CODE |  | Stage <br> References |  |
| 3.NF.A.1 | Understand a unit fraction as the quantity formed by one part when a <br> whole is partitioned into equal parts. <br> Understand that when a whole is partitioned equally, a fraction can be <br> used to represent a portion of the whole. | $14.1,14.2$ | Concepts |


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| MLS CODE | Description | Stage References | Concepts |
| 3.RA.B. 6 | Apply properties of operations as strategies to multiply and divide. | 13.7, 13.8 | Commutative Property, Distributive Property |
| 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. | $\begin{array}{r} 13.1-13.8 \\ 15.1-15.8 \end{array}$ | Mult. \& Division/Commutative \& Distributive Props. |
| 3.RA.C. 8 | Demonstrate fluency with products within 100. | MR 9, MR10 | Fluency; Multiply\& Divide Within 30/100 |
| 3.RA.D. 9 | Write and solve two-step problems involving variables using any of the four operations. | All Content | Content Includes Missing Parts/Story Problems |
| 3.GM.C. 12 | Multiply whole-number side lengths to solve problems involving the area of rectangles. | 22.1 | 1-Digit x 2-Digi/Area Model |
|  |  | 22.4 | Division Missing Factor and Divisor/Area Model |
| 3.GM.C. 13 | Find rectangular arrangements that can be formed for a given area. | 22.1, 22.3, 22.5 | 1-x 2-, 1-x 3-, 2-x 2-Digits/Area Model |
| 3.GM.C. 14 | Decompose a rectangle into smaller rectangles to find the area of the original rectangle. | 22.4 | Division Missing Factor and Divisor/Area Model |
| 4.NBT.A. 3 | Compare two multi-digit numbers using the symbols $>$, $=$ or <, and justify the solution. | 9.8, 10.8 | Compare Hundreds, Compare Three-Digit Numbers |
| 4.NBT.A. 4 | Understand that in a multi-digit whole number, a digit represent 10 times what it would represents in the place to its right. | 16.1-16.5 | Multiply \& Divide with 1/10/100 |
| 4.NBT.A. 5 | Demonstrate fluency with addition and subtraction of whole numbers. | MR 3-MR 8 | Fluency: Add \& Subtract Within 10-200 Including Missing Change |
| 4.NBT.A. 6 | Multiply a whole number of up to four digits by a one-digit whole number and multiply two two-digit numbers, and justify the solution. | 22.1, 22.3, 22.5 | $1-\times 2-$, 1-x 3-, 2-x 2-Digits/Justify Solutions |
| 4.NBT.A. 7 | Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, and justify the solution. | 22.2, 22.4 | Division with Remainders/Missing Factors and Divisor/Justify Solutions |
| 4.NF.A. 1 | Explain and/or illustrate why two fractions are equivalent. | 17.1 | Equivalent Fractions |
| 4.NF.A. 2 | Recognize and generate equivalent fractions. | 17.1, 19.3 | Equivalent Fractions, Equivalence with 10ths \& 100ths |


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| 4.NF.A. 3 | Compare two fractions using the symbols >, = or <, and justify the solution. | 17.2 | Comparing Fractions |
| 4.NF.B. 4 | Understand addition and subtraction of fractions as joining/composing and separating/decomposing parts referring to the same whole. | $\begin{aligned} & \text { 17.3-17.6, } \\ & \text { 18.1-18.4 } \end{aligned}$ | Add \& Subtract Unit Fractions, Add and Subtract Non Unit Fractions |
| 4.NF.B. 5 | Decompose a fraction into a sum of fractions with the same denominator and record each decomposition with an equation and justification. | $\begin{gathered} \text { 17.3-17.6 } \\ \text { 18.1-18.4 } \end{gathered}$ | Add \& Subtract Unit Fractions, Add and Subtract Non Unit Fractions |
| 4.NF.B. 6 | Solve problems involving adding and subtracting fractions and mixed numbers with like denominators. | $\begin{gathered} \text { 17.3-17.6, } \\ \text { 18.1-18.4, } 20.4 \end{gathered}$ | Add \& Subtract Unit Fractions, Add and Subtract Non Unit Fractions, Decomposing Mixed Numbers |
| 4.NF.B. 7 | Apply and extend previous understandings of multiplication to multiply a fraction by a whole number. | 23.1, 23.2 | Whole Numbers x Unit Fractions, Whole Numbers x Non-Unit Fractions |
| 4.NF.B. 8 | Solve problems involving multiplication of a fraction by a whole number. | 23.1-23.3 | Whole Numbers x Unit Fractions, Whole Numbers x Non-Unit Fractions/Missing Part |
| 4.NF.C. 9 | Use decimal notation for fractions with denominators of 10 or 100. | 19.5 | Decimal Notation for 10ths and 100ths |
| 4.NF.C. 10 | Understand that fractions and decimals are equivalent representations of the same quantity. | 19.3, 19.5 | Equvalence/Decimal Notation: 10ths \& 100ths |
| 4.NF.C. 11 | Read, write and identify decimals to the hundredths place using number names, base ten numerals and expanded form. | $\begin{gathered} 19.1,19.2,19.4 \\ 19.5 \end{gathered}$ | Identiying \& Notating Decimals |
| 4.NF.C. 12 | Compare two decimals to the hundredths place using the symbols $>,=$ or <, and justify the solution. | 19.6 | Comparing Decimal Numbers with Visual Models |
| 4.RA.A. 1 | Multiply or divide to solve problems involving a multiplicative comparison. | 22.1-22.5 | Expanded Mode Multiplication \&Division |
| 4.RA.A. 2 | Solve multi-step whole number problems involving the four operations and variables and using estimation to interpret the reasonableness of the answer. | $\begin{aligned} & \text { 21.1-21.8, } \\ & \text { 22.1-22.5 } \end{aligned}$ | Add. Subtraction, Multiplication \& Division, Missing Parts/Justifying Solutions/, Visual Models for Answer Reasonableness |
| 4.RA.A. 3 | Solve whole number division problems involving variables in which remainders need to be interpreted, and justify the solution. | 22.2, 22.4 | Division with Remainders/Missing Factors and Divisor/Justify Solutions |
| 4.RA.B. 4 | Recognize that a whole number is a multiple of each of its factors and find the multiples for a given whole number. | 15.1-15.8 | Mult. \& Div./Factors \& Multiples to 100 |


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| 5.NBT.A. 3 | Understand that in a multi-digit number, a digit represents $1 / 10$ times what it would represents in the place to its left. | 24.2-24.3, 25.1 | Magnitude and Place Value/Decimals to Thousandths |
| 5.NBT.A. 4 | Evaluate the value of powers of 10 and understand the relationship to the place value system. | 24.2-24.3, 25.1 | Magnitude and Place Value/Decimals to Thousandths |
| 5.NBT.A. 5 | Round numbers from billions to thousandths place. |  |  |
| 5.NBT.A. 6 | Add and subtract multi-digit whole numbers and decimals to the thousandths place, and justify the solution. | 25.1, 25.2 | Add and Subtract Decimals/Justify Solutions |
| 5.NBT.A. 7 | Multiply multi-digit whole numbers and decimals to the hundredths place, and justify the solution. | 26.1, 26.2, 26.4 | 1- Digit x, 3-Digits x, Decimal x Decimal/Justify Solutions |
| 5.NBT.A. 8 | Divide multi-digit whole numbers and decimals to the hundredths place using up to two-digit divisors and four-digit dividends, and justify the solution. | 26.1,26.2, 26.3 | Mult. \& Division with Decimals/Justify Solutions |
| 5.NF.A. 1 | Understand that parts of a whole can be expressed as fractions and/or decimals. | $\begin{gathered} \text { 14.1-14.4, 19.2, } \\ 19.5 \end{gathered}$ | Dividing Wholes, Whole Numbers as Fractions, Identifying Decimals, Decimal Notation |
| 5.NF.A. 2 | Convert decimals to fractions and fractions to decimals. | 19.3, 19.5, 25.1 | Decimal/Fraction Conversions |
| 5.NF.A. 3 | Compare and order fractions and/or decimals to the thousandths place using the symbols >, $=$ or $<$, and justify the solution. | $\begin{gathered} 17.2,19.1,19.6 \\ 25.3 \end{gathered}$ | Comparing/Ordering Fractions/Decimals |
| 5.NF.B. 4 | Estimate results of sums, differences and products with fractions and decimals to the thousandths. | $\begin{gathered} 19.4,25.2 \\ 26.1-26.4 \end{gathered}$ | Add, Subtract, Mutiply Fractions/Decimals |
| 5.NF.B.5a | Justify the reasonableness of a product when multiplying with fractions. | 23.1, 23.2 | Multiplying Fractions/Justify Solutions |
| 5.NF.B.5b | Justify the reasonableness of a product when multiplying with fractions. | $\begin{gathered} \text { 20.1, 20.2, 23.1, } \\ 23.2 \end{gathered}$ | Fractions Greater than One/Mult. with Fractions > 1/Justify Solutions |
| 5.NF.B.5c | Justify the reasonableness of a product when multiplying with fractions. | 23.3 | Fractions X Whole Numbers: Missing Part |
| 5.NF.B.7b | Extend the concept of multiplication to multiply a fraction or whole number by a fraction. | 23.1-23.2 | Multiplying Fractions and Whole Numbers |


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| MLS CODE | Description | Stage References | Concepts |
| 5.NF.B.8a | Extend the concept of division to divide unit fractions and whole numbers by using visual fraction models and equations. | 23.3 | Fractions X Whole Numbers: Missing Part |
| 5.NF.B.8b | Extend the concept of division to divide unit fractions and whole numbers by using visual fraction models and equations. | 23.3 | Fractions X Whole Numbers: Missing Part |
| 5.RA.C. 5 | Solve and justify multi-step problems involving variables, whole numbers, fractions and decimals. | 21.1-21.8 <br> 22.1-22.5, <br> 23.1-23.3 <br> 24.1-24.3 <br> 26.1-26.4 | Using all 4 Operations, Whole Numbers, Fractions, \& Decimals, Solve and Justify Problems |
| 6.NS.B. 2 | Demonstrate fluency with division of multi-digit whole numbers. | MR 11 | Fluency; Multiply\& Divide With Place Value |

