



# Symphony Math<sup>®</sup> Correlation

## Common Core State Standards for Mathematics

Common Core State Standards for Mathematics					Symphony Math	
Grade	#	Domain	Cluster	Standard	Stage	Activity
K	K.CC.1	Counting and Cardinality	Know number names and the count sequence.	Count to 100 by ones and by tens.	Two-Digit & Three-Digit Numbers	Symbols
K	K.CC.2	Counting and Cardinality	Know number names and the count sequence.	Count forward beginning from a given number within the known sequence (instead of having to begin at 1).	Number Sense	Symbols
K	K.CC.3	Counting and Cardinality	Know number names and the count sequence.	Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).	Two-Digit & Three-Digit Numbers	Manipulatives & Symbols
K	K.CC.4	Counting and Cardinality	Count to tell the numbers of objects.	Understand the relationship between numbers and quantities; connect counting to cardinality.	Number Sense	Manipulatives & Symbols
K	K.CC.4a	Counting and Cardinality	Count to tell the numbers of objects.	When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.	Number Sense	Symbols
K	K.CC.4b	Counting and Cardinality	Count to tell the numbers of objects.	Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.	Number Sense	Symbols
K	K.CC.4c	Counting and Cardinality	Count to tell the numbers of objects.	Understand that each successive number name refers to a quantity that is one larger.	Number Sense	Symbols
K	K.CC.5	Counting and Cardinality	Count to tell the numbers of objects.	Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.	Two-Digit & Three-Digit Numbers	Manipulatives

Common Core State Standards for Mathematics					Symphony Math	
Grade	#	Domain	Cluster	Standard	Stage	Activity
K	K.CC.6	Counting and Cardinality	Compare numbers.	Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.	Number Sense	Manipulatives
K	K.CC.7	Counting and Cardinality	Compare numbers.	Compare two numbers between 1 and 10 presented as written numerals.	Number Sense	Symbols
K	K.OA.1	Operations and Algebraic Thinking	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.	Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.	Introduction to Addition & Subtraction	All
K	K.OA.2	Operations and Algebraic Thinking	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.	Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.	Introduction to Addition & Subtraction	All
K	K.OA.3	Operations and Algebraic Thinking	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.	Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$ ).	Introduction to Addition & Subtraction	Manipulatives
K	K.OA.4	Operations and Algebraic Thinking	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.	For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.	Introduction to Addition & Subtraction	Manipulatives & Symbols
K	K.OA.5	Operations and Algebraic Thinking	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.	Fluently add and subtract within 5.	Introduction to Addition & Subtraction	Symbols

Common Core State Standards for Mathematics					Symphony Math	
Grade	#	Domain	Cluster	Standard	Stage	Activity
K	K.MD.1	Measurement and Data	Describe and compare measurable attributes.	Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.	Introduction to Addition & Subtraction	Manipulatives
K	K.MD.2	Measurement and Data	Describe and compare measurable attributes.	Directly compare two objects with a measurable attribute in common, to see which object has “more of”/“less of” the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.	Number Sense	Manipulatives
1	1.OA.1	Operations and Algebraic Thinking	Represent and solve problems involving addition and subtraction.	Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. <sup>2</sup>	Advanced Addition & Subtraction	Word Problems
1	1.OA.2	Operations and Algebraic Thinking	Represent and solve problems involving addition and subtraction.	Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.	Advanced Addition & Subtraction	Word Problems
1	1.OA.3	Operations and Algebraic Thinking	Understand and apply properties of operations and the relationship between addition and subtraction.	Apply properties of operations as strategies to add and subtract. <sup>3</sup> Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$ , the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$ . (Associative property of addition.)	Advanced Addition & Subtraction	Symbols
1	1.OA.4	Operations and Algebraic Thinking	Understand and apply properties of operations and the relationship between addition and subtraction.	Understand subtraction as an unknown-addend problem. For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8.	Advanced Addition & Subtraction	Symbols
1	1.OA.5	Operations and Algebraic Thinking	Add and subtract within 20.	Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).	Advanced Addition & Subtraction	Symbols

Common Core State Standards for Mathematics					Symphony Math	
Grade	#	Domain	Cluster	Standard	Stage	Activity
1	1.OA.6	Operations and Algebraic Thinking	Add and subtract within 20.	Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$ ); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$ ); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$ , one knows $12 - 8 = 4$ ); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$ ).	Advanced Addition & Subtraction	Symbols
1	1.OA.7	Operations and Algebraic Thinking	Work with addition and subtraction equations.	Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? $6 = 6$ , $7 = 8 - 1$ , $5 + 2 = 2 + 5$ , $4 + 1 = 5 + 2$ .	Advanced Addition & Subtraction	Symbols
1	1.OA.8	Operations and Algebraic Thinking	Work with addition and subtraction equations.	Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$ , $5 = ? - 3$ , $6 + 6 = ?$ .	Advanced Addition & Subtraction	Symbols
1	1.NBT.1	Number and Operations in Base Ten	Extend the counting sequence.	Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.	Two-Digit & Three-Digit Numbers	Symbols
1	1.NBT.2	Number and Operations in Base Ten	Understand place value.	Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:	Two-Digit & Three-Digit Numbers	Symbols
1	1.NBT.2.a	Number and Operations in Base Ten	Understand place value.	10 can be thought of as a bundle of ten ones — called a “ten.”	Two-Digit & Three-Digit Numbers	Symbols
1	1.NBT.2.b	Number and Operations in Base Ten	Understand place value.	The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.	Two-Digit & Three-Digit Numbers	Symbols

Common Core State Standards for Mathematics					Symphony Math	
Grade	#	Domain	Cluster	Standard	Stage	Activity
1	1.NBT.2.c	Number and Operations in Base Ten	Understand place value.	The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).	Ones, Tens & Hundreds	Symbols
1	1.NBT.3	Number and Operations in Base Ten	Understand place value.	Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$ , $=$ , and $<$ .	Two-Digit & Three-Digit Numbers	Symbols
1	1.NBT.4	Number and Operations in Base Ten	Use place value understanding and properties of operations to add and subtract.	Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.	Adding & Subtracting Two-digit Numbers	Symbols
1	1.NBT.5	Number and Operations in Base Ten	Use place value understanding and properties of operations to add and subtract.	Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.	Adding & Subtracting Two-digit Numbers	Symbols
1	1.NBT.6	Number and Operations in Base Ten	Use place value understanding and properties of operations to add and subtract.	Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	Adding & Subtracting Two-digit Numbers	Symbols
1	1.MD.1	Measurement and Data	Measure lengths indirectly and by iterating length units.	Order three objects by length; compare the lengths of two objects indirectly by using a third object.	Number Sense	Manipulatives

Common Core State Standards for Mathematics					Symphony Math	
Grade	#	Domain	Cluster	Standard	Stage	Activity
1	1.MD.2	Measurement and Data	Measure lengths indirectly and by iterating length units.	Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.	Introduction to Multiplication & Division	Manipulatives & Symbols
1	1.G.3	Geometry	Reason with shapes and their attributes.	Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.	Introduction to Multiplication & Division	Manipulatives
2	2.OA.1	Operations and Algebraic Thinking	Represent and solve problems involving addition and subtraction.	Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.1	Adding & Subtracting Two-digit Numbers	Symbols
2	2.OA.2	Operations and Algebraic Thinking	Add and subtract within 20.	Fluently add and subtract within 20 using mental strategies.2 By end of Grade 2, know from memory all sums of two one-digit numbers.	Advanced Addition & Subtraction	Symbols
2	2.OA.3	Operations and Algebraic Thinking	Work with equal groups of objects to gain foundations for multiplication.	Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.	Advanced Addition & Subtraction	Manipulatives
2	2.NBT.1A	Number and Operations in Base Ten	Understand place value.	Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases: 100 can be thought of as a bundle of ten tens — called a “hundred.”	Two-Digit & Three-Digit Numbers	Symbols

Common Core State Standards for Mathematics					Symphony Math	
Grade	#	Domain	Cluster	Standard	Stage	Activity
2	2.NBT.1B	Number and Operations in Base Ten	Understand place value.	Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases: The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).	Two-Digit & Three-Digit Numbers	Symbols
2	2.NBT.2	Number and Operations in Base Ten	Understand place value.	Count within 1000; skip-count by 5s, 10s, and 100s.	Two-Digit & Three-Digit Numbers	Symbols
2	2.NBT.3	Number and Operations in Base Ten	Understand place value.	Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.	Two-Digit & Three-Digit Numbers	Symbols
2	2.NBT.4	Number and Operations in Base Ten	Understand place value.	Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$ , $=$ , and $<$ symbols to record the results of comparisons.	Two-Digit & Three-Digit Numbers	Symbols
2	2.NBT.5	Number and Operations in Base Ten	Use place value understanding and properties of operations to add and subtract.	Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	Adding & Subtracting Two-digit Numbers	Symbols
2	2.NBT.6	Number and Operations in Base Ten	Use place value understanding and properties of operations to add and subtract.	Add up to four two-digit numbers using strategies based on place value and properties of operations.	Adding & Subtracting Two-digit Numbers	Symbols
2	2.NBT.7	Number and Operations in Base Ten	Use place value understanding and properties of operations to add and subtract.	Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.	Adding & Subtracting Two-digit Numbers	Symbols

Common Core State Standards for Mathematics					Symphony Math	
Grade	#	Domain	Cluster	Standard	Stage	Activity
2	2.NBT.8	Number and Operations in Base Ten	Use place value understanding and properties of operations to add and subtract.	Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.	Adding & Subtracting Two-digit Numbers	Symbols
2	2.NBT.9	Number and Operations in Base Ten	Use place value understanding and properties of operations to add and subtract.	Explain why addition and subtraction strategies work, using place value and the properties of operations. <sup>3</sup>	Adding & Subtracting Two-digit Numbers	Symbols
2	2.G.3	Geometry	Reason with shapes and their attributes.	Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.	Introduction to Fractions	Manipulatives
3	3.OA.1	Operations and Algebraic Thinking	Represent and solve problems involving multiplication and division.	Interpret products of whole numbers, e.g., interpret $5 \times 7$ as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as $5 \times 7$ .	Intermediate Multiplication & Division	Symbols
3	3.OA.2	Operations and Algebraic Thinking	Represent and solve problems involving multiplication and division.	Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$ .	Intermediate Multiplication & Division	Symbols
3	3.OA.3	Operations and Algebraic Thinking	Represent and solve problems involving multiplication and division.	Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. (1)	Intermediate Multiplication & Division	Symbols
3	3.OA.4	Operations and Algebraic Thinking	Represent and solve problems involving multiplication and division.	Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$ , $5 = ? \div 3$ , $6 \times 6 = ?$ .	Intermediate Multiplication & Division	Symbols

Common Core State Standards for Mathematics					Symphony Math	
Grade	#	Domain	Cluster	Standard	Stage	Activity
3	3.OA.5	Operations and Algebraic Thinking	Understand properties of multiplication and the relationship between multiplication and division.	Apply properties of operations as strategies to multiply and divide. (2) Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$ , then $15 \times 2 = 30$ , or by $5 \times 2 = 10$ , then $3 \times 10 = 30$ . (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$ , one can find $8 \times 7$ as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$ . (Distributive property.)	Intermediate Multiplication & Division	Symbols
3	3.OA.6	Operations and Algebraic Thinking	Understand properties of multiplication and the relationship between multiplication and division.	Understand division as an unknown-factor problem. For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8.	Intermediate Multiplication & Division	Symbols
3	3.OA.7	Operations and Algebraic Thinking	Multiply and divide within 100.	Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$ , one knows $40 \div 5 = 8$ ) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.	Intermediate Multiplication & Division	Symbols
3	3.NBT.2	Number and Operations in Base Ten	Use place value understanding and properties of operations to perform multi-digit arithmetic. (4)	Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.	Adding & Subtracting Three-digit Numbers	Symbols
3	3.NF.1	Number and Operations—Fractions (5)	Develop understanding of fractions as numbers.	Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into $b$ equal parts; understand a fraction $a/b$ as the quantity formed by $a$ parts of size $1/b$ .	Introduction to Fractions	Manipulatives & Symbols

Common Core State Standards for Mathematics					Symphony Math	
3	3.NF.3	Number and Operations—Fractions (5)	Develop understanding of fractions as numbers.	Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.	Non-Unit Fractions	Symbols
3	3.NF.3a	Number and Operations—Fractions (5)	Develop understanding of fractions as numbers.	Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.	Non-Unit Fractions	Manipulatives
3	3.NF.3b	Number and Operations—Fractions (5)	Develop understanding of fractions as numbers.	Recognize and generate simple equivalent fractions, e.g., $1/2 = 2/4$ , $4/6 = 2/3$ . Explain why the fractions are equivalent, e.g., by using a visual fraction model.	Non-Unit Fractions	Manipulatives & Symbols
3	3.NF.3c	Number and Operations—Fractions (5)	Develop understanding of fractions as numbers.	Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: Express 3 in the form $3 = 3/1$ ; recognize that $6/1 = 6$ ; locate $4/4$ and 1 at the same point of a number line diagram.	Improper Fractions	Symbols
3	3.NF.3d	Number and Operations—Fractions (5)	Develop understanding of fractions as numbers.	Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols $>$ , $=$ , or $<$ , and justify the conclusions, e.g., by using a visual fraction model.	Improper Fractions	Symbols