

FEBRUARY 2019

# CURRICULUM Correlation



\*Correlation content includes both Waterford Digital Resources and Waterford Teacher Resources.

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OHIO STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES*
PRE-MATH-KINDERGARTEN		
COUNTING AND CARDINALITY		
Know number names and count the	e sequence	
K.CC.1 Count to 100 by ones and by tens.	<ul> <li>Number Songs</li> <li>Counting Songs</li> <li>Math Books (See titles at end of document.)</li> <li>Number Counting</li> <li>Order Numbers</li> <li>Number Instruction</li> <li>Skip Counting</li> <li>Counting Puzzle</li> </ul>	<ul> <li>Count to 100 by ones and tens.pdf: Count to 100 by ones and tens.</li> <li>Missing Numbers</li> <li>Count On By 1</li> <li>Numbers 1-5</li> <li>Numbers 6-10</li> <li>Count By 10s</li> <li>Numbers 60-69</li> <li>I Can Count to 100</li> </ul>
K.CC.2 Count forward within 100 beginning from a given number other than 1.	<ul> <li>Count On</li> <li>Counting Songs (See titles at end of document.)</li> <li>Counting Puzzle</li> <li>Dot-to-Dot</li> </ul>	<ul> <li>Counting forward.pdf: Count forward beginning with given number within the known sequence.</li> <li>Let's Count On</li> <li>Toss and Count</li> <li>Count On by 1</li> <li>Flashcards</li> </ul>
K.CC.3 Write numerals from 0 to 20. Represent a number of objects with a written numeral 0–20 (with 0 representing a count of no objects).	<ul> <li>Math Books</li> <li>Counting Songs</li> <li>Number Songs (See titles at end of document.)</li> <li>Number Counting</li> <li>Number Instruction</li> <li>Counting Puzzle</li> </ul>	<ul> <li>Writing from 0 to 20.pdf: Write numbers from 0 to 20 Represent a number of objects with a written numera</li> <li>Numbers Practice: 1-20</li> <li>Numbers 1-5</li> <li>Add groups</li> <li>Count on by 1</li> <li>Number Writing Practice: 0-20</li> </ul>

<sup>\*</sup> Waterford Teacher Resources are available for download in the Waterford Manager (<a href="https://manager.waterford.org/">https://manager.waterford.org/</a>).





OHIO STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Count to tell the number of objects	5	
Understand the relationship between numbers and quantities; connect counting to cardinality using a variety of objects including pennies. K.CC.4a. When counting objects, establish a one-to-one relationship by saying 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.	<ul> <li>Counting Songs</li> <li>Number Songs</li> <li>Math Books</li> <li>Number Counting</li> <li>Order Numbers</li> <li>One-to-one Correspondence</li> <li>Make and Count Groups</li> <li>Number Instruction</li> <li>Counting Puzzle</li> <li>Dot-to-Dot</li> </ul>	<ul> <li>Object Counting Basics.pdf: 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.</li> <li>Number Walk</li> </ul>
K.CC.4b. 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.	<ul> <li>Make and Count Groups</li> <li>Number Counting</li> <li>Match Numbers</li> <li>One-to-One Correspondence</li> <li>Number Instruction</li> </ul>	<ul> <li>Object Counting Grouping.pdf: 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.</li> <li>Mixed Up Counting</li> </ul>
K.CC.4c. Understand that each successive number name refers to a quantity that is one larger (hierarchical inclusion).	<ul><li>Make and Count Groups</li><li>Number Counting</li><li>Match Numbers</li><li>One-to-One Correspondence</li></ul>	<ul> <li>Object Counting Succession.pdf: Understand that each successive number name refers to a quantity that is one larger.</li> <li>Hoop Addition</li> </ul>
K.CC.5. 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.	<ul> <li>Counting Songs</li> <li>Number Songs</li> <li>Math Books (See titles at end of document.)</li> <li>Make and Count Groups</li> <li>Number Counting</li> <li>Order Numbers</li> <li>Number Instruction</li> <li>Numbers Review</li> <li>Match Numbers</li> <li>Bug Fun</li> <li>One-to-one Correspondence</li> </ul>	<ul> <li>How many?.pdf: 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.         <ul> <li>Hoop Addition</li> </ul> </li> </ul>





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Compare numbers		
K.CC.6. Orally identify (without using inequality symbols) whether the number of objects in one group is greater/more than, less/fewer than, or the same as the number of objects in another group, not to exceed 10 objects in each group.	<ul> <li>Songs: Greater Than, Less Than; More Than, Fewer Than</li> <li>Book: For the Birds</li> <li>Greater Than, Less Than</li> <li>More Than, Fewer Than</li> <li>More Than</li> <li>Fewer Than</li> <li>Make a Math Story: More Than, Fewer Than</li> </ul>	Greater, less, or equal.pdf: Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group.  Beans and More  More Than Buttons  Short Names, Long Names  Noodle Necklaces  Groups Do Count!  More Than, Fewer Than, Equal  Which Has More? 1  Fewer Than  More or Fewer  Which Has More? 2  Greater or Less  More Than/Fewer Than Flashcard Sets
K.CC.7. Compare (without using inequality symbols) two numbers between 0 and 10 when presented as written numerals.	<ul> <li>Songs: Greater Than, Less Than; More Than, Fewer Than</li> <li>Book: For the Birds</li> <li>Greater Than, Less Than</li> <li>More Than, Fewer Than</li> <li>More Than</li> <li>Fewer Than</li> <li>Order Numbers</li> <li>Make a Math Story: More Than, Fewer Than</li> </ul>	<ul> <li>Comparing numbers.pdf: Compare two numbers between 1 and 10 presented as written numerals.</li> <li>More or Less Spinner</li> <li>Catch Me If You Can!</li> <li>Greater or Less</li> <li>Less or Greater</li> <li>Spinner</li> <li>Board game</li> <li>Number cards</li> </ul>
OPERATIONS AND ALGEBRAIC TH	IINKING	
Understand addition as putting to	gether and adding to, and understand subtraction as ta	king apart and taking from
K.OA.1 Represent addition and subtraction with objects, fingers, mental images, drawings, sounds such as claps, acting out situations, verbal explanations, expressions, or equations. Drawings need not show details, but should show the mathematics in the problem. (This applies wherever drawings are mentioned in the Standards.).	<ul> <li>Songs: Addition; Pirates Can Add; On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction</li> <li>Book: Five Delicious Muffins</li> <li>Make and Count Groups</li> <li>Add Groups</li> <li>Subtract Groups</li> <li>Act Out Addition</li> <li>Act Out Subtraction</li> </ul>	





OHIO STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Understand addition as putting tog	ether and adding to, and understand subtraction as ta	king apart and taking from <i>continued</i>
K.OA.2 Solve addition and subtraction problems (written or oral), and add and subtract within 10 by using objects or drawings to represent the problem.	<ul> <li>Songs: Addition; Pirates Can Add; On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction</li> <li>Book: Five Delicious Muffins</li> <li>Add Groups</li> <li>Subtract Groups</li> <li>Minuends to 5</li> <li>Minuends to 9</li> <li>Sums to 4-10 and Subtract from 4-9</li> <li>Act Out Addition</li> <li>Act Out Subtraction</li> <li>Flower Story Problems</li> <li>Story Problem Strategies</li> </ul>	<ul> <li>Addition and subtraction word problems.pdf: Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.</li> <li>Additions Stories</li> <li>Act It Out Stories</li> <li>Manipulative Stories</li> <li>Edible Stories</li> <li>One, Two, Three, Show</li> <li>Circus Subtraction</li> <li>Partner Subtraction</li> <li>Farmer's Market</li> <li>Green and Speckled Frogs</li> <li>Cars and Trucks Subtraction</li> <li>Yummy Subtraction</li> <li>Act Out Addition</li> <li>Act Out Subtraction</li> <li>Subtraction Flashcards</li> </ul>
K.OA.3. Decompose numbers and record compositions for numbers less than or equal to 10 into pairs in more than one way by using objects and, when appropriate, drawings or equations.	<ul> <li>Make and Count Groups</li> <li>Minuends to 5</li> <li>Subtract Groups</li> <li>Act Out Subtraction</li> <li>Subtract Doubles to 10</li> </ul>	
K.OA.4. 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, when appropriate, an equation.	<ul> <li>Missing Addends</li> <li>Count On</li> <li>Doubles, Sums to 10</li> <li>Doubles Plus 1, Sums to 10</li> <li>Act Out Addition</li> <li>Flower Story Problems</li> </ul>	





OHIO STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Understand addition as putting tog	gether and adding to, and understand subtraction as ta	aking apart and taking from <i>continued</i>
K.OA.5. Fluently add and subtract within 5.	<ul> <li>Songs: Addition; Pirates Can Add; On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction</li> <li>Book: Five Delicious Muffins</li> <li>Add Groups to 5</li> <li>Subtract Groups</li> <li>Minuends to 5</li> <li>Subtract from 5</li> <li>Sums</li> <li>Act Out Addition</li> <li>Act Out Subtraction</li> </ul>	
NUMBERS AND OPERATIONS IN B.	ASE TEN	
Work with numbers 11-19 to gain fo	undations for place value.	
K.NBT.1 Compose and decompose numbers from 11 to 19 into a group of ten ones and some further ones by using objects and, when appropriate, drawings or equations; understand that these numbers are composed of a group of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.	Place Value	<ul> <li>Tens and ones.pdf: Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation; understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.</li> <li>Place Value 11-19</li> </ul>
MEASUREMENT AND DATA		
Identify, describe, and compare me	asurable attributes	
K.MD.1 Identify and describe measurable attributes (length, weight, and height) of a single object using vocabulary terms such as long/short, heavy/light, or tall/short.	<ul> <li>Songs: Measuring Plants; Savanna Size</li> <li>Length</li> <li>Size</li> <li>Tall and Short</li> <li>Heavy and Light</li> <li>Big and Little</li> </ul>	<ul> <li>Measurable attributes.pdf: Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.</li> <li>Filling Table</li> <li>Order It Up</li> <li>Straw Rulers</li> <li>Measuring Walk</li> <li>Heavy or Light</li> <li>Make A Balance</li> <li>Measurable Attributes</li> </ul>





OHIO STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Identify, describe, and compare me	asurable attributes <i>continued</i>	
K.MD.2 Directly compare two objects with a measurable attribute in common to see which object has "more of" or "less of" the attribute, and describe the difference. For example, directly compare the heights of two children, and describe one child as taller/shorter	<ul> <li>Songs: Savanna Size, Measuring Plants</li> <li>Length</li> <li>Order Size</li> <li>Big and Little</li> <li>Tall and Short</li> <li>Heavy and Light</li> <li>Size</li> </ul>	Comparing objects.pdf: Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.  Filling Table  Order It Up  Straw Rulers  Measuring Walk  Heavy or Light  Make A Balance  Size Scavenger Hunt  Big and Little Sort  Boxes in a Line  Teddy Bear Line-Up  Magazine Sorting  Tall and Short  Big and Little  Tall and Short  Heavy and Light  Small, Medium, Large  Measuring Length  Measurable Attributes
Classify objects and count the num	ber of objects in each category.	
K.MD.3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. The number of objects in each category should be less than or equal to ten. Counting and sorting coins should be limited to pennies.	<ul> <li>Songs: Same and Different; All Sorts of Laundry</li> <li>Book: Buttons, Buttons</li> <li>Match</li> <li>Sort</li> <li>Make and Count Groups</li> </ul>	<ul> <li>Classifying objects.pdf: Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.</li> <li>Let's Sort</li> <li>Sort</li> </ul>





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GEOMETRY		
Identify and describe shapes (squa	res, circles, triangles, rectangles, hexagons, cubes, cor	ies, cylinders, and spheres).
K.G.1 Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.	<ul> <li>Songs: Positioning; Kites; Get Over the Bugs; Shapes, Shapes, Shapes</li> <li>Books: The Shape of Things; Imagination Shapes; Up in the Air</li> <li>Position</li> <li>Over, Under, Above, Below</li> <li>Above, Below, Next to, On</li> <li>Over, Under, and Through</li> <li>Inside, Outside, Between</li> <li>Circle, Square, Triangle, Rectangle</li> <li>Star, Semicircle, Octagon, Oval, Diamond</li> <li>Solid Shapes</li> <li>World Shapes</li> <li>Story Problem Strategies: Shapes</li> </ul>	Describing objects.pdf: Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.     Shapes Scavenger Hunt
K.G.2. Correctly name shapes regardless of their orientations or overall size.	<ul> <li>Songs: Kites; Shapes, Shapes</li> <li>Books: The Shape of Things; Imagination Shapes</li> <li>Circle, Square, Triangle, Rectangle</li> <li>Star, Semicircle, Octagon, Oval, Diamond</li> <li>Simple Shapes</li> <li>Solid Shapes</li> <li>World Shapes</li> <li>Story Problem Strategies: Shapes</li> </ul>	<ul> <li>Shape recognition.pdf: Correctly name shapes regardless of their orientations or overall size.</li> <li>Shapes Scavenger Hunt</li> <li>Shapes and Positioning</li> <li>Shapes Flashcards</li> </ul>
K.G.3. Identify shapes as two- dimensional (lying in a plane, flat) or three-dimensional (solid).	<ul><li>Solid Shapes</li><li>Space Shapes</li><li>Simple Shapes</li></ul>	
Describe, compare, create, and cor	npose shapes	
K.G.4. Describe and compare two- or three-dimensional shapes, in different sizes and orientations, using informal language to describe their commonalities, differences, parts, and other attributes.	<ul> <li>Song: Corners and Sides</li> <li>Simple Shapes</li> <li>Solid Shapes</li> <li>Space Shapes</li> <li>Congruence</li> <li>Tangrams</li> <li>Similar Figures</li> <li>Story Problem Strategies: Similar Figures</li> </ul>	





OHIO STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Describe, compare, create, and com	npose shapes <i>continued</i>	
K.G.5. Model shapes in the world by building shapes from components e.g., sticks and clay balls, and drawing shapes.	<ul><li>Geoboard</li><li>Tangrams</li></ul>	
K.G.6. Combine simple shapes to form larger shapes.	Geoboard     Tangrams	
BASIC MATH—FIRST GRADE		
OPERATIONS AND ALGEBRAIC TH	INKING	
Represent and solve problems invo	lving addition and subtraction	
1.OA.1 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.	<ul> <li>Songs: Fact Families; Doubles</li> <li>Book: Facts About Families</li> <li>Addition and Subtraction Fact Families</li> <li>Addition and Subtraction Relationship</li> <li>Doubles, Sums to 20</li> <li>Subtract Doubles to 20</li> <li>Problem Solving Strategy: Model or Act Out</li> <li>Story Problem Strategies</li> </ul>	<ul> <li>Word problems using subtraction within 20.pdf: 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.</li> <li>Guess and Check</li> <li>Model the Story</li> </ul>
1.OA.2 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. Drawings need not show details, but should show the mathematics in the problem. (This applies wherever drawings are mentioned in the Standards.)	<ul> <li>Story Problem Strategies: Add 3 One-digit Numbers</li> <li>Problem Solving Strategy: Model or Act Out</li> <li>Doubles, Sums to 20</li> </ul>	Word problems adding 3 numbers.pdf: Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20.     Draw a Picture





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Understand and apply properties o	f operations and the relationship between addition an	nd subtraction
1.OA.3 Apply properties of operations as strategies to add and subtract. For example, 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.) Students need not use formal terms for these properties.	<ul> <li>Addition and Subtraction Relationship</li> <li>Addition and Subtraction Fact Families</li> <li>Subtraction Patterns</li> <li>Commutative Property of Addition</li> <li>Kingdom of Counting: Commutative Property of Addition</li> </ul>	
1.OA.4 Understand subtraction as an unknown-addend problem. For example, subtract 10 – 8 by finding the number that makes 10 when added to 8.	<ul> <li>Missing Addends</li> <li>Subtraction Patterns</li> <li>Addition and Subtraction Fact Families</li> <li>Kingdom of Counting: Missing Minuends and Subtrahends, Missing Addends, Missing Addends to Sums to 10</li> </ul>	Understand subtraction as an unknown addend problem.pdf: Understand subtraction as an unknown- addend problem. Add and subtract within 20.
Add and subtract within 20		
1.OA.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).	<ul> <li>Song: Counting On</li> <li>Books: Circus 20; Painting by Number</li> <li>Jump Rope Rhymes</li> <li>Skip Count by 2</li> <li>Count On</li> <li>Make and Count Groups</li> <li>Add Groups</li> <li>Subtract Groups</li> </ul>	<ul> <li>Relate counting to addition and subtraction.pdf: Relate counting to addition and subtraction.</li> <li>Skip Counting Chant</li> <li>Jump Rope Counting</li> <li>Related Facts</li> <li>Count by 10s</li> <li>Count by 5s</li> <li>Count by 2s</li> </ul>





OHIO STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Add and subtract within 20 continu	red	
1.OA.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Strategies may include 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).	<ul> <li>Songs: Fact Families; Counting On</li> <li>Books: Facts about Families; Circus 20; Painting by Number</li> <li>Addition and Subtraction Fact Families</li> <li>Addition Sentences</li> <li>Subtraction Sentences</li> <li>Commutative Property of Addition</li> <li>Addition and Subtraction Relationship</li> <li>Missing Addends</li> <li>Missing Minuends and Subtrahends</li> <li>Add 3 One-digit Numbers</li> <li>Subtraction Patterns</li> <li>Speed Games</li> </ul>	<ul> <li>Add and subtract within 20.pdf: Add and subtract within 20, demonstrating fluency for addition and subtraction within 10.</li> <li>The Three Little Bears</li> <li>Fact Family Bingo</li> <li>A Graph of Fact Families</li> <li>Bean Facts</li> <li>Draw a Picture</li> <li>Addition</li> <li>Number Pyramid</li> <li>Subtraction Sentences</li> <li>Model the Story</li> <li>Fact Families</li> <li>Add _ and 1-5</li> <li>Add _ and 6-10</li> <li>Order Property of Addition</li> <li>Add Doubles +1 to 11</li> <li>Add Doubles to 20</li> <li>Add Doubles +1 to 21)</li> <li>Make 10</li> <li>Subtract _ from</li> <li>Subtract</li> <li>Subtract</li> <li>Subtract</li> <li>Fact Families to 10</li> <li>Fact Families to 20</li> <li>Add and Subtract Doubles to 10</li> <li>Add and Subtract Doubles to 20</li> <li>Sets of flashcards:</li> <li>Addition—horizontal</li> <li>Subtraction—horizontal</li> <li>Subtraction—horizontal</li> <li>Subtraction—horizontal</li> <li>Subtraction—horizontal</li> <li>Subtraction—horizontal</li> </ul>





OHIO STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Work with addition and subtraction	n equations	
1.OA.7. 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? $6 = 6$ , $7 = 8 - 1$ , $5 + 2 = 2 + 5$ , $4 + 1 = 5 + 2$ .	<ul> <li>Addition Sentences</li> <li>Subtraction Sentences</li> <li>Greater Than, Less Than</li> <li>More Than, Fewer Than</li> </ul>	
1.OA.8. 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 $8 + ? = 11, 5 = ? - 3, 6 + 6 = ?$ .	<ul> <li>Addition Sentences</li> <li>Subtraction Sentences</li> <li>Addition and Subtraction Fact Families</li> <li>Missing Addends</li> <li>Missing Minuends and Subtrahends</li> </ul>	
NUMBERS AND OPERATIONS IN BA	ASE TEN	
Extend the counting sequence		
1.NBT.1 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.	<ul> <li>Song: Counting On</li> <li>Books: Painting by Number; Circus 20; Hooray, Hooray for the One Hundredth Day!</li> <li>Count On</li> <li>Number Chart</li> </ul>	Count to 120.pdf: 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.  Mystery Numbers  I Can Write Numbers to 99  Numbers 20-29  Numbers 30-39  Numbers 40-49  Numbers 50-59  Numbers 60-69  Counting to 89  Counting Charts:  I Can Count to 50  I Can Count to 100  I Can Count to 199  I Can Count to 120





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Understand place value		
1.NBT.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: 10 can be thought of as a bundle of ten ones—called a "ten;" the numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones; and 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).	<ul> <li>Song: Place Value</li> <li>Place Value of 2-digit Numbers</li> <li>Expanded Notation</li> <li>Add with Manipulatives</li> </ul>	<ul> <li>Tens as a bundle of ones.pdf: 10 can be thought of as a bundle of ten ones—called a "ten."</li> <li>Popsicles to Ten</li> </ul>
1.NBT.3 Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.	<ul> <li>Place Value</li> <li>Greater Than, Less Than (2-digit Numbers)</li> <li>You Be the Teacher: Greater Than, Less Than</li> </ul>	
Use place value understanding and	properties of operations to add and subtract	
1.NBT.4. 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; record the strategy with a written numerical method (drawings and, when appropriate, equations) and explain the reasoning used. Understand that when adding two-digit numbers, tens are added to tens; ones are added to ones; and sometimes it is necessary to compose a ten.	<ul> <li>Addition</li> <li>Add Tens</li> <li>Doubles</li> <li>Doubles Plus 1</li> <li>Add with Manipulatives</li> <li>Add Vertical Squares</li> <li>Add with Beads</li> <li>Addition and Subtraction Relationship</li> <li>Flower Story Problems</li> <li>Story Problem Strategies</li> <li>Add with Regrouping Concept</li> <li>Add 2-digit and 1-digit Numbers with Regrouping</li> <li>Add 2-digit Numbers without Regrouping</li> <li>Add 2-digit Numbers with Regrouping</li> <li>You Be the Teacher: Add 2-digit Numbers with Regrouping</li> <li>You Be the Teacher: Add 2-digit Numbers with Regrouping</li> <li>You Be the Teacher: Add 2-digit Numbers with Regrouping</li> </ul>	<ul> <li>Adding within 100.pdf: 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).</li> <li>Drawing Tens</li> <li>Beans, Beans, and More Beans</li> <li>The Kingdom of Popsicle Stick-Filled Purses</li> <li>Straws and Macaroni</li> <li>Bean Addition</li> <li>Adding Tens and Ones</li> <li>Color Adds Up</li> <li>Cookies and Milk!</li> <li>Addition of Two-Digit Numbers</li> <li>Addition and Subtraction of Large Numbers</li> <li>1 set of flashcards</li> </ul>





OHIO STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Use place value understanding and	properties of operations to add and subtract continu	ed
1.NBT.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.	<ul> <li>Song: Skip Counting</li> <li>Book: Navajo Beads</li> <li>Add 10 and 6-10</li> <li>Subtract 10 from 10-20</li> <li>Add Tens</li> <li>Subtract Tens</li> <li>Skip Count by 10</li> <li>Number Chart</li> </ul>	Ten more or less.pdf: Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.  Ten-O Toss It Make a Number Subtract 10 Flashcards Bingo Addition of Tens
1.NBT.6. 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.	<ul> <li>Subtraction</li> <li>Subtraction Sentences</li> <li>Subtract Tens</li> <li>Subtraction Patterns</li> <li>Subtract 10 from 10-20</li> <li>Act Out Subtraction</li> <li>Place Value</li> <li>Addition and Subtraction Relationship</li> <li>Use Manipulatives</li> <li>You Be the Teacher: Subtraction</li> </ul>	<ul> <li>Subtracting in 10s.pdf: Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90.</li> <li>Ten-O</li> <li>Bingo</li> <li>Subtract Multiples of 10</li> </ul>





OHIO STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
MEASUREMENT AND DATA		
Measure lengths indirectly and by i	terating length units	
1.MD.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object.	<ul><li>Length</li><li>Nonstandard Units of Length</li></ul>	
1.MD.2 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.	Length     Nonstandard Units of Length	<ul> <li>Length Measurement.pdf: 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.         <ul> <li>Measures of Me</li> <li>Measure a Handful</li> <li>Estimating Length</li> <li>A Fruit and Vegetable</li> <li>Measure Up!</li> <li>Inches/Centimeters Rulers</li> </ul> </li> </ul>
Work with time and money.		
1.MD.3 Work with time and money.  a. Tell and write time in hours and half-hours using analog and digital clocks.  b. Identify pennies and dimes by name and value.	<ul> <li>Songs: Clock Hands; Money; Save Your Pennies</li> <li>Books: Mr. Romano's Secret: A Time Story; How Long is a Minute?; Bugs For Sale</li> <li>Tell Time to the Hour</li> <li>Tell Time to the Half-Hour</li> <li>Compare Minutes to Hours</li> <li>Sequence Times</li> <li>Order Numbers on a Clock</li> <li>Coin Identification</li> <li>Count Dimes, Nickels, and Pennies</li> <li>Count Nickels and Pennies or Dimes and Pennies</li> </ul>	Hours and Half-hours.pdf: Tell and write time in hours and half-hours using analog and digital clocks.  What Comes After, Before, Or Between?  Make Your Own Clock  Learning to Tell Time  Matching Time  What Numbers are Missing?  What Time Is It?  Time of Day  Clock flashcards





OHIO STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Represent and interpret data		
1.MD.4 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.	<ul> <li>Songs: Tallying; Graphing</li> <li>Books: One More Cat; Painting by Number</li> <li>Tally Marks</li> <li>Problem Solving Strategy: Make a Graph, Make a Table</li> <li>Graphs</li> <li>Make a Table</li> <li>Story Problem Strategies: Graphs</li> </ul>	Data Categorization.pdf: Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.      Ice Cream Sundae     Make A Real Object Graph     Make a Weather Bar Graph     Weather Flashcards     Our Favorite Foods     Make a Graph     Make a table     How Many?     Bugs!     Use Graphs and Tables     How Big Is Your Family?
GEOMETRY		
Reason with shapes and their attrib	outes	
1.G.1 Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.	<ul> <li>Songs: Corners and Sides; Kites</li> <li>Geoboard</li> <li>Circle, Square, Triangle, Rectangle</li> <li>Oval, Star, Semicircle, Diamond, Octagon</li> <li>Space Shapes</li> <li>Simple Shapes</li> <li>Solid Shapes</li> </ul>	
1.G.2 Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape. [Students do not need to learn formal names such as "right rectangular prism."]	<ul> <li>Song: Kites</li> <li>Space Shapes</li> <li>Story Problem Strategies: Space Shapes</li> <li>Geoboard</li> <li>Tangrams</li> <li>Simple Shapes</li> <li>Circle, Square, Triangle, Rectangle</li> <li>Oval, Star, Semicircle, Diamond, Octagon</li> </ul>	





OHIO STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Reason with shapes and their attrib	outes continued	
1.G.3 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 in real-world contexts. Understand for these examples that decomposing into more equal shares creates smaller shares.	<ul> <li>Song: Fractions</li> <li>Books: Halves and Fourths and Thirds; Half For You and Half For Me</li> <li>Equal-part Fractions</li> <li>Label Parts of Fractions</li> <li>Story Problem Strategies: Equal-part Fractions, Label Parts of Fractions</li> </ul>	
FLUENT MATH—SECOND GRADE		
OPERATIONS AND ALGEBRAIC TH	IINKING	
Represent and solve problems invo	lving addition and subtraction	
2.OA.1 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.	<ul> <li>Book: Painting by Number</li> <li>Addition</li> <li>Subtraction</li> <li>Problem Solving Strategies: Act Out Addition; Act Out Subtraction</li> <li>Story Problem Strategies</li> <li>Missing Addends and Subtrahends</li> <li>Subtraction Sentences</li> <li>Addition and Subtraction Facts</li> </ul>	Solving one and two step word problems within 100. pdf: 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.  Animal Math  Picture Problems  Act it Out  Guess and Check
Add and subtract within 20		
2.OA.2 Fluently add and subtract within 20 using mental strategies. By end of grade 2, know from memory all sums of two one-digit numbers. See standard 1.OA.6 for a list of mental strategies.	<ul> <li>Songs: Fact Families; Doubles</li> <li>Mental Math Games: Addition Facts; Missing Addends and Subtrahends; Addition and Subtraction Facts</li> <li>Speed Games: Addition and Subtraction Facts</li> <li>Subtraction Patterns</li> <li>Addition Facts to 20</li> </ul>	Adding and subtracting within 20.pdf: Fluently add and subtract within 20 using mental strategies. By end of grade 2, know from memory all sums of two one-digit numbers.      Sets of flashcards:     Addition—horizontal     Subtraction—horizontal     Addition—vertical     Subtraction—vertical     Addition and subtraction—horizontal and vertical





OHIO STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Work with equal groups of objects	to gain foundations for multiplication	
2.OA.3. 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.	<ul> <li>Song: Odd Todd and Even Steven</li> <li>Skip Count by 2</li> <li>Addition Facts</li> </ul>	Odd and even recognition.pdf: Determine whether a group of objects (up to 20) has an odd or even number of members.     Missing Patterns     Counting by 2s     What's My Number?
2.OA.4. Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.	Addition     Act Out Addition	
NUMBERS AND OPERATIONS IN BA	ASE TEN	
Understand place value		
2.NBT.1. 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:  a. 100 can be thought of as a bundle of ten tens—called a "hundred."  b. 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).	Song: Place Value     Place Value of 3-digit Numbers	<ul> <li>Thinking of 100 as a bundle of ten 10s.pdf: 100 can be thought of as a bundle of ten tens—called a "hundred." <ul> <li>The Kingdom of Popsicle Stick-Filled Purses</li> </ul> </li> <li>Grouping hundreds.pdf: 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). <ul> <li>My Three-Digit Numbers</li> </ul> </li> </ul>





OHIO STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Understand place value <i>continued</i>		
2.NBT.2. Count forward and backward within 1000 by ones, tens, and hundreds starting at any number; skip-count by 5s starting at any multiple of 5.	<ul> <li>Songs: Skip Counting; Counting Backward; Counting On</li> <li>Book: A Space Adventure</li> <li>Count On</li> <li>Count Down</li> <li>Skip Count</li> <li>Skip Count by 10</li> <li>Skip Count by 5</li> <li>Story Problem Strategies: Skip Count</li> <li>Number Sequences and Patterns</li> </ul>	Counting within 1000.pdf: Count within 1,000; skip-count by 5s, 10s, and 100s.  Chart Patterns  My 199 Picture  My 200 Picture  My 299 Picture  My 300 Picture  My 399 Picture  My 400 Picture  My 400 Picture  My 500 Picture  My 599 Picture  My 699 Picture  My 699 Picture  My 700 Picture  900 Chart
2.NBT.3. Read and write numbers to 1000 using base-ten numerals, number names, expanded form, and equivalent representations, e.g., 716 is 700 + 10 + 6, or 6 + 700 + 10, or 6 ones and 71 tens, etc.	<ul> <li>Sequences of 2-digit Numbers</li> <li>Sequences of 3-digit Numbers</li> <li>Number Chart</li> <li>Place Value</li> </ul>	
2.NBT.4. Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.	<ul> <li>Story Problem Strategies: Greater Than, Less Than 3-digit</li> <li>Greater Than, Less Than (3-digit Numbers)</li> <li>Place Value of 3-digit Numbers</li> </ul>	<ul> <li>Less than, equal to, or greater than.pdf: Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using &gt;, =, and &lt; symbols to record the results of comparisons.</li> <li>More or Less</li> <li>The Hands Have It!</li> <li>Larger or Smaller?</li> <li>Comparing Number Cards</li> <li>Number Cards</li> <li>&lt;,&gt;, = Cards</li> <li>Greater Than, Less Than, Equal To</li> </ul>





OHIO STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Use place value understanding and	properties of operations to add and subtract	
2.NBT.5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	<ul> <li>Place Value</li> <li>Addition and Subtraction Relationship</li> <li>Commutative Properties of Addition</li> <li>Addition</li> <li>Subtraction</li> <li>Add without Regrouping</li> <li>Add with Regrouping</li> <li>Subtract without regrouping</li> <li>Subtract with Regrouping</li> <li>Subtract with Regrouping</li> <li>Speed Games</li> <li>Mental Math Games</li> </ul>	<ul> <li>Adding or subtracting within 100.pdf: Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</li> <li>Addition Flashcards</li> <li>Addition of Two-Digit Numbers</li> <li>Tic Tac Toe</li> <li>Subtraction of Two-Digit Numbers</li> </ul>
2.NBT.6. Add up to four two-digit numbers using strategies based on place value and properties of operations.	<ul><li>Add Two-digit Numbers with Regrouping</li><li>Commutative Properties of Addition</li><li>Place Value</li></ul>	<ul> <li>Adding four 2-digit numbers.pdf: Add up to four two-digit numbers using strategies based on place value and properties of operations.</li> <li>Add Four Two-Digit Numbers</li> </ul>
2.NBT.7. 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; record the strategy with a written numerical method (drawings and, when appropriate, equations) and explain the reasoning used. Understand that in adding or subtracting three-digit numbers, hundreds are added or subtracted from hundreds, tens are added or subtracted from tens, ones are added or subtracted from ones; and sometimes it is necessary to compose or decompose tens or hundreds	<ul> <li>Place Value</li> <li>Addition and Subtraction Relationship</li> <li>Commutative Properties of Addition</li> <li>Addition</li> <li>Subtraction</li> <li>Add without Regrouping</li> <li>Add with Regrouping</li> <li>Subtract without regrouping</li> <li>Subtract with Regrouping</li> <li>Act Out Addition</li> <li>Act Out Subtraction</li> </ul>	<ul> <li>Add and subtract within 1000.pdf: Add and subtract within 1,000, 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.</li> <li>Choose and Add</li> <li>Mix and Match Addition</li> <li>Expanded Subtraction</li> <li>Subtracting Repeats</li> <li>999</li> <li>Prediction</li> <li>Up and Away</li> <li>Regrouping Treasure Hunt</li> <li>Play Ball</li> <li>Squirrel Facts</li> <li>Number Cards</li> </ul>





OHIO STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Use place value understanding and	properties of operations to add and subtract cont.	inued
2.NBT.8. Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900.	<ul> <li>Mental Math Games</li> <li>Speed Games</li> <li>Skip Count</li> <li>Place Value</li> <li>Number Chart</li> <li>Number Patterns</li> </ul>	<ul> <li>Mentally adding or subtracting 10 or 100.pdf: Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.</li> <li>Spin and Solve (with spinner and numbers cards)</li> </ul>
2.NBT.9. Explain why addition and subtraction strategies work, using place value and the properties of operations.  Explanations may be supported by drawings or objects.	<ul> <li>Addition</li> <li>Subtraction</li> <li>Add with Regrouping Concept</li> <li>Subtract with Regrouping Concept</li> <li>Place Value</li> <li>Number Line</li> <li>Addition and Subtraction Relationship</li> <li>Commutative Properties of Addition</li> <li>Act Out Addition</li> <li>Act Out Subtraction</li> </ul>	<ul> <li>Explaining addition and subtraction strategies.pdf:         Explain why addition and subtraction strategies work,         using place value and the properties of operations.         <ul> <li>Cube Trails</li> <li>Race for a Flat</li> <li>High/Low Number Cube Throw</li> <li>Lucky Five</li> <li>Hundreds, Tens, Ones Chart</li> <li>Numbers Cards</li> </ul> </li> </ul>
MEASUREMENT AND DATA		
Measure and estimate lengths in sta	andard units	
2.MD.1 Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.	<ul> <li>Song: Measuring Plants</li> <li>Book: Birds at My House</li> <li>Length</li> <li>Measurement Tools</li> <li>Standard Units of Length</li> </ul>	<ul> <li>Measurement tools.pdf: Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.         <ul> <li>Ready, Set, Measure</li> <li>Treasure Hunt</li> <li>Centimeter ruler</li> <li>Inch Ruler</li> <li>Let's Measure in Centimeters!</li> <li>Let's Measure in Inches!</li> </ul> </li> </ul>
2.MD.2 Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.	<ul><li>Length</li><li>Standard Units of Length</li></ul>	<ul> <li>Measuring the same object two ways.pdf: Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.</li> <li>Ready, Set, Measure</li> </ul>





OHIO STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Measure and estimate lengths in standard units <i>continued</i>		
2.MD.3 Estimate lengths using units of inches, feet, centimeters, and meters.	<ul> <li>Song: Measuring Plants</li> <li>Length</li> <li>Standard Units of Length</li> <li>Measurement Tools</li> </ul>	<ul> <li>Estimating lengths.pdf: Estimate lengths using units of inches, feet, centimeters, and meters.</li> <li>Ready, Set, Measure</li> <li>Treasure Hunt</li> <li>Let's Measure in Centimeters!</li> <li>Let's Measure in Inches!</li> <li>Measuring Perimeter</li> </ul>
2.MD.4 Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.	<ul><li>Length</li><li>Standard Units of Length</li></ul>	
Relate addition and subtraction to	length	
2.MD.5 Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same whole number units, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. Drawings need not show details, but should show the mathematics in the problem. (This applies wherever drawings are mentioned in the Standards.)	<ul> <li>Book: Yangshi's Perimeter</li> <li>Story Problem Strategies: Standard Units of Length</li> <li>Addition</li> <li>Subtraction</li> <li>Length</li> <li>Standard Units of Length</li> </ul>	
2.MD.6 Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2,, and represent whole-number sums and differences within 100 on a number line diagram.	<ul><li>Number Line</li><li>Length</li></ul>	





OHIO STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Work with time and money		
2.MD.7 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	<ul> <li>Songs: Telling Time; Clock Hands</li> <li>Book: How Long is a Minute?</li> <li>Tell Time</li> <li>Tell Time to Five Minutes</li> <li>Tell Time to the Quarter Hour</li> <li>Tell Time to the Minute</li> <li>Tell Time to the Hour</li> <li>Tell Time to the Half-hour</li> </ul>	
<ul> <li>2.MD.8. Solve problems with money.</li> <li>a. Identify nickels and quarters by name and value.</li> <li>b. Find the value of a collection of quarters, dimes, nickels, and pennies.</li> <li>c. Solve word problems by adding and subtracting within 100, dollars with dollars and cents with cents (not using dollars and cents simultaneously) using the \$ and ¢ symbols appropriately (not including decimal notation).</li> </ul>	<ul> <li>Count Dimes, Nickels, and Pennies</li> <li>Count Quarters, Dimes, Nickels, and Pennies</li> <li>Count Nickels and Pennies or Dimes and Pennies</li> <li>Make Change</li> <li>Count Coins</li> </ul>	<ul> <li>Money word problems.pdf: Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately.</li> <li>Supermarket Hunt</li> <li>Shopping for My Family</li> <li>Money Combinations</li> <li>Money Sums</li> <li>Pizza Parlor</li> <li>How Much Back?</li> <li>Coin Count</li> <li>Bills and Coins</li> <li>Let's Count Coins</li> <li>Money Addition</li> <li>Change is Good!</li> <li>Make 45¢</li> </ul>
Represent and interpret data		
2.MD.9. Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by creating a line plot, where the horizontal scale is marked off in whole-number units.		<ul> <li>Generating measurement data.pdf: Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.</li> <li>Measuring Inches</li> <li>Ready, Set, Measure</li> <li>Let's Measure in Centimeters!</li> </ul>





OHIO STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES	
Represent and interpret data conti	Represent and interpret data <i>continued</i>		
2.MD.10. Organize, represent, and interpret data with up to four categories; complete picture graphs when single-unit scales are provided; complete bar graphs when single-unit scales are provided; solve simple put-together, take-apart, and compare problems in a graph.	<ul> <li>Song: Graphing</li> <li>Graphing</li> <li>Bar Graphs</li> <li>Picture Graphs</li> <li>Use Graphs and Tables</li> </ul>		
GEOMETRY			
Reason with shapes and their attrib	outes		
2.G.1 Recognize and identify triangles, quadrilaterals, pentagons, and hexagons based on the number of sides or vertices. Recognize and identify cubes, rectangular prisms, cones, and cylinders.	<ul> <li>Songs: Kites; Shapes, Shapes, Shapes; Corners and Sides</li> <li>Book: The Shape of Things</li> <li>Circle, Square, Triangle, Rectangle</li> <li>Oval, Star, Semicircle, Diamond, Octagon</li> <li>Space Shapes</li> <li>World Shapes</li> <li>Story Problem Strategies: Space Shapes</li> </ul>		
2.G.2. Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.	<ul> <li>Song: Fractions</li> <li>Fractions of Regions</li> <li>Story Problem Strategies: Fractions of Regions, Fractions of Groups</li> <li>You Be the Teacher: Fractions of Regions</li> </ul>		
2.G.3. Partition circles and rectangles into two, three, or four equal shares; describe the shares using the words halves, thirds, or fourths and quarters, and use the phrases half of, third of, or fourth of and quarter of. Describe the whole as two halves, three thirds, or four fourths in real-world contexts. Recognize that equal shares of identical wholes need not have the same shape.	<ul> <li>Song: Fractions</li> <li>Books: Halves and Fourths and Thirds; The Fraction Twins; Half For You and Half For Me</li> <li>Fractions</li> <li>Label Parts of Fractions</li> <li>Fractions of Regions</li> <li>Fractions of Groups</li> <li>Story Problem Strategies: Fractions of Regions, Fractions of Groups</li> <li>You Be the Teacher: Fractions of Regions, Fractions of Groups</li> </ul>		

### WATERFORD Books and Related Activities



#### **PRE-MATH & SCIENCE**

#### **Math Books**

One Day on the Farm; Two Feet; Look for Three; Four Fine Friends; Grandpa's Great Athlete: A Book About 5; Hide and Seek Six; Just Seven; Eight at the Lake; 9 Cat Night; Ten for My Machine: The Search for Eleven: The Tasty Number Twelve; Thirteen in My Garden; Fourteen Camel Caravan; Fifteen on a Spring Day; Dinner for Sixteen; The Seventeen Machine; Eighteen Carrot Stew; Nineteen Around the World; Twenty Clay Children; Poor Wandering 1; Snowy Twos Day: 1, 2, 3, 4 in the Jungle: Give Me 5; Suzy Ladybug: 7 Train: 8 Octopus Legs: Highway 9: 10 Astronauts; When I Saw 11; I Love the Number 12; 13 Clues; 14 Camels; Fun 15; 16 Ants; Counting to 17; 18 Carrot Stew; 19 Around the World; 20 Fingers and Toes

#### **Science Books**

That's What I Like: A Book about Seasons; I Want to Be a Scientist Like Jane Goodall; Mr. Mario's Neighborhood; Mela's Water Pot; I Want to Be a Scientist Like Wilbur and Orville Wright; Follow the Apples!; I Want to Be a Scientist Like George Washington Carver; Guess What I Am; Where in the World Would You Go Today?; Star Pictures; I Wish I Had Ears Like a Bat; Creepy Crawlers

#### **Counting Songs**

Asian Counting, Marching Band Counting, Flower Counting, Country Counting, Dixieland Counting, Funky Counting, Reggae Counting, Salsa Counting, Techno Counting, Bagpipe Counting, Counting on the Mountain

#### **Number Songs**

Count to 31; Hotel 100; Poor Wandering 1; Snowy Twos Day; 1, 2, 3, 4 in the Jungle; Give Me 5; Suzy Ladybug; 7 Train; 8 Octopus Legs; Highway 9; 10 Astronauts; When I Saw 11; I Love the Number 12; 13 Clues; 14 Camels; Fun 15; 16 Ants; Counting to 17; 18 Carrot Stew; 19 Around the World; 20 Fingers and Toes

#### **BASIC MATH & SCIENCE**

#### **Math & Science Books**

One More Cat: Can You Guess? A Story for Two Voices: I Want to Be a Scientist Like Carl Linnaeus: I Want to Be a Scientist Like Antoni van Leeuwenhoek: Whatever the Weather: I Want to Be a Mathematician Like Sophie Germain: Water Is All Around; Mr. Romano's Secret: A Time Story; A Seed Grows; How Long is a Minute?; Marty's Mixed-up Mom: I Want to Be a Scientist Like Louis Pasteur; Pancakes Matter; Jump Rope Rhymes; Facts About Families: Fifteen Bayou Band: Hooray. Hooray for the One Hundredth Day!; Symmetry and Me: Animal Bodies: Everybody Needs to Eat: The Circus Came to Town: I Want to Be a Mathematician Like Thales: Bugs for Sale: Heads or Tails; Your Backyard; The Birds, the Beasts and the Bat: Halves and Fourths and Thirds: We All Exercise; Circus 20; Red Rock, River Rock; Painting by Number: I Want to Be a Scientist Like Joanne Simpson; Navajo Beads; Where in the World Would You Go Today?: I Want to Be a Scientist Like Wilbur and Orville Wright

#### **FLUENT MATH & SCIENCE**

#### **Math & Science Books**

The Snow Project; Chloe's Cracker Caper; What Sounds Say; Fossils Under Our Feet; The Boonville Nine; I Want to Be a Scientist Like Alexander von Humboldt: I Want to Be a Scientist Like Marie Curie; I Want to Be a Scientist Like Stephen Hawking; George and Jack; The Old Maple Tree; A Dinosaur's First Day; I Want to Be a Scientist Like Isaac Newton; My Family Campout; I Want to Be a Scientist Like Thomas Edison; Warm Soup for Dedushka; How Did the Chicken Cross the Road?: Inventions All Around: The Beginning of Numbers: I Want to Be a Mathematician Like Ada Byron Lovelace: Lightning Bells: Tyrannosaurus X 1; Halves and Fourths and Thirds; Navajo Beads; Red Rock, River Rock; I Want to Be a Mathematician Like Srinivasa Ramanujan; The Fraction Twins; Yangshi's Perimeter; I Want to Be a Mathematician Like Archimedes; Birds at My House; Painting by Number; The Fable Fair

#### **SUPPORT**



Professional Services offers a continuum of customizable services. Learn more here.

#### **CONTINUAL DEVELOPMENT**

As a nonprofit research institute, <u>Waterford.org</u> is continually developing resources with the latest research findings. Please note that this correlation is accurate as of the date on the cover.

## WATERFORD Family Engagement Resources



#### **SPANISH FAMILY ENGAGEMENT RESOURCES**

All Waterford books and many of the resources available to families at mentor.waterford.org can be found in Spanish or with Spanish support.

#### **SONGS**

#### **Beginning Math Songs**

Odd Todd and Even Steven; Salsa Counting; On the Bayou—Addition; Subtract Those Cars; More Than, Fewer Than; A Nice Addition; Marching Band Counting; Doubles 1–5; Multiply by O

#### **Nursery Songs and Rhymes**

Rhyming Words; A: The Apple Tree; B: Bluebird, Bluebird; C: Pat-a-Cake; D: Hey Diddle, Diddle; E: One Elephant Went Out to Play; F: The Farmer in the Dell; G: Ten Little Goldfish; H: All the Pretty Little Horses; I: Mother, Mother, I Am Ill; J: Jack and Jill; K: Three Little Kittens; L: Mary Had a Little Lamb; M: Little Miss Muffett; N: I Touch My Nose Like This (Spanish); O: Polly, Put the Kettle On; P: This Little Pig; Q: Quack, Quack, Quack; R: Little Rabbit (Chinese); S: Eensy, Weensy Spider; T: Tortillas, Tortillas (Spanish); U: The Bus; V: My Valentine; W: Wee Willie Winkie; X: A-hunting We Will Go; Y: Yankee Doodle; Z: The Zulu Warrior

#### **Beginning Reading Songs**

Comma, Comma, Comma; Homophone Monkey; Antonym Ant; Apples and Bananas; Old MacDonald's Vowels; ABC Show and Tell Sounds; ABC Tongue Twisters; ABC Picture Sounds; Sheep in the Shadows; C-K Rap; S Steals the Z; Blends; Blicky Licky Land; Apostrophe Pig; Capital Letters—Days; Chip Chop; Adjectives Describe; Lazy Letter Q; Nouns; Verbs; Adverbs; Irregular Verbs; Preposition Ship; Verbs that Link; Consonants; Pronouns, Sneaky Magic E; Silent Letters—G-H; Silent Letters—W; Drop Magic E; Bossy Mr. R; P-H and G-H Say Fff; Schwa Sound; Double the Fun; Strange Spelling; More Than One; Reading Detective—Peek at the Story

#### WEEKLY HOMELINK NEWSLETTERS

Weekly newsletters (28 in all) are available for teachers to share with families. The newsletters explain what children are learning during the week and provide resources and activities to involve families.

#### MATH HOMELINK NEWSLETTERS

Match, Position, Shapes, Counting, Patterns Sort, Size, Number Sense (1-10), Order (1-10), Count On, Measurement (length), Count Down, Addition (10), Numbers 11-15, Numbers 16-20

#### SCIENCE HOMELINK NEWSLETTERS

The World Around Us (5 senses), Living Things (living v. non-living), Plants, Vertebrates, Invertebrates, The Sky Above Us (sun, moon, stars), Our Earth (recycle, ecosystems), How it Works (push/pull, solid/liquid, magnets, materials)

#### WATERFORD MENTOR

Waterford Mentor is a secure website where families can log in to see their child's usage and learning achievements. Waterford families also receive short messages with ideas on how to engage in their child's learning and have access to hundreds of resources and activities.

#### **READING HOMELINK NEWSLETTERS**

#### **Alphabet Knowledge**

#### **Comprehension and Vocabulary**

Sum Up: Remember Order, Sum Up: Remember Details, Peek at the Story, Guess and Check, Connect to Me, Build Knowledge

#### **Readiness Skills Letters**

Naming Parts of the Body; First, Next, Last; One-to-One Correspondence; Opposites; Look at Details (identify same and different)

#### **Phonological Awareness Letters**

What Is Rhyming?, Which Words Rhyme?, Sentences Are Made Up of Words, Making Compound Words, Breaking Compound Words, What Is a Syllable?, Put Syllables Together to Make Words, Break Words into Syllables, The First Sound in a Word, Words with the Same First Sound, Making Words from First Sounds and the Rest



Waterford Mentor is available online and in the Mentor app (for iOS and Android).