

FEBRUARY 2019

# CURRICULUM Correlation

Waterford Reading Academy:

Math & Science

100%

Washington State
Math Learning
Standards

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

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WASHINGTON STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES*
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 Recognition and Sense</li> <li>Number Instruction</li> <li>Skip Counting</li> <li>Counting Puzzle</li> </ul>	Count to 100 by ones and tens.pdf: Count to 100 by ones and tens.  Missing Numbers  Count On By 1  Numbers 1–5  Numbers 6–10  Math Newsletters  Count By 10s  Numbers 60–69  I Can Count to 100
K.CC.2 Count forward beginning from a given number within the known sequence (instead of having to begin at 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 a 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>Math Newsletter: Count On</li> <li>Flashcards</li> </ul>
K.CC.3 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).	<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>Number Recognition and Sense</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 numeral.</li> <li>Numbers Practice: 1-20 (one per number)</li> <li>Numbers 1-5</li> <li>Add groups</li> <li>Count on by 1</li> <li>Number Writing Practice: 0-20 (one per number)</li> </ul>





WASHINGTON STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Count to tell the number of objects	3	
K.CC.4a. 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.	<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>Number Recognition and Sense</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> </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.	<ul> <li>Make and Count Groups</li> <li>Number Counting</li> <li>Match Numbers</li> <li>One-to-One Correspondence</li> <li>Order Numbers</li> <li>Count On by 1</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>Number Recognition and Sense</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. 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.	<ul> <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> <li>Make and Count Groups</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  Grouped 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 two numbers between 1 and 10 presented as written numerals.	<ul> <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> <li>Number Recognition and Sense</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>





WASHINGTON STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
GEOMETRY		
Identify and describe shapes (squa	ares, circles, triangles, rectangles, hexagons, cubes, co	nes, 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; Up in the Air</li> <li>Books: The Shape of Things; Imagination Shapes</li> <li>Position</li> <li>Over, Under, Above, Below</li> <li>Inside, Outside, Between</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>Above, Below, Next to, On</li> <li>Story Problem Strategies: Shapes</li> <li>Right, Left</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, Shapes; Up in the Air</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>	





WASHINGTON STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Analyze, compare, create, and com	pose shapes	
K.G.4. Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).	<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>	
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. Compose simple shapes to form larger shapes. For example, "Can you join these two triangles with full sides touching to make a rectangle?"	Geoboard     Tangrams	
MEASUREMENT AND DATA		
Describe and compare measurable	attributes	
K.MD.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.	<ul><li>Song: Measuring Plants</li><li>Length</li></ul>	<ul> <li>Measurable attributes.pdf: Describe measurable attributes of objects, such as length or weight. Describ 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>





WASHINGTON STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Describe and compare measurable	attributes continued	
K.MD.2 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.	<ul> <li>Songs: Savanna Size, Measuring Plants</li> <li>Capacity</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> <li>Match</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
K.MD.3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. [Limit category counts to be less than or equal to 10.]	<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> <li>Logic Game</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>





WASHINGTON STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
OPERATIONS AND ALGEBRAIC TH	IINKING	
Understand addition as putting tog	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 (e.g., claps), acting out situations, verbal explanations, expressions, or equations.	<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>	
K.OA.2 Solve addition and subtraction word problems, and add and subtract within 10, e.g., 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>Addition Newsletter</li> <li>Subtraction Flashcards</li> </ul>
K.OA.3. 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 $5 = 4 + 1$ ).	<ul> <li>Make and Count Groups</li> <li>Add Groups</li> <li>Subtract Groups</li> <li>Act Out Subtraction</li> <li>Subtract Doubles to 10</li> </ul>	





WASHINGTON 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 continued
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 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>	
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> <li>Speed Games</li> <li>Mental Math Games</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 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.	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> <li>Place Value 11-19 (2)</li> </ul>





WASHINGTON STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
FIRST GRADE		
GEOMETRY		
Reason with shapes and their attrik	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>Space 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> </ul>	
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. Understand for these examples that decomposing into more equal shares creates smaller shares.	<ul> <li>Song: Fractions</li> <li>Book: Halves and Fourths and Thirds</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>	





WASHINGTON 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><li>Story Problem Strategies: 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.	<ul> <li>Length</li> <li>Nonstandard Units of Length</li> <li>Story Problem Strategies: Nonstandard Units of Length</li> <li>Problem Solving</li> <li>Problem Solving Strategies: Make and Use a Picture</li> </ul>	<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>
Tell and write time		
1.MD.3 Tell and write time in hours and half-hours using analog and digital clocks.	<ul> <li>Song: Clock Hands</li> <li>Books: Mr. Romano's Secret: A Time Story; How Long is a Minute?</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>Story Problem Strategies: Time</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





WASHINGTON 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?
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 Recognition and Sense</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 an 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  I Can Count to 50  I Can Count to 100  I Can Count to 99  I Can Count to 120





WASHINGTON STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Understand place value		
1.NBT.2a 10 can be thought of as a bundle of ten ones—called a "ten."	<ul> <li>Song: Place Value</li> <li>Place Value of 2-digit Numbers</li> <li>Expanded Notation</li> <li>Add with Manipulatives</li> <li>Flower Story Problems</li> <li>Number Recognition and Sense</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.2b The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.	<ul> <li>Song: Place Value</li> <li>Place Value of 2-digit Numbers</li> <li>Expanded Notation</li> <li>Add with Manipulatives</li> <li>Flower Story Problems</li> <li>Number Recognition and Sense</li> </ul>	<ul> <li>11-19 broken down.pdf: The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.</li> <li>Toss It</li> <li>Make a Number</li> <li>Numbers Flashcards</li> <li>Numbers 10-19</li> <li>More Numbers 10-19</li> </ul>
1.NBT.2c 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>Expanded Notation</li> <li>Story Problem Strategies: Expanded Notation, Place Value</li> <li>Place Value</li> <li>Place Value of 2-digit Numbers</li> <li>Number Recognition and Sense Review</li> </ul>	<ul> <li>Ten groupings.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>Toss It</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>	





WASHINGTON STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
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; 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.	<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>Mental Math Games</li> <li>Speed Games</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 without Regrouping</li> <li>You Be the Teacher: Add 2-digit Numbers with Regrouping</li> </ul>	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).  Drawing Tens  Beans, Beans, and More Beans  The Kingdom of Popsicle Stick-Filled Purses  Straws and Macaroni  Bean Addition  Newsletter  Adding Tens and Ones  Color Adds Up  Cookies and Milk!  Addition of Two-Digit Numbers  Addition and Subtraction of Large Numbers  1 set of flashcards
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> <li>Kingdom of Counting</li> <li>Flower Story Problems</li> </ul>	<ul> <li>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.</li> <li>Ten-O</li> <li>Toss It</li> <li>Make a Number</li> <li>Subtract 10</li> <li>Flashcards</li> <li>Bingo</li> <li>Addition of Tens</li> </ul>





WASHINGTON STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Use place value understanding and	properties of operations to add and subtract continue	ed
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>Subtract 10 from 10-20</li> <li>Place Value</li> <li>Addition and Subtraction Relationship</li> <li>Use Manipulatives</li> <li>Flower Story Problems: Subtraction Patterns</li> <li>Story Problem Strategies: Subtract Ten</li> <li>Problem Solving Strategies: Look for a Pattern; Model or Act Out</li> <li>Mental Math Games</li> <li>You Be the Teacher: Subtraction</li> </ul>	Subtracting in 10s.pdf: Subtract multiples of 10 in the range 10–90 from multiples of 10 in the range 10–90.     Ten-O     Bingo     Subtract Multiples of 10
OPERATIONS AND ALGEBRAIC TH		
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> <li>Mental Math Games (Addition Facts to 20)</li> <li>Kingdom of Counting (Subtract Doubles to 20)</li> <li>Mental Math Games (Subtraction Facts to 20)</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.	<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>	<ul> <li>Word problems adding 3 numbers.pdf: Solve word problems that call for addition of three whole number whose sum is less than or equal to 20.</li> <li>Draw a Picture</li> </ul>





WASHINGTON STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Understand and apply properties o	f operations and the relationship between addition and	d subtraction
1.OA.3 Apply properties of operations as strategies to add and subtract. 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.)	<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> <li>Mental Math Games: 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> <li>Mental Math Games: Missing Addends</li> </ul>	<ul> <li>Understand subtraction as an unknown addend problem.pdf: Understand subtraction as an unknown-addend problem. Add and subtract within 20.</li> <li>Write each subtraction problem as an addition problem and solve it.</li> </ul>
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>





WASHINGTON STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Add and subtract within 20 continued		
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).	<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>Mental Math Games</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 +1 to 21)</li> <li>Make 10</li> <li>Subtract _ from</li> <li>Subtract</li> <li>Subtract 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>Add and Subtract Doubles to 20</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> <li>Subtraction—horizontal</li> <li>Subtraction—horizontal</li> </ul>





WASHINGTON 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? $6 = 6$ , $7 = 8 - 1$ , $5 + 2 = 2 + 5$ , $4 + 1 = 5 + 2$ .	· ·	
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> <li>Mental Math Games</li> </ul>	
SECOND GRADE		
GEOMETRY		
Reason with shapes and their attrik	outes	
2.G.1 Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. [Sizes are compared directly or visually, not compared by measuring.] Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.	<ul> <li>Song: Kites</li> <li>Geoboard</li> <li>Songs: Shapes, Shapes; Corners and Sides</li> <li>Book: The Shape of Things</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>	





WASHINGTON STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Reason with shapes and their attrik	outes continued	
2.G.3. 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.	<ul> <li>Song: Fractions</li> <li>Books: Halves and Fourths and Thirds; The Fraction Twins</li> <li>Fractions</li> <li>Label Parts of Fractions</li> <li>Geoboard</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>	
MEASUREMENT AND DATA		
Measure and estimate lengths in st	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>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.</li> <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>
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><li>Measurement Tools</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>
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>





WASHINGTON STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Measure and estimate lengths in st	andard units <i>continued</i>	
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 units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.	<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>	
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>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> <li>You Be the Teacher: Tell Time</li> <li>Story Problem Strategies: Time to the Quarter Hour; Time to the Minute; Time to Five Minutes;</li> </ul>	





WASHINGTON STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Work with time and money continu	red	
2.MD.8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?	<ul> <li>Songs: Money; Save Your Pennies</li> <li>Coin Identification</li> <li>Coin Value</li> <li>Quarters</li> <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> <li>Count Bills and Coins</li> <li>Equivalent Sums of Money</li> <li>Story Problem Strategies: Make Change, Count Coins, Count Bills and Coins</li> <li>You Be the Teacher: Make Change</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 making a line plot, where the horizontal scale is marked off in whole-number units.		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 unit     Measuring Inches     Ready, Set, Measure     Let's Measure in Centimeters!     Let's Measure in Inches!
2.MD.10. Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.	<ul> <li>Song: Graphing</li> <li>Graphing</li> <li>Bar Graphs</li> <li>Picture Graphs</li> <li>Use Graphs and Tables</li> <li>Story Problem Strategies: Picture Graphs, Bar Graphs</li> </ul>	





WASHINGTON STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
NUMBERS AND OPERATIONS IN B.	ASE TEN	
Understand place value		
2.NBT.1a. 100 can be thought of as a bundle of ten tens—called a "hundred." 1b. 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>Song: Place Value</li> <li>Place Value of 3-digit Numbers</li> </ul>	<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."</li> <li>The Kingdom of Popsicle Stick-Filled Purses</li> <li>Grouping hundreds: 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).</li> <li>My Three-Digit Numbers</li> </ul>
2.NBT.2. Count within 1,000; skip-count by 5s, 10s, and 100s.	<ul> <li>Song: Skip Counting</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 499 Picture  My 500 Picture  My 599 Picture  My 599 Picture  My 600 Picture  My 699 Picture  My 700 Picture  My 700 Picture  900 Chart
2.NBT.3. Read and write numbers to 1,000 using base-ten numerals, number names, and expanded form.	<ul> <li>Sequences of 2-digit Numbers</li> <li>Sequences of 3-digit Numbers</li> <li>Number Chart</li> <li>Place Value</li> <li>Number Recognition and Sense</li> </ul>	





WASHINGTON STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Understand place value continued		
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>
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>





WASHINGTON STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Use place value understanding and	properties of operations to add and subtract contin	nued
2.NBT.7. 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.	<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>	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.  Choose and Add  Mix and Match Addition  Expanded Subtraction  Subtracting Repeats  999  Prediction  Up and Away  Regrouping Treasure Hunt  Play Ball  Squirrel Facts  Number Cards
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.	<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>You Be the Teacher</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>





WASHINGTON STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
OPERATIONS AND ALGEBRAIC TH		WATER ORD TEACHER RESOURCES
Represent and solve problems invo		
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.	<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>	<ul> <li>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.</li> <li>Addition—horizontal</li> <li>Subtraction—horizontal</li> <li>Addition—vertical</li> <li>Subtraction—vertical</li> <li>Addition and subtraction—horizontal and vertical</li> </ul>
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>	<ul> <li>Odd and even recognition.pdf: Determine whether a group of objects (up to 20) has an odd or even number of members.</li> <li>Missing Patterns</li> <li>Counting by 2's</li> <li>What's My Number?</li> </ul>
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.	<ul> <li>Addition</li> <li>Multiply Using Repeated Addition</li> <li>Multiply Using Arrays</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).