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Correlation Criteria: NORTH CAROLINA STANDARD COURSE OF STUDY
MATHEMATICS 2017 & SCIENCE 2019
for KINDERGARTEN, 1ST, AND 2ND GRADES

MARCH 2023

CURRICULUM
Correlation

Waterford Reading Academy:

Math & Science

100%

North Carolina Standard Course of Study Mathematics 2017 & Science 2019

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

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NORTH CAROLINA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
MATHEMATICS		
KINDERGARTEN		
Counting and Cardinality		
Know number names and the counting sequence.		

NC.K.CC.1 Know number names and recognize patterns in the counting sequence by:
• Counting to 100 by ones.
	• Number Songs
	• Counting Songs
	• Number Counting
	• Number Instruction
		• 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

• Counting to 100 by tens.	• Song: Skip Counting
	• Book: Navajo Beads; Jump Rope Rhymes
	• Number Instruction
	• Skip Counting
	• Skip Count by 10
		• 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

NC.K.CC.2 Count forward beginning from a given number within the known sequence, instead of having to begin at 1.	• Count On
	• Counting Songs
		• Count forward.pdf: Count forward beginning with a given number within the known sequence.
		  – Let's Count On
		  – Toss and Count
		  – Count On by 1

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Know number names and the counting sequence *continued.*		

NC.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.	• Math Books
	• Counting Songs
	• Number Songs
	• Number Counting
	• Number Instruction
		• Write numbers 0-20.pdf: Write numbers from 0 to 20. Represent a number of objects with a written numeral.
		  – Numbers Practice
		  – Numbers
		  – Add groups
		  – Count on by 1
		  – Number Writing Practice

Count to tell the number of objects.		
NC.K.CC.4 Understand the relationship between numbers and quantities. • 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 (one-to-one correspondence).	• Counting Songs • Number Songs • Number Counting • Order Numbers • One-to-one Correspondence • Make and Count Groups • Number Instruction	• 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. – Number Walk
• Recognize that the last number named tells the number of objects counted regardless of their arrangement (cardinality).	• Make and Count Groups • Number Counting • Number Instruction • Match Numbers • One-to-One Correspondence	• 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. – Mixed Up Counting
• State the number of objects in a group, of up to 5 objects, without counting the objects (perceptual subitizing).	• Moving Target (Dots) • Match Numbers • Dominoes	
NC.K.CC.5 Count to answer "How many?" in the following situations: • Given a number from 1–20, count out that many objects.	• Counting Songs • Number Songs • Make and Count Groups • Number Counting • Number Instruction • Numbers Review • One-to-one Correspondence	• 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. – Hoop Addition

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Count to tell the number of objects *continued.*		
• Given up to 20 objects, name the next successive number when an object is added, recognizing the quantity is one more/greater.	• Counting Songs • Count On by 1 • Make and Count Groups • Number Counting • Number Instruction • One-to-one Correspondence	• 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. – Hoop Addition
• Given 20 objects arranged in a line, a rectangular array, and a circle, identify how many.	• Make and Count Groups • Number Counting • Number Instruction • One-to-one Correspondence	• 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. – Hoop Addition
• Given 10 objects in a scattered arrangement, identify how many.	• Make and Count Groups • Number Counting • Number Instruction • One-to-one Correspondence	• 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. – Hoop Addition
Compare numbers.		
NC.K.CC.6 Identify whether the number of objects, within 10, in one group is greater than, less than, or equal to the number of objects in another group, by using matching and counting strategies.	• Song: Greater Than, Less Than • Book: For the Birds • Greater Than, Less Than • More Than, Fewer Than • More Than • Fewer Than • Make and Count Groups	• 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? – Fewer Than
NC.K.CC.7 Compare two numbers, within 10, presented as written numerals.	• Song: Greater Than, Less Than • Book: For the Birds • Greater Than, Less Than • More Than, Fewer Than • More Than • Fewer Than	• Compare two numbers.pdf: Compare two numbers between 1 and 10 presented as written numerals. – More or Less Spinner – Catch Me If You Can! – Greater or Less – Less or Greater

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Operations and Algebraic Thinking		
Understand addition and subtraction.		

NC.K.OA.1 Represent addition and subtraction, within 10:
• Use a variety of representations such as objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, or expressions.
	• Songs: Addition; On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction
	• Book: Five Delicious Muffins
	• Make and Count Groups
	• Add Groups
	• Subtract Groups
	• Act Out Addition
	• Act Out Subtraction
		• Represent addition and subtraction with objects. pdf: Represent addition and subtraction with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations.
		  – Addition Cubes
		  – Addition Stories
		  – Going Fishing
		  – Let's Count On
		  – Act it out Stories
		  – Manipulative Stories

• Demonstrate understanding of addition and subtraction by making connections among representations.	• Songs: Addition; On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction
	• Book: Five Delicious Muffins
	• Make and Count Groups
	• Add Groups
	• Subtract Groups
	• Act Out Addition
	• Act Out Subtraction
		• Represent addition and subtraction with objects. pdf: Represent addition and subtraction with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations.
		  – Addition Cubes
		  – Addition Stories
		  – Going Fishing
		  – Let's Count On
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Understand addition and subtraction *continued*.		

NC.K.OA.2 Solve addition and subtraction word problems, within 10, using objects or drawings to represent the problem, when solving:
• Add to/Take From-Result Unknown
	• Songs: Addition; On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction
	• Book: Five Delicious Muffins
	• Add Groups
	• Subtract Groups
	• Minuends
	• Sums
	• Act Out Addition
	• Act Out Subtraction
		• 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.
		  – Additions Stories
		  – Act It Out Stories
		  – Manipulative Stories
		  – Edible Stories
		  – One, Two, Three, Show
		  – Circus Subtraction
		  – Partner Subtraction
		  – Farmer's Market
		  – Green and Speckled Frogs
		  – Cars and Trucks Subtraction
		  – Yummy Subtraction
		  – Act Out Addition
		  – Act Out Subtraction

• Put Together/ Take Apart (Total Unknown and Two Addends Unknown)	• Songs: Addition; On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction
	• Book: Five Delicious Muffins
	• Add Groups
	• Subtract Groups
	• Minuends
	• Sums
	• Act Out Addition
	• Act Out Subtraction
	• Missing Addends
	• Missing Minuends and Subtrahends
		• 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.
		  – Additions Stories
		  – Act It Out Stories
		  – Manipulative Stories
		  – Edible Stories
		  – One, Two, Three, Show
		  – Circus Subtraction
		  – Partner Subtraction
		  – Farmer's Market
		  – Green and Speckled Frogs
		  – Cars and Trucks Subtraction
		  – Yummy Subtraction
		  – Act Out Addition
		  – Act Out Subtraction

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Understand addition and subtraction *continued*.		
NC.K.OA.3 Decompose numbers less than or equal to 10 into pairs in more than one way using objects or drawings, and record each decomposition by a drawing or expression.	• Make and Count Groups • Add Groups • Subtract Groups • Act Out Subtraction	• Decompose numbers.pdf: 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. – Addition Cubes – Fact Families
NC.K.OA.4 For any number from 0 to 10, find the number that makes 10 when added to the given number using objects or drawings, and record the answer with a drawing or expression.	• Make 10 • Missing Addends • Count On • Act Out Addition	• Numbers that make 10.pdf: 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. – How Many More?
NC.K.OA.5 Demonstrate fluency with addition and subtraction within 5.	• Songs: Addition; On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction • Book: Five Delicious Muffins • Add Groups • Subtract Groups • Minuends • Sums • Act Out Addition • Act Out Subtraction	
NC.K.OA.6 Recognize and combine groups with totals up to 5 (conceptual subitizing).	• Make and Count Groups • Add Groups • Act Out Addition	
Number and Operations in Base Ten		
Build foundation for place value.		
NC.K.NBT.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones by: • Using objects or drawings.	• Place Value	• 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. – Place Value 11–19

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Build foundation for place value *continued*.		
• Recording each composition or decomposition by a drawing or expression.	• Place Value	• 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. – Place Value 11–19
• Understanding that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.	• Place Value	• 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. – Place Value 11–19
Measurement and Data		
Describe and compare measurable attributes.		

NC.K.MD.1 Describe measurable attributes of objects; and describe several different measurable attributes of a single object.	• Song: Measuring Plants
	• Length
		• Measurable attributes.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
		  – Measurable Attributes

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Describe and compare measurable attributes *continued*.		

NC.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.	• Songs: Savanna Size, Measuring Plants
	• Capacity
	• Length
	• Weight
	• Big and Little
	• Tall and Short
	• Heavy and Light
	• Size
		• Comparing objects.pdf: 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.
		  – 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

Classify objects and count the number of objects in each category.		

NC.K.MD.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.	• Songs: Same and Different; All Sorts of Laundry
	• Book: Buttons, Buttons
	• Sort
	• Make and Count Groups
		• Classifying objects.pdf: Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.
		  – Let's Sort
		  – Sort

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Geometry		
Identify and describe shapes.		
NC.K.G.1 Describe objects in the environment using names of shapes, and describe the relative positions of objects using positional terms.	• Songs: Position Cat; Kites; Get Over the Bugs; Shapes, Shapes, Shapes • Books: The Shape of Things; Imagination Shapes; Up In the Air • Position • Over, Under, Above, Below • Inside, Outside, Between • Circle, Square, Triangle, Rectangle • Star, Semicircle, Octagon, Oval, Rhombus • Simple Shapes • Solid Shapes • World Shapes • Above, Below, Next to, On	• 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

NC.K.G.2 Correctly name squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres regardless of their orientations or overall size.	• Songs: Shapes, Shapes, Shapes; Marmot Shapes
	• Books: The Shape of Things; Imagination Shapes
	• Circle, Square, Triangle, Rectangle
	• Star, Semicircle, Octagon, Oval, Rhombus
	• Simple Shapes
	• Solid Shapes
	• World Shapes
		• Shape recognition.pdf: Correctly name shapes regardless of their orientations or overall size.
		  – Shapes Scavenger Hunt
		  – Shapes and Positioning

NC.K.G.3 Identify squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres as two-dimensional or three-dimensional.	• Solid Shapes • Space Shapes • Simple Shapes	• Two-dimensional shapes.pdf: Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid"). – Shapes and Positioning
Analyze, compare, create, and compose shapes.		
NC.K.G.4 Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, attributes and other properties.	• Song: Corners and Sides • Simple Shapes • Solid Shapes • Space Shapes • Congruence • Tangrams • Similar Figures	• Compare shapes.pdf: 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). – Comparing Shapes

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Analyze, compare, create, and compose shapes *continued*.		
NC.K.G.5 Model shapes in the world by: • Building and drawing triangles, rectangles, squares, hexagons, circles.	• Geoboard • Tangrams	• Model shapes.pdf: Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. – Building Shapes
• Building cubes, cones, spheres, and cylinders.	• Geoboard • Tangrams	• Model shapes.pdf: Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. – Building Shapes
NC.K.G.6 Compose larger shapes from simple shapes.	• Geoboard • Tangrams	• Form larger shapes.pdf: Compose simple shapes to form larger shapes. – Combining Shapes
FIRST GRADE		
Operations and Algebraic Thinking		
Represent and solve problems.		
NC.1.OA.1 Represent and solve addition and subtraction word problems, within 20, with unknowns, by using objects, drawings, and equations with a symbol for the unknown number to represent the problem, when solving: • Add to/Take from-Change Unknown	• Songs: Fact Families; Doubles • Book: Facts About Families • Addition and Subtraction Fact Families • Addition and Subtraction Relationship	• 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. – Guess and Check – Model the Story
• Put together/Take Apart-Addend Unknown	• Songs: Fact Families; Doubles • Book: Facts About Families • Unknown Addends • Addition and Subtraction Relationship	• 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. – Guess and Check – Model the Story

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Represent and solve problems *continued*.		

• Compare-Difference Unknown	• Song: Fact Families
	• Book: Facts About Families
	• Minuends
	• Missing Minuends and Subtrahends
	• Addition and Subtraction Relationship
		• 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.
		  – Guess and Check
		  – Model the Story

NC.1.OA.2 Represent and solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, by using objects, drawings, and equations with a symbol for the unknown number.	• Add 3 One-digit Numbers	• 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
Understand and apply the properties of operations.		

NC.1.OA.3 Apply the commutative and associative properties as strategies for solving addition problems.	• Addition and Subtraction Relationship
	• Addition and Subtraction Fact Families
	• Addition Patterns
	• Commutative Property of Addition
		• Strategies to add and subtract.pdf: Apply properties of operations as strategies to add and subtract.
		  – Adding and Subtracting Bugs
		  – Concentration
		  – Related Facts

NC.1.OA.4 Solve an unknown-addend problem, within 20, by using addition strategies and/or changing it to a subtraction problem.	• Missing Addends • Subtraction Patterns • Addition and Subtraction Fact Families	• Understand subtraction as an unknown addend problem.pdf: Understand subtraction as an unknown-addend problem. Add and subtract within 20. – Write each subtraction problem as an addition problem and solve it.

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Add and subtract within 20.		

NC.1.OA.9 Demonstrate fluency with addition and subtraction within 10.	• Songs: Fact Families; Counting On
	• Books: Facts about Families
	• Addition and Subtraction Fact Families
	• Addition Sentences
	• Subtraction Sentences
	• Commutative Property of Addition
	• Addition and Subtraction Relationship
	• Missing Addends
	• Missing Minuends and Subtrahends
	• Addition Patterns
	• Subtraction Patterns
		• Add and subtract within 20.pdf: Add and subtract within 20, demonstrating fluency for addition and subtraction within 10.
		  – The Three Little Bears
		  – Fact Family Bingo
		  – A Graph of Fact Families
		  – Bean Facts
		  – Draw a Picture
		  – Addition
		  – Number Pyramid
		  – Subtraction Sentences
		  – Model the Story
		  – Fact Families

NC.1.OA.6 Add and subtract, within 20, using strategies such as:
• Counting on
	• Songs: Fact Families; Counting On
	• Books: Facts about Families
	• Addition and Subtraction Fact Families
	• Addition Sentences
	• Subtraction Sentences
	• Commutative Property of Addition
	• Addition and Subtraction Relationship
	• Missing Addends
	• Missing Minuends and Subtrahends
	• Subtraction Patterns
		• Add and subtract within 20.pdf: Add and subtract within 20, demonstrating fluency for addition and subtraction within 10.
		  – The Three Little Bears
		  – Fact Family Bingo
		  – A Graph of Fact Families
		  – Bean Facts
		  – Draw a Picture
		  – Addition
		  – Number Pyramid
		  – Subtraction Sentences
		  – Model the Story
		  – Fact Families

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Add and subtract within 20 *continued*.		

• Making ten	• Songs: Fact Families; Counting On
	• Books: Facts about Families
	• Addition and Subtraction Fact Families
	• Addition Sentences
	• Subtraction Sentences
	• Commutative Property of Addition
	• Addition and Subtraction Relationship
		• Add and subtract within 20.pdf: Add and subtract within 20, demonstrating fluency for addition and subtraction within 10.
		  – The Three Little Bears
		  – Fact Family Bingo
		  – A Graph of Fact Families
		  – Bean Facts
		  – Draw a Picture
		  – Addition
		  – Number Pyramid
		  – Subtraction Sentences
		  – Model the Story
		  – Fact Families

• Decomposing a number leading to a ten	• Addition and Subtraction Fact Families
	• Addition Sentences
	• Subtraction Sentences
	• Commutative Property of Addition
	• Addition and Subtraction Relationship
	• Missing Addends
	• Missing Minuends and Subtrahends
	• Subtraction Patterns
		• Add and subtract within 20.pdf: Add and subtract within 20, demonstrating fluency for addition and subtraction within 10.
		  – The Three Little Bears
		  – Fact Family Bingo
		  – A Graph of Fact Families
		  – Bean Facts
		  – Draw a Picture
		  – Addition
		  – Number Pyramid
		  – Subtraction Sentences
		  – Model the Story
		  – Fact Families

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Add and subtract within 20 *continued*.		

• Using the relationship between addition and subtraction	• Song: Fact Families
	• Addition and Subtraction Fact Families
	• Commutative Property of Addition
	• Addition and Subtraction Relationship
	• Missing Addends
	• Missing Minuends and Subtrahends
	• Addition Patterns
	• Subtraction Patterns
		• Add and subtract within 20.pdf: Add and subtract within 20, demonstrating fluency for addition and subtraction within 10.
		  – The Three Little Bears
		  – Fact Family Bingo
		  – A Graph of Fact Families
		  – Bean Facts
		  – Draw a Picture
		  – Addition
		  – Number Pyramid
		  – Subtraction Sentences
		  – Model the Story
		  – Fact Families

• Using a number line	• Book: Milton's Mittens • Number Line • Use the Number Line	
• Creating equivalent but simpler or known sums	• Song: Fact Families • Addition and Subtraction Fact Families • Addition and Subtraction Relationship • Missing Addends • Missing Minuends and Subtrahends • Addition Patterns • Subtraction Patterns	
Analyze addition and subtraction equations within 20.		

NC.1.OA.7 Apply understanding of the equal sign to determine if equations involving addition and subtraction are true.	• Song: Fact Families
	• Book: Facts About Families
	• Addition and Subtraction Fact Families
	• Addition and Subtraction Relationship
	• Commutative Property of Addition
	• Addition Sentences
	• Subtraction Sentences
	• Greater Than, Less Than
	• More Than, Fewer Than
		• Equal sign.pdf: Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false.
		  – Show Me!
		  – Tricky Total
		  – Domino Addition
		  – Domino Subtraction
		  – Playground Fact Snake

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Analyze addition and subtraction equations within 20 *continued*.		
NC.1.OA.8 Determine the unknown whole number in an addition or subtraction equation involving three whole numbers.	• Addition Sentences • Subtraction Sentences • Addition and Subtraction Fact Families • Missing Addends • Missing Minuends and Subtrahends	
Number and Operations in Base Ten		
Extend and recognize patterns in the counting sequence.		
NC.1.NBT.1 Count to 150, starting at any number less than 150.	• Song: Counting On • Count On • Number Chart • Logic Game (Number Patterns)	

NC.1.NBT.7 Read and write numerals, and represent a number of objects with a written numeral, to 100.	• Song: Counting On
	• Count On
	• Number Chart
		• 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; 30–39; 40–49; 50–59; 60–69
		  – Counting to 89
		  – Counting Charts:
		  – I Can Count to 50; 100; 99; 120

Understand place value.		
NC.1.NBT.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. • Unitize by making a ten from a collection of ten ones.	• Song: Place Value • Place Value of 2-digit Numbers • Add with Manipulatives	• Tens as a bundle of ones.pdf: 10 can be thought of as a bundle of ten ones—called a "ten." – Popsicles to Ten

• Model the numbers from 11 to 19 as composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.	• Song: Place Value
	• Place Value of 2-digit Numbers
	• Add with Manipulatives
		• 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.
		  – Toss It
		  – Make a Number
		  – Numbers 10–19
		  – More Numbers 10–19

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Understand place value *continued*.		
Demonstrate that the numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens, with 0 ones.	• Place Value • Place Value of 2-digit Numbers	• 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). – Toss It

NC.1.NBT.3 Compare two two-digit numbers based on the value of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.	• Place Value
	• Greater Than, Less Than (2-digit Numbers)
		• Compare two-digit numbers.pdf: Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.
		  – More or Less Spinner
		  – Catch Me if You Can!
		  – What Are You Looking For?
		  – Two-Pile Sort

Use place value understanding and properties of operations.		

NC.1.NBT.4 Using concrete models or drawings, strategies based on place value, properties of operations, and explaining the reasoning used, add, within 100, in the following situations:
• A two-digit number and a one-digit number
	• Addition
	• Add Tens
	• Addition and Subtraction Relationship
	• Add with Regrouping Concept
	• Add 2-digit and 1-digit Numbers with Regrouping
		• 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

NORTH CAROLINA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Use place value understanding and properties of operations *continued*.		

• A two-digit number and a multiple of 10	• Addition
	• Add Tens
	• Addition and Subtraction Relationship
	• Add with Regrouping Concept
	• Add 2-digit Numbers without Regrouping
	• Add 2-digit Numbers with Regrouping
		• 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

NC.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.	• Song: Skip Counting
	• Book: Navajo Beads
	• Add
	• Subtract
	• Add Tens
	• Subtract Tens
	• Skip Count by 10
	• Number Chart
		• 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

NC.1.NBT.6 Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90, explaining the reasoning, using:
• Concrete models and drawings
	• Subtraction
	• Subtract Tens
	• Subtraction Patterns
	• Subtract
	• Use Manipulatives
	• Make 10 Subtraction Strategy
		• 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

NORTH CAROLINA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Use place value understanding and properties of operations *continued*.		

• Number lines	• Subtraction
	• Number Line
	• Number Chart
	• Subtract
	• Place Value
	• Make 10 Subtraction Strategy
	• Addition and Subtraction Relationship
	• Use Manipulatives
		• 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

• Strategies based on place value	• Subtraction
	• Subtract Tens
	• Subtraction Patterns
	• Make 10 Subtraction Strategy
	• Place Value
	• Addition and Subtraction Relationship
	• Use Manipulatives
		• 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

• Properties of operations	• Subtraction
	• Subtract Tens
	• Subtraction Patterns
	• Subtract
	• Make 10 Subtraction Strategy
	• Addition and Subtraction Relationship
	• Use Manipulatives
		• Add and subtract 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.
		  – Addition of Two-Digit Numbers
		  – Tic Tac Toe
		  – Subtraction of Two-Digit Numbers

• The relationship between addition and subtraction	• Subtraction
	• Subtract Tens
	• Make 10 Subtraction Strategy
	• Subtraction Patterns
	• Subtract
	• Place Value
	• Addition and Subtraction Relationship
	• Use Manipulatives
		• Add and subtract 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.
		  – Addition of Two-Digit Numbers
		  – Tic Tac Toe
		  – Subtraction of Two-Digit Numbers

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NORTH CAROLINA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Measurement and Data		
Measure lengths.		

NC.1.MD.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object.	• Length
	• Nonstandard Units of Length
		• Order by length.pdf: Order three objects by length; compare the lengths of two objects indirectly by using a third object.
		  – Estimating Length
		  – A Fruit and Vegetable Measure

NC.1.MD.2 Measure lengths with non-standard units.
• Express the length of an object as a whole number of non-standard length units.
	• Length
	• Nonstandard Units of Length
		• 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.
		  – Measures of Me
		  – Measure a Handful
		  – Estimating Length
		  – A Fruit and Vegetable
		  – Measure Up!
		  – Inches/Centimeters Rulers

• Measure by laying multiple copies of a shorter object (the length unit) end to end (iterating) with no gaps or overlaps.	• Length
	• Nonstandard Units of Length
		• 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.
		  – Measures of Me
		  – Measure a Handful
		  – Estimating Length
		  – A Fruit and Vegetable
		  – Measure Up!
		  – Inches/Centimeters Rulers

NORTH CAROLINA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Build understanding of time and money.		

NC.1.MD.3 Tell and write time in hours and half-hours using analog and digital clocks.	• Song: Clock Hands
	• Books: Mr. Romano's Secret: A Time Story
	• Tell Time to the Hour
	• Tell Time to the Half-Hour
		• 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

NC.1.MD.5 Identify quarters, dimes, and nickels and relate their values to pennies.	• Songs: Money; Save Your Pennies • Book: Bugs For Sale • Coin Identification • Coin Value • Quarters • Count Dimes, Nickels, and Pennies • Count Quarters, Dimes, Nickels, and Pennies • Count Nickels and Pennies or Dimes and Pennies • Count Coins • Equivalent Sums of Money	
Represent and interpret data.		

NC.1.MD.4 Organize, represent, and interpret data with up to three categories.
• Ask and answer questions about the total number of data points.
	• Songs: Tallying; Graphing
	• Books: Painting by Number; One More Cat; The Booneville Nine
	• Tally Marks
	• Graphs
	• Make a Table
		• 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?

NORTH CAROLINA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Represent and interpret data *continued.*		

• Ask and answer questions about how many in each category.	• Songs: Tallying; Graphing
	• Books: Painting by Number; One More Cat; The Booneville Nine
	• Tally Marks
	• Graphs
	• Make a Table
		• 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?

• Ask and answer questions about how many more or less are in one category than in another.	• Songs: Tallying; Graphing
	• Books: Painting by Number; One More Cat; The Booneville Nine
	• Tally Marks
	• Graphs
	• Make a Table
		• 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?

NORTH CAROLINA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Geometry		
Reason with shapes and their attributes.		
NC.1.G.1 Distinguish between defining and non-defining attributes and create shapes with defining attributes by: • Building and drawing triangles, rectangles, squares, trapezoids, hexagons, circles.	• Songs: Corners and Sides; Kites • Geoboard • Space Shapes	• Attributes.pdf: Distinguish between defining attributes versus non-defining attributes; build and draw shapes to possess defining attributes. – Sorting Shapes
• Building cubes, rectangular prisms, cones, spheres, and cylinders.	• Songs: Corners and Sides; Kites • Geoboard • Space Shapes	• Attributes.pdf: Distinguish between defining attributes versus non-defining attributes; build and draw shapes to possess defining attributes. – Sorting Shapes
NC.1.G.2 Create composite shapes by: • Making a two-dimensional composite shape using rectangles, squares, trapezoids, triangles, and half-circles naming the components of the new shape.	• Song: Kites • Space Shapes • Geoboard • Tangrams	• Form larger shapes.pdf: Compose simple shapes to form larger shapes. – Combining Shapes
• Making a three-dimensional composite shape using cubes, rectangular prisms, cones, and cylinders, naming the components of the new shape.	• Song: Kites • Space Shapes • Geoboard • Tangrams	

NC.1.G.3 Partition circles and rectangles into two and four equal shares.
• Describe the shares as halves and fourths, as half of and fourth of.
	• Song: Fractions
	• Books: Halves and Fourths and Thirds; Half For You and Half For Me
	• Equal-part Fractions
	• Label Parts of Fractions
		• Equal shares.pdf: 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.
		  – Make It Equal
		  – Fraction Friends
		  – Fraction Train
		  – Halves, Thirds, Fourths
		  – Equal Parts

NORTH CAROLINA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Reason with shapes and their attributes *continued*.		

• Describe the whole as two of, or four of the shares.	• Song: Fractions
	• Books: Halves and Fourths and Thirds; Half For You and Half For Me
	• Equal-part Fractions
	• Label Parts of Fractions
		• Equal shares.pdf: 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.
		  – Make It Equal
		  – Fraction Friends
		  – Fraction Train
		  – Halves, Thirds, Fourths
		  – Equal Parts

• Explain that decomposing into more equal shares creates smaller shares.	• Song: Fractions
	• Books: Halves and Fourths and Thirds; Half For You and Half For Me
	• Equal-part Fractions
	• Label Parts of Fractions
		• Equal shares.pdf: 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.
		  – Make It Equal
		  – Fraction Friends
		  – Fraction Train
		  – Halves, Thirds, Fourths
		  – Equal Parts

NORTH CAROLINA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
SECOND GRADE		
Operations and Algebraic Thinking		
Represent and solve problems.		

NC.2.OA.1 Represent and solve addition and subtraction word problems, within 100, with unknowns in all positions, by using representations and equations with a symbol for the unknown number to represent the problem, when solving:
• One-Step problems:
  – Add to/Take from-Start Unknown
  – Compare-Bigger Unknown
  – Compare-Smaller Unknown
	• Book: Painting by Number
	• Addition
	• Subtraction
	• Missing Addends and Subtrahends
	• Subtraction Sentences
	• Addition and Subtraction Facts
		• 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
		  – Color the Chart
		  – Think About it Differently
		  – Act it Out
		  – Guess and Check

• Two-Step problems involving single digits:
  – Add to/Take from- Change Unknown
  – Add to/Take From- Result Unknown
	• Book: Painting by Number
	• Addition
	• Subtraction
	• Missing Addends and Subtrahends
	• Subtraction Sentences
	• Addition and Subtraction Facts
		• 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
		  – Color the Chart
		  – Think About it Differently
		  – Act it Out
		  – Guess and Check

NORTH CAROLINA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Add and subtract within 20.		

NC.2.OA.2 Demonstrate fluency with addition and subtraction, within 20, using mental strategies.	• Songs: Fact Families; Doubles
	• Subtraction Patterns
	• Addition Facts to 20
		• 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

Work with equal groups.		

NC.2.OA.3 Determine whether a group of objects, within 20, has an odd or even number of members by:
• Pairing objects, then counting them by 2s.
	• Songs: Odd Todd and Even Steven; Skip Counting
	• Skip Count by 2
	• Addition Facts
		• 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?

• Determining whether objects can be placed into two equal groups.	• Song: Odd Todd and Even Steven
	• Skip Count by 2
	• Addition Facts
	• Divide by 2
		• 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?

• Writing an equation to express an even number as a sum of two equal addends.	• Songs: Doubles; Odd Todd and Even Steven
	• Make and Count Groups
	• Doubles
		• 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?

NC.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 • Multiply Using Repeated Addition • Multiply Using Arrays	

NORTH CAROLINA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Number and Operations in Base Ten		
Understand place value.		
NC.2.NBT.1 Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones. • Unitize by making a hundred from a collection of ten tens.	• Song: Place Value • Place Value • Place Value of 3-digit Numbers	• Thinking of 100 as a bundle of ten 10s.pdf: 100 can be thought of as a bundle of ten tens—called a "hundred." – The Kingdom of Popsicle Stick-Filled Purses
• Demonstrate that the numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds, with 0 tens and 0 ones.	• Song: Place Value • Place Value • Place Value of 3-digit Numbers	• 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). – My Three-Digit Numbers
• Compose and decompose numbers using various groupings of hundreds, tens, and ones.	• Song: Place Value • Place Value • Place Value of 3-digit Numbers • Expanded Notation	

NC.2.NBT.2 Count within 1,000; skip-count by 5s, 10s, and 100s.	• Song: Skip Counting
	• Book: Jump Rope Rhymes
	• Skip Count
	• Skip Count by 10
	• Skip Count by 5
	• Number Sequences and Patterns
		• Counting within 1000.pdf: Count within 1,000; skip-count by 5s, 10s, and 100s.
		  – Chart Patterns
		  – My 199; 200; 299; 300; 399; 400; 499; 500; 599; 600; 699; and 700 Picture
		  – 900 Chart

NC.2.NBT.3 Read and write numbers, within 1,000, using base-ten numerals, number names, and expanded form.	• Sequences of 2-digit Numbers
	• Sequences of 3-digit Numbers
	• Number Chart
	• Place Value
		• Read and write numbers to 1000.pdf: Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.
		  – Cube Trails
		  – Race for a Flat
		  – High/Low Number Cube Throw
		  – Lucky Five

NORTH CAROLINA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Understand place value *continued*.		

NC.2.NBT.4 Compare two three-digit numbers based on the value of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.	• Greater Than, Less Than (3-digit Numbers)
	• Place Value of 3-digit Numbers
		• Less than, equal to, or greater than.pdf: Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.
		  – More or Less
		  – The Hands Have It!
		  – Larger or Smaller?
		  – Comparing Number Cards
		  – <,>, = Cards
		  – Greater Than, Less Than, Equal To

Use place value understanding and properties of operations.		

NC.2.NBT.5 Demonstrate fluency with addition and subtraction, within 100, by:
• Flexibly using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.
	• Place Value
	• Addition and Subtraction Relationship
	• Commutative Properties of Addition
	• Addition
	• Subtraction
	• Add without Regrouping
	• Add with Regrouping
	• Subtract without regrouping
	• Subtract with Regrouping
		• Add and subtract 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.
		  – Addition of Two-Digit Numbers
		  – Tic Tac Toe
		  – Subtraction of Two-Digit Numbers

• Comparing addition and subtraction strategies, and explaining why they work.	• Addition
	• Subtraction
	• Add with Regrouping Concept
	• Subtract with Regrouping Concept
	• Place Value
	• Number Line
	• Addition and Subtraction Relationship
	• Commutative Properties of Addition
	• Act Out Addition
	• Act Out Subtraction
		• Explaining addition and subtraction strategies.pdf: Explain why addition and subtraction strategies work, using place value and the properties of operations.
		  – Cube Trails
		  – Race for a Flat
		  – High/Low Number Cube Throw
		  – Lucky Five
		  – Hundreds, Tens, Ones Chart
		  – Numbers Cards

NORTH CAROLINA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Use place value understanding and properties of operations *continued*.		

• Selecting an appropriate strategy in order to efficiently compute sums and differences.	• Place Value
	• Addition and Subtraction Relationship
	• Commutative Properties of Addition
	• Addition
	• Subtraction
	• Add without Regrouping
	• Add with Regrouping
	• Subtract without regrouping
	• Subtract with Regrouping
		• Add and subtract 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.
		  – Addition of Two-Digit Numbers
		  – Tic Tac Toe
		  – Subtraction of Two-Digit Numbers

NC.2.NBT.6 Add up to three two-digit numbers using strategies based on place value and properties of operations.	• Add Two-digit Numbers with Regrouping • Commutative Properties of Addition • Place Value	• Adding four 2-digit numbers.pdf: Add up to four two-digit numbers using strategies based on place value and properties of operations. – Add Four Two-Digit Numbers

NC.2.NBT.7 Add and subtract, within 1,000, relating the strategy to a written method, using:
• Concrete models or drawings
	• Place Value
	• Addition and Subtraction Relationship
	• Commutative Properties of Addition
	• Addition
	• Subtraction
	• Add without Regrouping
	• Add with Regrouping
	• Subtract without regrouping
	• Subtract with Regrouping
	• Act Out Addition
	• Act Out Subtraction
		• 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

NORTH CAROLINA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Use place value understanding and properties of operations *continued.*		

• Strategies based on place value	• Place Value
	• Addition and Subtraction Relationship
	• Commutative Properties of Addition
	• Addition
	• Subtraction
	• Add without Regrouping
	• Add with Regrouping
	• Subtract without regrouping
	• Subtract with Regrouping
	• Act Out Addition
	• Act Out Subtraction
		• 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

• Properties of operations	• Place Value
	• Addition and Subtraction Relationship
	• Commutative Properties of Addition
	• Addition
	• Subtraction
	• Add without Regrouping
	• Add with Regrouping
	• Subtract without regrouping
	• Subtract with Regrouping
	• Act Out Addition
	• Act Out Subtraction
		• 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

NORTH CAROLINA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Use place value understanding and properties of operations *continued*.		

• Properties of operations *continued*		• Add and subtract within 1000.pdf...*continued*
		  – 999
		  – Prediction
		  – Up and Away
		  – Regrouping Treasure Hunt
		  – Play Ball
		  – Squirrel Facts

• Relationship between addition and subtraction	• Place Value
	• Addition and Subtraction Relationship
	• Commutative Properties of Addition
	• Addition
	• Subtraction
	• Add without Regrouping
	• Add with Regrouping
	• Subtract without regrouping
	• Subtract with Regrouping
	• Act Out Addition
	• Act Out Subtraction
		• 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

NC.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.	• Skip Count • Place Value • Number Chart • Number Patterns • Mental Math Games	• 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. – Spin and Solve

NORTH CAROLINA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Measurement and Data		
Measure and estimate lengths.		

NC.2.MD.1 Measure the length of an object in standard units by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.	• Song: Measuring Plants
	• Book: Birds at My House
	• Length
	• Measurement Tools
	• Standard Units of Length
		• Measurement tools.pdf: Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.
		  – Ready, Set, Measure
		  – Treasure Hunt
		  – Centimeter Ruler
		  – Inch Ruler
		  – Let's Measure in Centimeters!
		  – Let's Measure in Inches!

NC.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.	• Length • Standard Units of Length • Measurement Tools	• 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. – Ready, Set, Measure

NC.2.MD.3 Estimate lengths in using standard units of inches, feet, yards, centimeters, and meters.	• Song: Measuring Plants
	• Length
	• Standard Units of Length
	• Measurement Tools
		• Estimating lengths.pdf: Estimate lengths using units of inches, feet, centimeters, and meters.
		  – Ready, Set, Measure
		  – Treasure Hunt
		  – Let's Measure in Centimeters!
		  – Let's Measure in Inches!
		  – Measuring Perimeter

NC.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.	• Length
	• Standard Units of Length
		• Measure length.pdf: Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.
		  – Ready, Set, Measure
		  – Treasure Hunt

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NORTH CAROLINA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Relate addition and subtraction to length.		

NC.2.MD.5 Use addition and subtraction, within 100, to solve word problems involving lengths that are given in the same units, using equations with a symbol for the unknown number to represent the problem.	• Book: Yangshi's Perimeter
	• Addition
	• Subtraction
	• Length
	• Standard Units of Length
		• One- and two-step word problems within 100. pdf: Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.
		  – Animal Math
		  – Picture Problems
		  – Color the Chart
		  – Think About it Differently

NC.2.MD.6 Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points and represent whole-number sums and differences, within 100, on a number line.	• Number Line • Length	
Build understanding of time and money.		

NC.2.MD.7 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	• Songs: Telling Time; Clock Hands
	• Tell Time
	• Tell Time to Five Minutes
	• Tell Time to the Quarter Hour
	• Tell Time to the Minute
	• Tell Time to the Hour
	• Tell Time to the Half-hour
		• Tell and write time.pdf: Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.
		  – Matching Clocks
		  – Cartoon Captions
		  – Time to 5 Minutes

NORTH CAROLINA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Build understanding of time and money *continued*.		
NC.2.MD.8 Solve word problems involving: • Quarters, dimes, nickels, and pennies within 99¢, using ¢ symbols appropriately.	• Songs: Money; Save Your Pennies • Book: Bugs For Sale • Coin Identification • Coin Value • Quarters • Count Dimes, Nickels, and Pennies • Count Quarters, Dimes, Nickels, and Pennies • Count Nickels and Pennies or Dimes and Pennies • Count Coins • Equivalent Sums of Money	• Solve money word problems.pdf: Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. – Supermarket Hunt – Shopping for My Family – Money Combinations – Money Sums – Pizza Parlor – How Much Back? – Coin Count – Bills and Coins – Let's Count Coins – Money Addition – Change is Good! – Make 45¢
• Whole dollar amounts, using the $ symbol appropriately.	• Songs: Money; Save Your Pennies • Book: Bugs For Sale • Make Change • Count Bills and Coins • Equivalent Sums of Money	• Solve money word problems.pdf: Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. – Supermarket Hunt – Shopping for My Family – Money Combinations – Money Sums – Pizza Parlor – How Much Back? – Coin Count – Bills and Coins – Let's Count Coins – Money Addition – Change is Good! – Make 45¢

NORTH CAROLINA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Represent and interpret data.		

NC.2.MD.10 Organize, represent, and interpret data with up to four categories.
• Draw a picture graph and a bar graph with a single-unit scale to represent a data set.
	• Song: Graphing
	• Graphing
	• Bar Graphs
	• Picture Graphs
	• Use Graphs and Tables
		• Graphs.pdf: 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.
		  – Questions and Answers
		  – Library Book Survey
		  – Playground Survey
		  – Rock Collections
		  – Use Graphs and Tables

• Solve simple put-together, take-apart, and compare problems using information presented in a picture and a bar graph.	• Song: Graphing
	• Graphing
	• Bar Graphs
	• Picture Graphs
	• Use Graphs and Tables
		• Graphs.pdf: 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.
		  – Questions and Answers
		  – Library Book Survey
		  – Playground Survey
		  – Rock Collections
		  – Use Graphs and Tables

Geometry		
Reason with shapes and their attributes.		

NC.2.G.1 Recognize and draw triangles, quadrilaterals, pentagons, and hexagons, having specified attributes; recognize and describe attributes of rectangular prisms and cubes.	• Songs: Shapes, Shapes, Shapes; Corners and Sides; Kites
	• Book: The Shape of Things
	• Space Shapes
	• World Shapes
	• Geoboard
		• Draw shapes.pdf: Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.
		  – Making Shapes
		  – Shapes Review

NC.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, fourths, fourth of, quarter of.
	• Song: Fractions
	• Books: Halves and Fourths and Thirds; The Fraction Twins
	• Fractions
	• Label Parts of Fractions
	• Fractions of Regions
	• Fractions of Groups
		• Fractions.pdf: 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.
		  – Frenzied Fraction Fun
		  – Fabulous Fractions

NORTH CAROLINA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Reason with shapes and their attributes *continued*.		

• Describe the whole as two halves, three thirds, four fourths.	• Song: Fractions
	• Books: Halves and Fourths and Thirds; The Fraction Twins
	• Fractions
	• Label Parts of Fractions
	• Fractions of Regions
	• Fractions of Groups
		• Fractions.pdf: 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.
		  – Frenzied Fraction Fun
		  – Fabulous Fractions

• Explain that equal shares of identical wholes need not have the same shape.	• Song: Fractions
	• Books: Halves and Fourths and Thirds; The Fraction Twins
	• Fractions
	• Label Parts of Fractions
	• Fractions of Regions
	• Fractions of Groups
		• Fractions.pdf: 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.
		  – Frenzied Fraction Fun
		  – Fabulous Fractions

SCIENCE

KINDERGARTEN		
Forces and Motion		
K.P.1 Understand the positions and motions of objects and organisms observed in the environment.		
K.P.1.1 Compare the relative position of various objects observed in the classroom and outside using position words such as: in front of, behind, between, on top of, under, above, below and beside.	• Songs: Position Cat; Get Over the Bugs • Book: Up In the Air • Position • Over, Under, Above, Below • Inside, Outside, Between • Above, Below, Next to, On	
K.P.1.2 Give examples of different ways objects and organisms move (to include falling to the ground when dropped): • Straight • Zigzag • Round and round • Back and forth • Fast and slow	• Songs: Push and Pull; Gravity • Books: Mr. Mario's Neighborhood; The Big Hill; Up and Down • Gravity • Push and Pull • Rock Cycle	• More to Explore Experiment: Air Movement • Learning Together: How It Works

NORTH CAROLINA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Matter: Properties and Change		
K.P.2 Understand how objects are described based on their physical properties and how they are used.		
K.P.2.1 Classify objects by observable physical properties (including size, color, shape, texture, weight and flexibility).	• Songs: Savanna Size; Shapes, Shapes, Shapes • Size • Capacity • Length • Weight • Heavy and Light • Tall and Short • Big and Little • Color Practice • Density	
K.P.2.2 Compare the observable physical properties of different kinds of materials (clay, wood, cloth, paper, etc) from which objects are made and how they are used.	• Materials • Density Experiment • Buoyancy Experiment	
Earth Systems, Structures and Processes		
K.E.1 Understand change and observable patterns of weather that occur from day to day and throughout the year.		
K.E.1.1 Infer that change is something that happens to many things in the environment based on observations made using one or more of their senses.	• Songs: The Five Senses; Seasons • Book: That's What I Like: A Book About Seasons • Science Tools • Sight • Hearing • Touch • Smell • Spring • Summer • Fall • Winter • Rock Cycle	

NORTH CAROLINA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
K.E.1 Understand change and observable patterns of weather that occur from day to day and throughout the year.		
K.E.1.2 Summarize daily weather conditions noting changes that occur from day to day and throughout the year.	• Song: Seasons • Book: That's What I Like: A Book About Seasons • Weather • Calendar/Graph Weather • Weather Patterns • Clouds • Spring • Summer • Fall • Winter	• Learning Together: Weather; The Weather Around Us • Weather Cards
K.E.1.3 Compare weather patterns that occur from season to season.	• Song: Seasons • Book: That's What I Like: A Book About Seasons • Weather • Calendar/Graph Weather • Weather Patterns • Spring • Summer • Fall • Winter	
Structures and Functions of Living Organisms		
K.L.1 Compare characteristics of animals that make them alike and different from other animals and nonliving things.		
K.L.1.1 Compare different types of the same animal (i.e. different types of dogs, different types of cats, etc.) to determine individual differences within a particular type of animal.	• Songs: Animal Bodies; Birds; Vertebrates; Fish; Invertebrates • Books: I Want to Be a Scientist Like Jane Goodall; Guess What I Am; Creepy Crawlers; Animal Bodies; Everybody Needs to Eat • Food From Plants • Animal Bodies • Mammals • Birds • Reptiles • Amphibians • Invertebrates • Insects • Worms • Science Investigation	

NORTH CAROLINA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
K.L.1 Compare characteristics of animals that make them alike and different from other animals and nonliving things.		
K.L.1.2 Compare characteristics of living and nonliving things in terms of their: • Structure • Growth • Changes • Movement • Basic needs	• Songs: Measuring Plants; Animal Bodies; Living and Nonliving • Book: Animal Bodies • Living or Nonliving • Animal Behavior • Animals Need Water • Living Things • Animal Bodies • Animal Tracks • Rock Cycle	
FIRST GRADE		
Forces and Motion		
1.P.1 Understand how forces (pushes or pulls) affect the motion of an object.		
1.P.1.1 Explain the importance of a push or pull to changing the motion of an object.	• Song: Push and Pull • Book: Mr. Mario's Neighborhood • Push and Pull	• Learning Together: How It Works
1.P.1.2 Explain how some forces (pushes and pulls) can be used to make things move without touching them, such as magnets.	• Songs: Push and Pull; Gravity • Books: Mr. Mario's Neighborhood; Up and Down • Gravity • Magnets • Push and Pull	
1.P.1.3 Predict the effect of a given force on the motion of an object, including balanced forces.	• Song: Push and Pull • Book: Mr. Mario's Neighborhood • Push and Pull • Science Investigation	
Earth in the Universe		
1.E.1 Recognize the features and patterns of the earth/moon/sun system as observed from Earth.		
1.E.1.1 Recognize differences in the features of the day and night sky and apparent movement of objects across the sky as observed from Earth.	• Songs: The Moon; Sun Blues • Books: Moon Song; Star Pictures • Sun • Moon • Constellations	• More to Explore Experiment: The Moon • Learning Together: The Sky Above Us

NORTH CAROLINA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
1.E.1 Recognize the features and patterns of the earth/moon/sun system as observed from Earth *continued*.		
1.E.1.2 Recognize patterns of observable changes in the Moon's appearance from day to day.	• Song: The Moon • Books: Moon Song • Moon • Moon Patterns	• More to Explore Experiment: The Moon • Learning Together: The Sky Above Us
Earth Systems, Structures and Processes		
1.E.2 Understand the physical properties of Earth materials that make them useful in different ways.		
1.E.2.1 Summarize the physical properties of Earth materials, including rocks, minerals, soils and water that make them useful in different ways.	• Book: Water Is All Around • Rocks • Rock Cycle • Soil • Water • Water Cycle • Materials • Density Experiment • Buoyancy Experiment	• More to Explore Experiment: Rocks
1.E.2.2 Compare the properties of soil samples from different places relating their capacity to retain water, nourish and support the growth of certain plants.	• Song: Four Ecosystems • Book: Where in the World Would You Go Today? • Soil • Mountains • Deserts • Rainforests	• Learning Together: Our Earth
Ecosystems		
1.L.1 Understand characteristics of various environments and behaviors of humans that enable plants and animals to survive.		
1.L.1.1 Recognize that plants and animals need air, water, light (plants only), space, food and shelter and that these may be found in their environment.	• Songs: Water; Food From Plants; Plants Are Growing • Books: Mela's Water Pot; Everybody Needs to Eat • Sun • Plants • Water • Animals Need Water • Plants Need Water • Plants and Animals Need Air • Healthy Plants' Needs • Living Things	• More to Explore Experiment: Water for Plants • Learning Together: Green and Growing

NORTH CAROLINA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
1.L.1 Understand characteristics of various environments and behaviors of humans that enable plants and animals to survive *continued*.		
1.L.1.2 Give examples of how the needs of different plants and animals can be met by their environments in North Carolina or different places throughout the world.	• Song: Four Ecosystems • Books: Where in the World Would You Go Today?; Winter Snoozers; The Old Maple Tree; Turtle's Pond • Mountains • Deserts • Rainforests	• Learning Together: Our Earth
1.L.1.3 Summarize ways that humans protect their environment and/or improve conditions for the growth of the plants and animals that live there (e.g., reuse or recycle products to avoid littering).	• Songs: Conservation; Pollution Rap • Pollution and Recycling • Care of Water • Care of Earth	• More to Explore Experiment: Recycling • Learning Together: Our Earth
Molecular Biology		
1.L.2 Summarize the needs of living organisms for energy and growth.		
1.L.2.1 Summarize the basic needs of a variety of different plants (including air, water, nutrients, and light) for energy and growth.	• Song: Water • Book: Mela's Water Pot • Sun • Plants • Water • Plants and Animals Need Air • Healthy Plants' Needs	• More to Explore Experiment: Water for Plants • Learning Together: Green and Growing
1.L.2.2 Summarize the basic needs of a variety of different animals (including air, water, and food) for energy and growth.	• Songs: Water; Food From Plants • Books: Mela's Water Pot; Everybody Needs to Eat • Water • Plants and Animals Need Air • Animals Need Water	
SECOND GRADE		
Forces and Motion		
2.P.1 Understand the relationship between sound and vibrating objects.		
2.P.1.1 Illustrate how sound is produced by vibrating objects and columns of air.	• Song: Sound • Book: What Sounds Say • Sound Waves	• More to Explore Experiment: Sound

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NORTH CAROLINA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
2.P.1 Understand the relationship between sound and vibrating objects *continued*.		
2.P.1.2 Summarize the relationship between sound and objects of the body that vibrate – eardrum and vocal cords.	• Song: Sound • Book: What Sounds Say • Sound Waves	• More to Explore Experiment: Sound
Matter: Properties and Change		
2.P.2 Understand properties of solids and liquids and the changes they undergo.		
2.P.2.1 Give examples of matter that change from a solid to a liquid and from a liquid to a solid by heating and cooling.	• Songs: Precipitation; Solid or Liquid • Books: Whatever the Weather; Pancakes Matter • Solid and Liquid • Changes in Matter • Science Investigation • States of Water • Movement of Heat	
2.P.2.2 Compare the amount (volume and weight) of water in a container before and after freezing.	• Weight • Capacity • Science Investigation	
2.P.2.3 Compare what happens to water left in an open container over time as to water left in a closed container.	• Song: The Scientific Method • Science Investigation	• More to Explore Experiment: Evaporation
Earth Systems, Structures and Processes		
2.E.1 Understand patterns of weather and factors that affect weather.		
2.E.1.1 Summarize how energy from the sun serves as a source of light that warms the land, air and water.	• Song: Sun Blues • Sun	
2.E.1.2 Summarize weather conditions using qualitative and quantitative measures to describe: • Temperature • Wind direction • Wind speed • Precipitation	• Song: Precipitation • Book: Whatever the Weather • Weather • Calendar/Graph Weather • Weather Patterns • Weather Tools	• Learning Together: Weather; The Weather Around Us • Weather Cards

NORTH CAROLINA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
2.E.1 Understand patterns of weather and factors that affect weather *continued*.		
2.E.1.3 Compare weather patterns that occur over time and relate observable patterns to time of day and time of year.	• Song: Seasons • Book: That's What I Like: A Book About Seasons • Weather • Calendar/Graph Weather • Weather Patterns • Spring • Summer • Fall • Winter	• Learning Together: Weather; The Weather Around Us • Weather Cards
2.E.1.4 Recognize the tools that scientists use for observing, recording, and predicting weather changes from day to day and during the seasons.	• Weather • Weather Tools • Science Tools • Science Investigation • Measurement Tools	
Structures and Functions of Living Organisms		
2.L.1 Understand animal life cycles.		
2.L.1.1 Summarize the life cycle of animals: • Birth • Developing into an adult • Reproducing • Aging and death	• Books: Watch the Woolly Worm • Animal Life Cycle and Growth • Amphibians • Mammals • Birds • Observe a Simple System	• Butterfly Life Cycle.pdf: Create the different stages of a butterfly's life cycle. • Bird Life Cycle.pdf: Create the different stages of a bird's life cycle. • Frog Life Cycle.pdf: Draw and color a picture for each stage in the frog life cycle. • Amphibians.pdf: Cut and paste pictures to show how the egg changes into a frog.
2.L.1.2 Compare life cycles of different animals such as, but not limited to, mealworms, ladybugs, crickets, guppies or frogs.	• Books: Watch the Woolly Worm • Animal Life Cycle and Growth • Amphibians • Mammals • Birds • Observe a Simple System	• Butterfly Life Cycle.pdf: Create the different stages of a butterfly's life cycle. • Bird Life Cycle.pdf: Create the different stages of a bird's life cycle. • Frog Life Cycle.pdf: Draw and color a picture for each stage in the frog life cycle. • Amphibians.pdf: Cut and paste pictures to show how the egg changes into a frog.

NORTH CAROLINA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Evolution and Genetics		
2.L.2 Remember that organisms differ from or are similar to their parents based on the characteristics of the organism.		
2.L.2.1 Identify ways in which many plants and animals closely resemble their parents in observed appearance and ways they are different.	• Books: George and Jack; A Seed Grows • Build Knowledge: Mine	• More to Explore Experiment: Traits
2.L.2.2 Recognize that there is variation among individuals that are related.	• Books: George and Jack; José Three; Mine • Build Knowledge: Mine	• More to Explore Experiment: Traits

PRE-MATH & SCIENCE

Math Books

Zero In My Toybox; 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; Zero Is a Big Round Hole; 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, Waterford.org is continually developing resources with the latest research findings. Please note that this correlation is accurate as of the date on the cover.

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 0

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

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; Charley Chick; Adjectives Describe; Lazy Letter Q; Nouns; Verbs; Adverbs; Irregular Verbs; Preposition Cat; 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

Many of these songs are available on the Waterford.org YouTube channel.

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)

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

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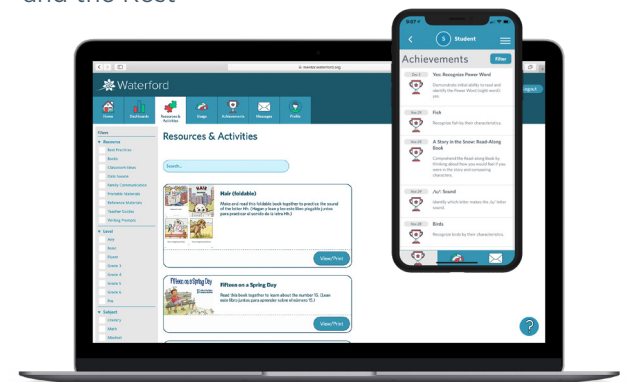
Waterford Mentor is available online and in the Mentor app (for iOS and Android).