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CURRICULUM

Correlation Criteria: MISSISSIPPI COLLEGE- AND CAREER-READINESS STANDARDS FOR MATHEMATICS (2016) AND SCIENCE (2018) *for* KINDERGARTEN, 1ST, AND 2ND GRADES

JANUARY 2022

CURRICULUM *Correlation*

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

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MATHEMATICS		
KINDERGARTEN		
Counting and Cardinality (CC)		
Know number names and count the sequence.		
K.CC.1 Count to 100 by ones and by tens.	• Number Songs • Counting Songs • Number Counting • Number Instruction • Skip Counting • Counting Puzzle	• 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).	• Count On • Counting Songs • Counting Puzzle • Dot-to-Dot	• 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 – Math Newsletter: Count On – Flashcards
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 • Counting Puzzle	• Write numbers 0-20.pdf: Write numbers from 0 to 20. Represent a number of objects with a written numeral. – Numbers Practice: 1–20 – Numbers 1–5 – Add groups – Count on by 1 – Number Writing Practice: 0–20

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Count to tell the number of objects.		
K.CC.4 Understand the relationship between numbers and quantities; connect counting to cardinality. 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.	• Counting Songs • Number Songs • Number Counting • Order Numbers • One-to-one Correspondence • Make and Count Groups • Number Instruction • Counting Puzzle • Dot-to-Dot	• 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
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.	• Make and Count Groups • Number Counting • 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
K.CC.4c Understand that each successive number name refers to a quantity that is one larger.	• Make and Count Groups • Number Counting • Match Numbers • One-to-One Correspondence • Order Numbers • Count On by 1	• Object Counting Succession.pdf: Understand that each successive number name refers to a quantity that is one larger. – One By One
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.	• Counting Songs • Number Songs • Make and Count Groups • Number Counting • Number Instruction • Numbers Review • Match Numbers • Bug Bits • 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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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.	• 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? 1; 2 – Fewer Than – More or Fewer – Greater or Less – More Than/Fewer Than Flashcard Sets
K.CC.7 Compare two numbers between 1 and 10 presented as written numerals.	• 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 – Spinner – Board game – Number cards
Operations and Algebraic Thinking (OA)		
Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.		
K.OA.1 Represent addition and subtraction, in which all parts and whole of the problem are within 10, with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.	• Songs: Addition; Pirates Can Add; 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

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Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from *continued*.		
K.OA.2 Solve addition and subtraction word problems within 10 involving situations of adding to, taking from, putting together and taking apart with unknowns in all positions, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.	• Songs: Addition; Pirates Can Add; 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 • Flower Story Problems • Story Problem Strategies	• 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
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).	• Make and Count Groups • Add Groups • Subtract Groups • Act Out Subtraction • Subtract Doubles	• 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
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.	• Missing Addends • Count On • Act Out Addition • Flower Story Problems	• 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?

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Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from *continued*.		
K.OA.5 Fluently add and subtract within 5.	• Songs: Addition; Pirates Can Add; 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	
Number and Operations In Base Ten (NBT)		
Work with numbers 11–19 to gain foundations for place value.		
K.NBT.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones to understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., 18 = 10 + 8).	• 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 (MD)		
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.	• 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*.		
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.	• Songs: Savanna Size, Measuring Plants • Capacity • Length • Order Size • Big and Little • Tall and Short • Heavy and Light • Size	• Comparing objects.pdf: Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. – Filling Table – Order It Up – Straw Rulers – Measuring Walk – Heavy or Light – Make A Balance – Size Scavenger Hunt – Big and Little Sort – Boxes in a Line – Teddy Bear Line-Up – Magazine Sorting – Tall and Short – Big and Little – Tall and Short – Heavy and Light – Small, Medium, Large – Measuring Length – Measurable Attributes
Classify objects and count the number of objects in each category.		
K.MD.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.	• 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 (G)		
Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, 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.	• Songs: Positioning; Kites; Get Over the Bugs; Shapes, Shapes, Shapes; Up in the Air • Books: The Shape of Things; Imagination Shapes • Position • Over, Under, Above, Below • Inside, Outside, Between • Circle, Square, Triangle, Rectangle • Star, Semicircle, Octagon, Oval, Diamond • 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
K.G.2 Correctly name shapes regardless of their orientations or overall size.	• Songs: Kites; Shapes, Shapes, Shapes; Up in the Air • Books: The Shape of Things; Imagination Shapes • Circle, Square, Triangle, Rectangle • Star, Semicircle, Octagon, Oval, Diamond • 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 – Shapes Flashcards
K.G.3 Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").	• 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.		
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).	• 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*.		
K.G.5 Model objects in the world by drawing two-dimensional shapes and building three-dimensional shapes.	• 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
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	• Form larger shapes.pdf: Compose simple shapes to form larger shapes. – Combining Shapes
FIRST GRADE		
Operations and Algebraic Thinking (OA)		
Represent and solve problems involving 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.	• Songs: Fact Families; Doubles • Book: Facts About Families • Addition and Subtraction Fact Families • Addition and Subtraction Relationship • Doubles • Subtract Doubles • Problem Solving Strategy • Story Problem Strategies	• 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
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.	• Story Problem Strategies • Problem Solving Strategy	• Word problems adding 3 numbers.pdf: Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20. – Draw a Picture

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Understand and apply properties of operations and the relationship between addition and 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.)	• Addition and Subtraction Relationship • Addition and Subtraction Fact Families • Subtraction 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
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.	• Missing Addends • Subtraction Patterns • Addition and Subtraction Fact Families • Missing Addends	• 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.
Add and subtract within 20.		
1.OA.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).	• Song: Counting On • Books: Circus 20; Painting by Number; Jump Rope Rhymes • Skip Count by 2 • Count On • Make and Count Groups • Add Groups • Subtract Groups	• Relate counting to addition and subtraction.pdf: Relate counting to addition and subtraction. – Skip Counting Chant – Jump Rope Counting – Related Facts – Count by 2s; 5s; 10s

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Add and subtract within 20 *continued*.		
1.OA.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).	• Songs: Fact Families; Counting On • Books: Facts about Families; Circus 20; Painting by Number • Addition and Subtraction Fact Families • Addition Sentences • Subtraction Sentences • Commutative Property of Addition • Addition and Subtraction Relationship • Missing Addends • Missing Minuends and Subtrahends • Add 3 One-digit Numbers • 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 – Add _ and 1–5; _ and 6–10 – Order Property of Addition – Add Doubles +1 to 11 – Add Doubles to 20 – Add Doubles +1 to 21 – Make 10 – Subtract _ from – Subtract – Subtraction Patterns – Fact Families to 10; to 20 – Add and Subtract Doubles to 10; Doubles to 20 – Sets of flashcards: – Addition—horizontal; vertical – Subtraction—horizontal; vertical

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Work with addition and subtraction 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.	• 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
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 = ?.	• Addition Sentences • Subtraction Sentences • Addition and Subtraction Fact Families • Missing Addends • Missing Minuends and Subtrahends	
Number and Operations in Base Ten (NBT)		
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.	• Song: Counting On • Books: Painting by Number; Circus 20; Hooray, Hooray for the One Hundredth Day! • 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.		
1.NBT.2 Understand that the two digits of a two-digit number represents amounts of tens and ones. Understand the following as special cases: 1.NBT.2.a 10 can be thought of as a bundle of ten ones—called a “ten.”	• Song: Place Value • Place Value of 2-digit Numbers • Expanded Notation • 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

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Understand place value *continued*.		
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.	• Song: Place Value • Place Value of 2-digit Numbers • Expanded Notation • 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 Flashcards – Numbers 10–19 – More Numbers 10–19
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).	• Expanded Notation • 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
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 <.	• Place Value • Greater Than, Less Than (2-digit Numbers) • You Be the Teacher	• 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 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.	• Addition • Add Tens • Doubles • Doubles Plus 1 • Add with Manipulatives • Add Vertical Squares • Add with Beads • Addition and Subtraction Relationship • Add with Regrouping Concept • Add 2-digit and 1-digit Numbers with Regrouping • Add 2-digit Numbers without Regrouping • Add 2-digit Numbers with Regrouping • You Be the Teacher	• 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

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Use place value understanding and properties of operations to add and subtract *continued*.		
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
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.	• Subtraction • Subtract Tens • Subtraction Patterns • Subtract • Place Value • Addition and Subtraction Relationship • Use Manipulatives • You Be the Teacher	• 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

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Measurement and Data (MD)		
Measure lengths indirectly and by iterating length units.		
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
1.MD.2 Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.	• Length • Nonstandard Units of Length • Problem Solving	• 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
Tell and write time with respect to a clock and a calendar.		
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; How Long Is a Minute? • Tell Time to the Hour • Tell Time to the Half-Hour • Compare Minutes to Hours • Order Numbers on a Clock	• 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
1.MD.3b Identify the days of the week, the number of days in a week, and the number of weeks in each month.	• Song: Days of the Week • Days of the Week • Days in a Month	

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Represent and interpret data.		
1.MD.C.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.	• Songs: Tallying; Graphing • Books: One More Cat; Painting by Number • 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?
Work with money		
1.MD.5a Identify the value of all U.S. coins (penny, nickel, dime, quarter, half-dollar, and dollar coins). Use appropriate cent and dollar notation (e.g., 25¢, $1).	• 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 • Make Change • Count Coins • Count Bills and Coins	• Money.pdf: Learn to identify pennies, nickels, dimes, and quarters. – Identify Coins – Penny Jar – 50 Pennies Game – Hidden Coins
1.MD.5b Know the comparative values of all U.S. coins (e.g., a dime is of greater value than a nickel).	• Songs: Money; Save Your Pennies • 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	

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Work with money *continued.*		
1.MD.5c Count like U.S. coins up to the equivalent of a dollar.	• Songs: Money; Save Your Pennies • Book: Bugs For Sale • Coin Value • Quarters • Count Dimes, Nickels, and Pennies • Count Quarters, Dimes, Nickels, and Pennies • Count Nickels and Pennies or Dimes and Pennies • Make Change • Count Coins • Count Bills and Coins • Equivalent Sums of Money	
1.MD.5d Find the equivalent value for all greater value U.S. coins using like value smaller coins (e.g., 5 pennies equal 1 nickel; 10 pennies equal dime, but not 1 nickel and 5 pennies equal 1 dime).	• Songs: Money; Save Your Pennies • Book: Bugs For Sale • Coin Value • Quarters • Count Dimes, Nickels, and Pennies • Count Quarters, Dimes, Nickels, and Pennies • Count Nickels and Pennies or Dimes and Pennies • Make Change • Count Coins • Count Bills and Coins • Equivalent Sums of Money	
Geometry (G)		
Reason with shapes and their attributes.		
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.	• 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

MISSISSIPPI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Reason with shapes and their attributes *continued*.		
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.	• Song: Kites • Space Shapes • Geoboard • Tangrams	
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.	• Song: Fractions • Book: Halves and Fourths and Thirds • 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
SECOND GRADE		
Operations and Algebraic Thinking (OA)		
Represent and solve problems involving addition and subtraction.		
2.OA.1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	• Book: Painting by Number • Addition • Subtraction • Problem Solving Strategies • Story Problem Strategies • 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 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

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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.	• Songs: Fact Families; Doubles • Subtraction Patterns • Addition Facts to 2	• Add and Subtract 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. – Addition and Subtraction Fact Cards
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.	• Song: Odd Todd and Even Steven • 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 2's – What's My Number?
2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.	• Addition • Multiply Using Repeated Addition • Multiply Using Arrays	
Numbers and Operations In Base Ten (NBT)		
Understand place value.		
2.NBT.1 Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases: 2.NBT.1a 100 can be thought of as a bundle of ten tens—called a "hundred."	• Song: 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
2.NBT.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).	• Song: Place Value • Place Value of 3-digit Numbers	• 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). – My Three-Digit Numbers

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Understand place value *continued*.		
2.NBT.2 Count within 1000; skip-count by 5s, starting at any number ending in 5 or 0. Skip-count by 10s, and 100s starting at any number.	• Song: Skip Counting • 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 Picture; 200 Picture; 299 Picture; 300 Picture; 399 Picture; 400 Picture; 499 Picture; 500 Picture; 599 Picture; 600 Picture; 699 Picture; 700 Picture – 900 Chart
2.NBT.3 Read and write numbers to 1000 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
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.	• 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 – Number Cards – <,>, = Cards – Greater Than, Less Than, Equal To
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.	• 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

MISSISSIPPI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Use place value understanding and properties of operations to add and subtract *continued*.		
2.NBT.6 Add up to four 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
2.NBT.7 Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; 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.	• 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 – 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.	• Skip Count • Place Value • Number Chart • Number Patterns	• 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 (with spinner and numbers cards)

MISSISSIPPI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Use place value understanding and properties of operations to add and subtract *continued*.		
2.NBT.9 Explain why addition and subtraction strategies work, using place value and the properties of operations.	• Addition • Subtraction • Add with Regrouping Concept • Subtract with Regrouping Concept • Place Value • Number Line • Addition and Subtraction Relationship • You Be the Teacher • 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
Measurement and Data (MD)		
Measure and estimate lengths in standard 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.	• 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!
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
2.MD.3 Estimate lengths using units of inches, feet, 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

MISSISSIPPI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Measure and estimate lengths in standard units *continued*.		
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
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.	• Book: Yangshi's Perimeter • Story Problem Strategies • Addition • Subtraction • Length • Standard Units of Length	• Add and subtract 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. – Perimeter Walkabout – How Far Around? – Measuring Perimeter
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.	• Number Line • Length	
Work with time with respect to a clock and a calendar, and work with money.		
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 • You Be the Teacher	• 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

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Work with time with respect to a clock and a calendar, and work with money *continued*.		
2.MD.8a 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?	• 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 • Make Change • Count Coins • Count Bills and Coins • Equivalent Sums of Money • Story Problem Strategies	• 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¢
2.MD.8b Fluently use a calendar to answer simple real world problems such as "How many weeks are in a year?" or "James gets a $5 allowance every 2 months, how much money will he have at the end of each year?"	• Story Problem Strategies	• Calendar.pdf: Use this calendar template to keep track of days or schedules.
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 units. – Measuring Inches – Ready, Set, Measure – Let's Measure in Centimeters! – Let's Measure in Inches!

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Represent and interpret data *continued.*		
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.	• 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 (G)		
Reason with shapes and their attributes.		
2.G.1 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.	• Songs: Kites; Shapes, Shapes, Shapes; Corners and Sides • Book: The Shape of Things • Geoboard • Space Shapes • World Shapes	• 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
2.G.2 Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.	• Song: Fractions • Fractions of Regions • You Be the Teacher	
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.	• Song: Fractions • Books: Halves and Fourths and Thirds; The Fraction Twins • Fractions • Label Parts of Fractions • Geoboard • Fractions of Regions • Fractions of Groups • You Be the Teacher	• 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

MISSISSIPPI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
SCIENCE		
KINDERGARTEN		
Life Science		
L.K.1 Hierarchical Organization		
L.K.1A Students will demonstrate an understanding of living and nonliving things.		
L.K.1A.1 With teacher guidance, conduct an investigation of living organisms and nonliving objects in various real-world environments to define characteristics of living organisms that distinguish them from nonliving things (e.g., playground, garden, school grounds).	• Living or Nonliving • Plants and Animals Need Air • Water • Sun ***Resources:*** • Living or Nonliving? • Which Ones Will Grow	• Learning Together: Living Things
L.K.1A.2 With teacher support, gain an understanding that scientists are humans who use observations to learn about the natural world. Obtain information from informational text or other media about scientists who have made important observations about living things (e.g. Carl Linnaeus, John James Audubon, Jane Goodall).	• Books: I Want to Be a Scientist Like Carl Linnaeus; I Want to Be a Scientist Like Jane Goodall; I Want to Be a Scientist Like George Washington Carver	
L.K.1B Students will demonstrate an understanding of how animals (including humans) use their physical features and their senses to learn about their environment.		
L.K.1B.1 Develop and use models to exemplify how animals use their body parts to (a) obtain food and other resources, (b) protect themselves, and (c) move from place to place	• Song: Animal Bodies • Book: Animal Bodies • Animal Bodies • Animal Groups • Animal Teeth	

MISSISSIPPI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
L.K.1B Students will demonstrate an understanding of how animals (including humans) use their physical features and their senses to learn about their environment continued.		
L.K.1B.2 Identify and describe examples of how animals use their sensory body parts (eyes to detect light and movement, ears to detect sound, skin to detect temperature and touch, tongue to taste, and nose to detect smell).	• Books: I Wish I Had Ears Like a Bat; Fawn Eyes	
L.K.2 Reproduction and Heredity		
L.K.2 Students will demonstrate an understanding of how living things change in form as they go through the general stages of a life cycle.		
L.K.2.1 Use informational text or other media to make observations about plants as they change during the life cycle (e.g., germination, growth, reproduction, and death) and use models (e.g., drawing, writing, dramatization, or technology) to communicate findings.	• Song: Plants Are Growing • Books: A Seed Grows; The Old Maple Tree • Plant Life Cycle and Growth • Plant Experiment	• Learning Together: Plants
L.K.2.2 Construct explanations using observations to describe and model the life cycle (birth, growth, adulthood, death) of a familiar mammal (e.g., dog, squirrel, rabbit, deer).	• Animal Life Cycle and Growth	
L.K.2.3 With teacher guidance, conduct a structured investigation to observe and measure (comparison of lengths) the changes in various individuals of a single plant species from seed germination to adult plant. Record observations using drawing or writing.	• Song: Measuring Plants • Plant Experiment • Plant Life Cycle and Growth	• Learning Together: Plants • More to Explore Experiment: Water for Plants

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L.K.2 Students will demonstrate an understanding of how living things change in form as they go through the general stages of a life cycle continued.		
L.K.2.4 Use observations to explain that young plants and animals are like but not exactly like their parents (i.e., puppies look similar, but not exactly like their parents).	• Song: Traits • Books: George and Jack; A Seed Grows • Build Knowledge: Mine	• More to Explore Experiment: Traits
L.K.3 Ecology and Interdependence		
L.K.3A Students will demonstrate an understanding of what animals and plants need to live and grow.		
L.K.3A.1 With teacher guidance, conduct a structured investigation to determine what plants need to live and grow (water, light, and a place to grow). Measure growth by directly comparing plants with other objects.	• Song: Water • Book: Mela's Water Pot • Sun • Plants • Water • Plant Experiment	• More to Explore Experiment: Water for Plants; Light for Plants
L.K.3A.2 Construct explanations using observations to describe and report what animals need to live and grow (food, water, shelter, and space).	• Song: Water • Books: Mela's Water Pot; Everybody Needs to Eat • Sun • Water • Plants and Animals Need Air • Animals Need Water	
L.K.3B Students will demonstrate an understanding of the interdependence of living things and the environment in which they live.		
L.K.3B.1 Observe and communicate that animals get food from plants or other animals. Plants make their own food and need light to live and grow.	• Song: Food From Plants • Book: Everybody Needs to Eat • Food From Plants • Animal Teeth	
L.K.3B.2 Create a model habitat which demonstrates interdependence of plants and animals using an engineering design process to define the problem, design, construct, evaluate, and improve the habitat.*	Waterford encourages everyone to have writing, drawing, and art materials available for children's creations. • Food Chains • Nature Detective • Polar Lands Food Chain • Prairies Food Chain • Wetlands Food Chain	

MISSISSIPPI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
L.K.4 Adaptations and Diversity		
L.K.4 Students will demonstrate an understanding that some groups of plants and animals are no longer living (extinct) because they were unable to meet their needs for survival.		
L.K.4.1 Obtain information from informational text or other media to document and report examples of different plants or animals that are extinct.	• Books: Discovering Dinosaurs; Fossils Under Our Feet; A Dinosaur's First Day • Dinosaurs • Fossils • Team Science	• More to Explore Experiment: Dinosaur Size; Fossils
L.K.4.2 Observe and report how some present-day animals resemble extinct animals (i.e., elephants resemble wooly mammoths).	• Books: Discovering Dinosaurs; Fossils Under Our Feet • Dinosaurs • Fossils • Team Science	• More to Explore Experiment: Dinosaur Size
Physical Science		
P.K.5 Organization of Matter and Chemical Interactions		
P.K.5A Students will demonstrate an understanding of the solid and liquid states of matter.		
P.K.5A.1 Generate questions and investigate the differences between liquids and solids and develop awareness that a liquid can become a solid and vice versa.	• Song: Solid or Liquid • Book: Pancakes Matter • States of Water • Heat Changes Water • Solid and Liquid ***Resources:*** • Solid and Liquid.pdf	• Learning Together: Solids, Liquids, and Gases; How It Works
P.K.5A.2 Describe and compare the properties of different materials (e.g., wood, plastic, metal, cloth, paper) and classify these materials by their observable characteristics (visual, aural, or natural textural) and by their physical properties (weight, volume, solid or liquid, and sink or float)	• Materials • Length • Weight • Capacity • Solid and Liquid ***Resources:*** • Solid and Liquid.pdf	• Learning Together: Solids, Liquids, and Gases; How It Works

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P.K.5B. Students will demonstrate an understanding of how solid objects can be constructed from a smaller set.		
P.K.5B.1 Use basic shapes and spatial reasoning to model large objects in the environment using a set of small objects (e.g., blocks, construction sets).	• Song: Positioning • Book: Imagination Shapes • Geoboard • Position	
P.K.5B.2 Analyze a large composite structure to describe its smaller components using drawing and writing.	• Book: The Shape of Things • Tangrams • Simple Shapes	• Learning Together: Shapes
P.K.5B.3 Explain why things may not work the same if some of the parts are missing.	• Books: Inventions All Around; I Want to Be a Scientist Like Wilbur and Orville Wright • Simple Machines	
Earth and Space Science		
E.K.8 Earth and the Universe		
E.K.8A Students will demonstrate an understanding of the pattern of seasonal changes on the Earth.		
E.K.8A.1 Construct an explanation of the pattern of the Earth's seasonal changes in the environment using evidence from observations.	• Song: Seasons • Book: That's What I Like: A Book About Seasons • Calendar/Graph Weather • Weather Patterns • Clouds • Spring • Summer • Fall • Winter	• Learning Together: Weather; The Weather Around Us • Weather Cards
E.K.8B Students will demonstrate an understanding that the Sun provides the Earth with heat and light.		
E.K.8B.1 With teacher guidance, generate and answer questions to develop a simple model, which describes observable patterns of sunlight on the Earth's surface (day and night).	• Book: My Family Campout • Sun, Moon, and Earth • Sun	• Learning Together: The Sky Above Us • Sun and Shade Pictures

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E.K.8B Students will demonstrate an understanding that the Sun provides the Earth with heat and light continued.		
E.K.8B.2 With teacher guidance, develop questions to conduct a structured investigation to determine how sunlight affects the temperature of the Earth's natural resources (e.g., sand, soil, rocks, and water).	• Book: My Family Campout • Sun, Moon, and Earth • Sun	• Learning Together: The Sky Above Us • Sun and Shade Pictures
E.K.8B.3 Develop a device (i.e., umbrella, shade structure, or hat) which would reduce heat from the sun (temperature) using an engineering design process to define the problem, design, construct, evaluate, and improve the device.*	Waterford encourages everyone to have writing, drawing, and art materials available for children's creations. • Song: The Scientific Method • Science Investigation	
E.K.10 Earth's Resources		
E.K.10 Students will demonstrate an understanding of how humans use Earth's resources.		
E.K.10.1 Participate in a teacher-led activity to gather, organize and record recyclable materials data on a chart or table using technology. Communicate results.	• Songs: Pollution Rap; Conservation; Graphing • Pollution and Recycling • Bar Graphs	• More to Explore: Recycling • Learning Together: Our Earth
E.K.10.2 With teacher guidance, develop questions to conduct a structured investigation to determine ways to conserve Earth's resources (i.e., reduce, reuse, and recycle) and communicate results	• Song: Pollution Rap • Care of Earth • Care of Water • Pollution and Recycling	• More to Explore: Recycling • Learning Together: Our Earth
E.K.10.3 Create a product from the reused materials that will meet a human need (e.g., pencil holder, musical instrument, bird feeder). Use an engineering design process to define the problem, design, construct, evaluate, and improve the product.*	Waterford encourages everyone to have writing, drawing, and art materials available for children's creations. • Song: The Scientific Method • Book: Birds At My House • Science Investigation • Pollution and Recycling	

MISSISSIPPI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
GRADE ONE		
Life Science		
L.1.1 Hierarchical Organization		
L.1.1 Students will demonstrate an understanding of the basic needs and structures of plants.		
L.1.1.1 Construct explanations using first-hand observations or other media to describe the structures of different plants (i.e., root, stem, leaves, flowers, and fruit). Report findings using drawings,writing, or models	• Song: Plants are Growing • Plants • Functions of Plant Parts	• Learning Together: Plants; Green and Growing
L.1.1.2 Obtain information from informational text and other media to describe the function of each plant part (roots absorb water and anchor the plant, leaves make food, the stem transports water and food, petals attract pollinators, flowers produce seeds, and seeds produce new plants).	• Song: Plants are Growing • Plants • Functions of Plant Parts	
L.1.1.3 Design and conduct an experiment that shows the absorption of water and how it is transported through the plant. Report observations using drawings, sketches, or models.	• Plants Need Water • Functions of Plant Parts	• Learning Together: Water for Plants
L.1.1.4 Create a model which explains the function of each plant structure (roots, stem, leaves, petals, flowers, seeds)	• Song: Plants are Growing • Plants • Functions of Plant Parts	• Learning Together: Plants; Green and Growing

MISSISSIPPI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
L.1.1 Students will demonstrate an understanding of the basic needs and structures of plants continued.		
L.1.1.5 With teacher support, gain an understanding that scientists are humans who use observations and experiments to learn about the natural world. Obtain information from informational text or other media about scientists who have made important observations about plants (e.g., Theophrastus, Gregor Mendel, George Washington Carver, Katherine Esau).	• Books: I Want to Be a Scientist Like George Washington Carver; I Want to Be a Scientist Like Alexander von Humboldt	
L.1.2 Reproduction and Heredity		
L.1.2 Students will demonstrate an understanding of how living things change in form as they go through the general stages of a life cycle.		
L.1.2.1 Investigate, using observations and measurements (non-standard units), flowering plants (pumpkins, peas, marigolds, or sunflowers) as they change during the life cycle (i.e., germination, growth, reproduction, and seed dispersal). Use drawings, writing, or models to communicate findings.	• Songs: Plants Are Growing; Measuring Plants • Books: Little Tree; The Old Maple Tree; A Seed Grows • Plant Experiment • Plant Life Cycle and Growth	
L.1.2.2 Obtain, evaluate, and communicate information through labeled drawings, the life cycle (egg, larva, pupa, adult) of pollinating insects (e.g., bees, butterflies)	• Animal Life Cycle and Growth • Social Insects	

MISSISSIPPI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
L.1.3 Ecology and Interdependence		
L.1.3A Students will demonstrate an understanding of what plants need from the environment for growth and repair.		
L.1.3A.1 Conduct structured investigations to make and test predictions about what plants need to live, grow, and repair including water, nutrients, sunlight, and space. Develop explanations, compare results, and report findings.	• Plants Need Water • Plants and Animals Need Air • Healthy Plants' Needs • Plant Experiment	• More to Explore Experiment: Water for Plants; Light for Plants • Learning Together: Green and Growing
L.1.3B Students will demonstrate an understanding of the interdependence of flowering plants and pollinating insects.		
L.1.3B.1 Identify the body parts of a pollinating insect (e.g., bee, butterfly) and describe how insects use these parts to gather nectar or disburse pollen. Report findings using drawings, writing, or models	• Book: The Bee's Secret • Social Insects • Insects	• Insect Parts Poster
L.1.4 Adaptations and Diversity		
L.1.4 Students will demonstrate an understanding of the ways plants adapt to their environment in order to survive.		
L.1.4.1 Explore the cause and effect relationship between plant adaptations and environmental changes (i.e., leaves turning toward the sun, leaves changing color, leaves wilting, or trees shedding leaves).	• Song: Seasons • Books: A Seed Grows; That's What I Like: A Book About Seasons; The Old Maple Tree • Winter • Spring • Summer • Fall	• More to Explore Experiment: Light for Plants
L.1.4.2 Describe how the different characteristics of plants help them to survive in distinct environments (e.g., rain forest, desert, grasslands, forests).	• Wetlands • Polar Lands • Prairies • Backyards	

MISSISSIPPI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
L.1.4 Students will demonstrate an understanding of the ways plants adapt to their environment in order to survive continued.		
L.1.4.3 Create a solution for an agricultural problem (i.e. pollination, seed dispersal, over-crowding). Use an engineering design process to define the problem, design, construct, evaluate, and improve the solution.*	Waterford encourages everyone to have writing, drawing, and art materials available for children's creations. • Songs: The Scientific Method; Pollution Rap • Book: I Want to Be a Scientist Like George Washington Carver • Science Investigation • Pollution and Recycling	• Learning Together: Earth
Physical Science		
P.1.6 Motions, Forces, and Energy		
P.1.6A Students will demonstrate an understanding that light is required to make objects visible.		
P.1.6A.1 Construct explanations using first-hand observations or other media to describe how reflected light makes an object visible.	• Books: I Want to Be a Scientist Like Thomas Edison; I Want to Be a Scientist Like Isaac Newton • Properties of Light • Light Experiment	
P.1.6A.2 Use evidence from observations to explain how shadows form and change with the position of the light source.	• Books: My Family Campout; Thump, Bump! • Light Exploration	
P.1.6B Students will demonstrate an understanding of sound.		
P.1.6B.1 Conduct an investigation to provide evidence that vibrations create sound (e.g., pluck a guitar string) and that sound can create vibrations (e.g., feeling sound through a speaker).	• Book: What Sounds Say • Sound Waves	• More to Explore Experiment: Sound
P.1.6B.2 Create a device that uses light and/or sound to communicate over a distance (e.g., signal lamp with a flashlight). Use an engineering design process to define the problem, design, construct, evaluate, and improve the device.*	Waterford encourages everyone to have writing, drawing, and art materials available for children's creations. • Song: The Scientific Method • Book: I Want to Be a Scientist Like Thomas Edison • Science Investigation	• More to Explore Experiment: Sound • Learning Together: Light

MISSISSIPPI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Earth and Space Science		
E.1.9 Earth's Systems and Cycles		
E.1.9A Students will demonstrate an understanding of the patterns of weather by describing, recording, and analyzing weather data to answer questions about daily and seasonal weather patterns.		
E.1.9A.1 Analyze and interpret data from observations and measurements to describe local weather conditions (including temperature, wind, and forms of precipitation).	• Book: Whatever the Weather • Weather • Precipitation • Calendar/Graph Weather	• Learning Together: Weather; The Weather Around Us • Weather Cards
E.1.9A.2 Develop and use models to predict weather conditions associated with seasonal patterns and changes.	• Books: I Want to Be a Scientist Like Joanne Simpson; The Four Seasons • Weather Tools • Weather Patterns • Winter • Spring • Summer • Fall	• Learning Together: Weather; The Weather Around Us • Weather Cards
E.1.9A.3 Construct an explanation for the general pattern of change in daily temperatures by measuring and calculating the difference between morning and afternoon temperatures.	• Weather Patterns • Weather Tools	
E.1.9A.4 Obtain and communicate information about severe weather conditions to explain why certain safety precautions are necessary.	• Book: Lightning Bells • Storms • Lightning Safety • Weather Experiment	
E.1.9B Students will demonstrate an understanding of models (drawings or maps) to describe how water and land are distributed on Earth.		
E.1.9B.1 Locate, classify, and describe bodies of water (oceans, rivers, lakes, and ponds) on the Earth's surface using maps, globes, or other media.	• Song: Water Cycle • Book: Water Is All Around • Water Sources • Oceans	

MISSISSIPPI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
E.1.9B Students will demonstrate an understanding of models (drawings or maps) to describe how water and land are distributed on Earth continued.		
E.1.9B.2 Generate and answer questions to explain the patterns and location of frozen and liquid bodies of water on earth using maps, globes, or other media.	• Book: Water Is All Around • Water Sources • Oceans	
E.1.9B.3 With teacher guidance, plan and conduct a structured investigation to determine how the movement of water can change the shape of the land on earth.	• Song: Rock Cycle • Book: Mela's Water Pot • Rock Cycle	• Learning Together: Our Earth
E.1.10 Earth's Resources		
E.1.10 Students will demonstrate an understanding of human dependence on clean and renewable water resources.		
E.1.10.1 Obtain and evaluate informational texts and other media to generate and answer questions about water sources and human uses of clean water.	• Song: Precipitation • Books: Water Is All Around; Mela's Water Pot • Water Cycle • Care of Water	
E.1.10.2 Communicate solutions that will reduce the impact of humans on the use and quality of water in the local environment.	• Care of Water	
E.1.10.3 Create a device that will collect free water to meet a human need (e.g., household drinking water, watering plants/animals, cleaning). Use an engineering design process to define the problem, design, construct, evaluate, and improve the device.*	Waterford encourages everyone to have writing, drawing, and art materials available for children's creations. • Song: The Scientific Method • Science Investigation • Care of Water	

MISSISSIPPI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
GRADE TWO		
Life Science		
L.2.1 Hierarchical Organization		
L.2.1 Students will demonstrate an understanding of the classification of animals based on physical characteristics.		
L.2.1.1 Compare and sort groups of animals with backbones (vertebrates) from groups of animals without backbones (invertebrates).	• Songs: Vertebrates; Invertebrates • Books: Guess What I Am; Creepy Crawlers • Vertebrates • Invertebrates	• Learning Together: Vertebrates; Invertebrates • Invertebrates
L.2.1.2 Classify vertebrates (mammals, fish, birds, amphibians, and reptiles) based on their physical characteristics.	• Song: Vertebrates • Book: Guess What I Am • Vertebrates • Mammals • Fish • Birds • Amphibians • Reptiles	• Mammal Attribute Poster • Fish Poster • Amphibian Attribute Poster • Reptile Attribute Poster
L.2.1.3 Compare and contrast physical characteristics that distinguish classes of vertebrates (i.e., reptiles compared to amphibians).	• Song: Vertebrates • Book: Guess What I Am • Animal Groups • Vertebrates • Amphibians	• Learning Together: Vertebrates
L.2.1.4 Construct a scientific argument for classifying vertebrates that have unusual characteristics, such as bats, penguins, snakes, salamanders, dolphins, and duck-billed platypuses (i.e., bats have wings yet they are mammals).	• Song: Vertebrates • Book: Guess What I Am • Vertebrates • Animal Groups • Mammals • Fish • Birds • Amphibians • Reptiles	

MISSISSIPPI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
L.2.2 Reproduction and Heredity		
L.2.2 Students will demonstrate an understanding of how living things change in form as they go through the general stages of a life cycle.		
L.2.2.1 Use observations through informational texts and other media to observe the different stages of the life cycle of trees (i.e., pines, oaks) to construct explanations and compare how trees change and grow over time.	• Book: The Old Maple Tree • Plant Life Cycle and Growth	
L.2.2.2 Construct explanations using first-hand observations or other media to describe the life cycle of an amphibian (birth, growth/ development, reproduction, and death). Communicate findings.	• Animal Life Cycle and Growth • Amphibians	• Amphibians • Amphibian Attribute Poster
L.2.3 Ecology and Interdependence		
L.2.3A Students will demonstrate an understanding of the interdependence of living things and the environment in which they live.		
L.2.3A.1 Evaluate and communicate findings from informational text or other media to describe how animals change and respond to rapid or slow changes in their environment (fire, pollution, changes in tide, availability of food/water).	• Animal Behavior • Weather Affects People and Animals	
L.2.3A.2 Construct scientific arguments to explain how animals can make major changes (e.g., beaver dams obstruct streams, or large deer populations destroying crops) and minor changes to their environments (e.g., ant hills, crawfish burrows, mole tunnels). Communicate findings.	• Books: Turtle's Pond; Winter Snoozers • Animal Behavior • Insects	• Animal Bodies

MISSISSIPPI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
L.2.3B Students will demonstrate an understanding of the interdependence of living things.		
L.2.3B.1 Evaluate and communicate findings from informational text or other media to describe and to compare how animals interact with other animals and plants in the environment (i.e., predator prey relationships, herbivore, carnivore, omnivore).	• Herbivores, Carnivores, and Omnivores • Food Chains • Polar Lands Food Chain • Prairies Food Chain • Wetlands Food Chain	
L.2.3B.2 Conduct an investigation to find evidence where plants and animals compete or cooperate with other plants and animals for food or space. Present findings (i.e., using technology or models).	• Herbivores, Carnivores, and Omnivores • Food Chains • Polar Lands Food Chain • Prairies Food Chain • Wetlands Food Chain	
L.2.4 Adaptations and Diversity		
L.2.4 Students will demonstrate an understanding of the ways animals adapt to their environment in order to survive.		
L.2.4.1 Evaluate and communicate findings from informational text or other media to describe how plants and animals use adaptations to survive (e.g., ducks use webbed feet to swim in lakes and ponds, cacti have waxy coatings and spines to grow in the desert) in distinct environments (e.g., polar lands, saltwater and freshwater, desert, rainforest, woodlands).	• Book: Animal Bodies • Animal Bodies • Mountains • Deserts • Rainforests • Prairies	
L.2.4.2 Create a solution exemplified by animal adaptations to solve a human problem in a specific environment (e.g., snowshoes are like hare's feet or flippers are like duck's feet). Use an engineering design process to define the problem, design, construct, evaluate, and improve the solution.*	Waterford encourages everyone to have writing, drawing, and art materials available for children's creations. • Song: The Scientific Method • Science Investigation • Animal Adaptations and Human Tools	

MISSISSIPPI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Physical Science		
P.2.5 Organization of Matter and Chemical Interactions		
P.2.5 Students will demonstrate an understanding of the properties of matter.		
P.2.5.1 Conduct a structured investigation to collect, represent, and analyze categorical data to classify matter as solid, liquid, or gas. Report findings and describe a variety of materials according to observable physical properties (e.g., size, color, texture, opacity, solubility).	• Song: Solid or Liquid • Book: Pancakes Matter • Solid and Liquid • Solid, Liquid, Gas • Matter Experiment	• Learning Together: Solids, Liquids, and Gases
P.2.5.2 Compare and measure the length of solid objects using technology and mathematical representations. Analyze and communicate findings	• Song: Measuring Plants • Length	
P.2.5.3 Compare the weight of solid objects and the volume of liquid objects. Analyze and communicate findings.	• Capacity • Heavy and Light	
P.2.5.4 Construct scientific arguments to support claims that some changes to matter caused by heating can be reversed, and some changes cannot be reversed.	• Book: Water • Water Cycle • Changes in Matter	
P.2.6 Motions, Forces, and Energy		
P.2.6 Students will demonstrate an understanding of how the motion of objects is affected by pushes, pulls, and friction on an object.		
P.2.6.1 Conduct a structured investigation to collect, represent, and analyze data from observations and measurements to demonstrate the effects of pushes and pulls with different strengths and directions. Communicate findings (e.g., models or technology).	• Song: Push and Pull • Book: Mr. Mario's Neighborhood • Push and Pull	

MISSISSIPPI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
P.2.6 Students will demonstrate an understanding of how the motion of objects is affected by pushes, pulls, and friction on an object continued.		
P.2.6.2 Generate and answer questions about the relationship between (1) friction and the motion of objects and (2) friction and the production of heat.	• Book: Mr. Mario's Neighborhood • Push and Pull	
P.2.6.3 Develop a plan to change the force (push or pull) of friction to solve a human problem (e.g., improve the ride on a playground slide or make a toy car or truck go faster). Use an engineering design process to define the problem, design, construct, evaluate, and improve the plan.*	• Song: The Scientific Method • Book: Mr. Mario's Neighborhood • Science Investigation • Push and Pull	
Earth and Space Science		
E.2.8 Earth and the Universe		
E.2.8 Students will demonstrate an understanding of the appearance, movements, and patterns of the sun, moon, and stars.		
E.2.8.1 Recognize that there are many stars that can be observed in the night sky and the Sun is the Earth's closest star.	• Book: Star Pictures • Sun, Moon, and Earth	• Learning Together: The Sky Above Us
E.2.8.2 With teacher guidance, observe, describe, and predict the seasonal patterns of sunrise and sunset. Collect, represent, and interpret data from internet sources to communicate findings.	• Book: That's What I Like: A Book About Seasons • Sun, Moon, and Earth • Weather Patterns	
E.2.8.3 Observe and compare the details in images of the moon and planets using the perspective of the naked eye, telescopes, and data from space exploration.	• Song: Moon • Books: Star Pictures; Moon Song • Sun, Moon, and Earth • Moon	• Learning Together: Astronomy; The Sky Above Us

MISSISSIPPI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
E.2.8 Students will demonstrate an understanding of the appearance, movements, and patterns of the sun, moon, and stars continued.		
E.2.8.4 With teacher support, gain an understanding that scientists are humans who use observations and experiments to learn about space. Obtain information from informational text or other media about scientists who have made important discoveries about objects in space (e.g., Galileo Galilei, Johannes Kepler, George Ellery Hale, Jill Tarter) or the development of technologies (e.g., various telescopes and detection devices, computer modeling, and space exploration).	• Book: I Want to Be a Scientist Like Stephen Hawking	
E.2.8.5 Use informational text and other media to observe, describe and predict the visual patterns of motion of the Sun (sunrise, sunset) and Moon (phases).	• Book: Moon Song • Sun, Moon, and Earth • Moon Patterns	
E.2.8.6 Create a model that will demonstrate the observable pattern of motion of the Sun or Moon. Use an engineering design process to define the problem, design, construct, evaluate, and improve the model.*	Waterford encourages everyone to have writing, drawing, and art materials available for children's creations. • Song: The Scientific Process • Science Investigation	
E.2.10 Earth's Resources		
E.2.10 Students will demonstrate an understanding of how humans use Earth's resources.		
E.2.10.1 Use informational text, other media, and first-hand observations to investigate, analyze and compare the properties of Earth materials (including rocks, soils, sand, and water).	• Song: Rocks • Natural Resources • Soil • Water • Rocks	• Learning Together: Natural Resources; Rocks • More to Explore: Rocks

MISSISSIPPI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
E.2.10 Students will demonstrate an understanding of how humans use Earth's resources continued.		
E.2.10.2 Conduct an investigation to identify and classify everyday objects that are resources from the Earth (e.g., drinking water, granite countertops, clay dishes, wood furniture, or gas grill). Classify these objects as renewable and nonrenewable resources.	• Song: Rocks • Natural Resources • Soil • Water • Rocks	• Learning Together: Natural Resources
E.2.10.3 Use informational text and other media to summarize and communicate how Earth materials are used (e.g., soil and water to grow plants; rocks to make roads, walls or building; or sand to make glass)	• Song: Rocks • Natural Resources • Soil • Water • Rocks	• Learning Together: Natural Resources
E.2.10.4 Use informational text, other media, and first-hand observations to investigate and communicate the process and consequences of soil erosion.	• Rock Cycle	
E.2.10.5 With teacher guidance, investigate possible solutions to prevent or repair soil erosion.	Waterford encourages everyone to have writing, drawing, and art materials available for children's creations. • Song: The Scientific Method • Science Investigation • Rock Cycle	

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

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 waterford.mentor.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; 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

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)

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

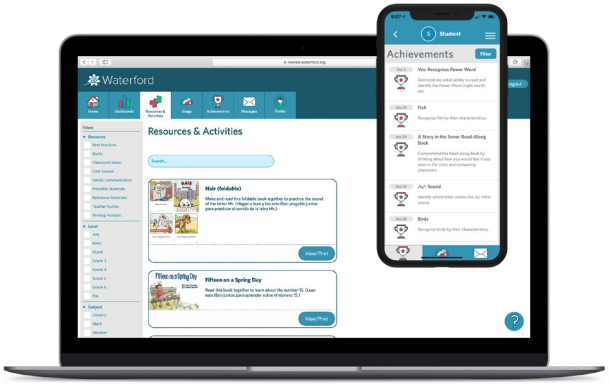
Sum Up: Remember Order, Sum Up: Remember Details, Peek at the Story, Guess and Check, Connect to Me, Build Knowledge

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).