

Alignment September 2025



Waterford
Early Learning:
Math & Science

Overview



This document provides a detailed alignment of Waterford Early Learning to Mississippi College & Career-Readiness Standards Mathematics 2025 & Science 2018.

Alignment Description

This document aligns Mississippi College & Career-Readiness Standards Mathematics 2025 & Science 2018 to Waterford.org's digital activities and supporting resources.

Waterford Digital Activities

Waterford programs include engaging, evidencebased digital activities anchored in the science of learning that progress through an adaptive learning path in reading, math, and science. These activities are also available for collaborative instruction at >teacher.waterford.org.

 Classroom Playlists enable teachers to harness learning technologies in whole-class instruction, flexible small groups, and personalized support for individual students.

Waterford Resources

Waterford provides an engaging, diverse collection of PDF resources tailored to boost children's learning experiences, empowering instruction in both classroom and home settings.

- Teacher Resources encompass class activities, reference materials, teacher guides, an array of books, and more.
- Family Resources encompass newsletters, activity sets, and reference materials, all available in both English and Spanish.

Waterford Curriculum Details

Waterford programs leverage the science of learning and evidence-based research to optimize reading development, accelerate learning, and target interventions for PreK–2nd grade learners.

Adaptive, Individualized Learning

Tailored instruction enables students to progress through the sequence at their own pace, offering multiple opportunities for practice as needed and more challenging activities when students are ready. This adaptation is automatic within the learning sequence. More information on the adaptive learning sequence can be found in → Waterford's Adaptive Learning Path in Action video.

Data-Informed Instruction

Administrators and teachers can use the program's reporting features to monitor progress in real-time, identify areas of difficulty, and utilize additional intervention tools in varied instructional settings. Examples of the reporting features can be found \rightarrow here.

Research-Driven Development

Waterford is committed to ongoing development based on the latest research findings. Please note that this correlation is accurate as of the date on the cover.

Reading Sequence

Waterford's Reading Sequence is aligned to the Science of Reading, with explicit and systematic instruction. The sequence develops phonics; phonological awareness; comprehension and vocabulary; language concepts and writing; and fluency. More detailed information can be found in the →Reading Skills Scope & Sequence.

Math and Science Sequence

Waterford's Math and Science Sequence is designed around clear instructional principles. The math sequence develops numbers and operations (including counting and cardinality); operations and algebraic thinking; measurement and data; and geometry. The science sequence develops an understanding of physical, life, earth and space domains. More detailed information can be found in the →Math and Science Scope & Sequence.

SmartStart Sequence

Waterford's SmartStart Sequence is designed so learners are exposed to the foundational principles critical to kindergarten readiness. SmartStart combines the digital learning path with teacher resources to teach early reading, math, science, and social studies concepts as well as executive function, creative arts, health, and physical development. More detailed information can be found in the →SmartStart Scope & Sequence.

Table of Contents



Mathematics	1
Kindergarten	1
Counting and Cardinality (CC)	2 4 6
First Grade	10
Operations and Algebraic Thinking (OA)	13 15
Second Grade	20
Operations and Algebraic Thinking (OA) Numbers and Operations In Base Ten (NBT) Measurement and Data (MD) Geometry (G)	21 24

Science	28
KINDERGARTEN	28
Life Science Physical Science Earth and Space Science	33
GRADE ONE	36
Life Science	39
GRADE TWO	42
Life Science Physical Science Earth and Space Science	46
Books and Related Activities	51
Family Engagement Resources	52



Mississippi Standards	Waterford Digital Activities	Waterford Resources
Mathematics		
Kindergarten		
Counting and Cardinality (CC)		
Know number names and the count sequence	ce.	
K.CC.1a Count to 100 by ones.	 Number Songs Counting Songs (See titles at end of document.) Skip Counting Counting Puzzle Classroom Playlists MS: K Counting and Cardinality: Count to 100 	Count to 100 by Ones and Tens
K.CC.1b Count to 100 by tens.	 Number Songs Counting Songs (See titles at end of document.) Skip Counting Counting Puzzle Classroom Playlists MS: K Counting and Cardinality: Count to 100 	Count to 100 by Ones and Tens
K.CC.2 Count forward beginning from a given number within the known sequence (instead of having to begin at 1).	 Songs: Counting On Count On Counting Songs (See titles at end of document.) Classroom Playlists MS: K: Counting and Cardinality: Count Forward 	Count Forward



Mississippi Standards	Waterford Digital Activities	Waterford Resources
Know number names and the count sequen	ce continued.	
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).	 Counting Songs Number Songs Math Books (See titles at end of document.) Number Instruction Classroom Playlists MS: K: Counting and Cardinality: Write and Represent Numbers: 	• Write Numbers 0-20
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 (See titles at end of document.) Number Counting Order Numbers One-to-one Correspondence Make and Count Groups Number Instruction Classroom Playlists MS: K: Counting and Cardinality: Count Objects MS: K: Counting and Cardinality: Write and Represent Numbers: 	Object Counting Basics
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 Number Instruction Match Numbers One-to-One Correspondence Classroom Playlists MS: K: Counting and Cardinality: Count Objects MS: K: Counting and Cardinality: Write and Represent Numbers 	Object Counting Grouping



Mississippi Standards	Waterford Digital Activities	Waterford Resources	
Count to tell the number of objects continue	Count to tell the number of objects <i>continued</i> .		
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 Classroom Playlists MS: K: Counting and Cardinality: Count Objects MS: K: Counting and Cardinality: Write and Represent Numbers 	Object Counting Succession	
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 (See titles at end of document.) Make and Count Groups Number Counting Number Instruction Match Numbers Bug Bits One-to-one Correspondence Classroom Playlists MS: K: Counting and Cardinality: Count Objects MS: K: Counting and Cardinality: Write and Represent Numbers 	• How Many?	



Mississippi Standards	Waterford Digital Activities	Waterford Resources	
Compare numbers.	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.	 Books: For the Birds Greater Than, Less Than More Than, Fewer Than More Than Fewer Than Make and Count Groups Classroom Playlists MS: K: Counting and Cardinality: Greater Than, Less Than MS: K: Counting and Cardinality: More Than, Fewer Than 	• Greater, Less, or Equal	
K.CC.7 Compare two numbers between 1 and 10 presented as written numerals.	 Books: For the Birds Greater Than, Less Than More Than, Fewer Than More Than Fewer Than Classroom Playlists MS: K: Counting and Cardinality: Greater Than, Less Than 	Compare Two Numbers	
Operations and Algebraic Thinking (OA	()		
Understand addition as putting together and	adding to, and understand subtraction as taking apart and taki	ng 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; Bee Happy Addition; On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction Books: Five Delicious Muffins Make and Count Groups Add Groups Subtract Groups Act Out Addition Act Out Subtraction Classroom Playlists MS: K: Operations and Algebraic Thinking: Addition MS: K: Operations and Algebraic Thinking: Subtraction 	Represent Addition and Subtraction with Objects	



Mississippi Standards	Waterford Digital Activities	Waterford Resources	
Understand addition as putting together and	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from <i>continued</i> .		
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; Bee Happy Addition; On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction Books: Five Delicious Muffins Add Groups Subtract Groups Minuends Sums Act Out Addition Act Out Subtraction Classroom Playlists MS: K: Operations and Algebraic Thinking: Addition Word Problems MS: K: Operations and Algebraic Thinking: Subtraction Word Problems 	Addition and Subtraction Word Problems	
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	
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 Classroom Playlists MS: K: Operations and Algebraic Thinking: Make 10 	• Numbers That Make 10	
K.OA.5a Fluently add within 5.	 Songs: Addition; Bee Happy Addition; On the Bayou Add Groups Sums Act Out Addition Classroom Playlists MS: K: Operations and Algebraic Thinking: Fluently Add 		



Mississippi Standards	Waterford Digital Activities	Waterford Resources
Understand addition as putting together an	d adding to, and understand subtraction as taking apart and taki	ng from continued .
K.OA.5b Fluently subtract within 5. Number and Operations In Base Ten (N	Songs: Bakery Subtraction; Subtract Those Cars; Circus Subtraction Books: Five Delicious Muffins Subtract Groups Minuends Sums Act Out Subtraction Classroom Playlists MS: K: Operations and Algebraic Thinking: Fluently Subtract	
Work with numbers 11–19 to gain foundation	s 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 Classroom Playlists MS: K: Numbers and Operations: Compose and Decompose Numbers	• Tens and Ones



Mississippi Standards	Waterford Digital Activities	Waterford Resources
Measurement and Data (MD)		
Describe and compare measurable attributes	5.	
K.MD.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.	 Songs: Measuring Plants Length Classroom Playlists MS: K: Measurement and Data: Length MS: K: Measurement and Data: Weight 	Measurable Attributes
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 Classroom Playlists MS: K: Measurement and Data: Tall and Short MS: K: Measurement and Data: Length MS: K: Measurement and Data: Weight 	Comparing Objects
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 Books: Buttons, Buttons Sort Make and Count Groups Classroom Playlists MS: K: Measurement and Data: Classify Objects 	Classifying Objects



Mississippi Standards	Waterford Digital Activities	Waterford Resources	
Geometry (G)	Geometry (G)		
Identify and describe shapes (squares, circles	s, triangles, rectangles, hexagons, cubes, cones, cylinders, and sp	heres).	
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: 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 Classroom Playlists MS: K: Geometry: Shapes MS: K: Geometry: Positions 	Describing Objects	
K.G.2 Correctly name shapes regardless of their orientations or overall size.	 Songs: Kites; Shapes, Shapes, Shapes Books: The Shape of Things; Imagination Shapes; Up in the Air Circle, Square, Triangle, Rectangle Star, Semicircle, Octagon, Oval, Rhombus Simple Shapes Solid Shapes World Shapes MS: K: Geometry: Shapes 	• Shape Recognition	



Mississippi Standards	Waterford Digital Activities	Waterford Resources	
Identify and describe shapes (squares, circle	Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres) continued.		
K.G.3 Identify shapes as two-dimensional (lying in a plane, "flat") or threedimensional ("solid").	Solid Shapes Space Shapes Simple Shapes Classroom Playlists MS: K: Geometry: Two-Dimensional or Three-dimensional	• Two-dimensional Shapes	
Analyze, compare, create, and compose shap	pes.		
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).	 Songs: Corners and Sides Simple Shapes Solid Shapes Space Shapes Congruence Tangrams Similar Figures Classroom Playlists MS: K: Geometry: Compare Shapes MS: K: Geometry: Shapes 	• Compare Shapes	
K.G.5 Model objects in the world by drawing two-dimensional shapes and building three-dimensional shapes.	Geoboard Tangrams	Model 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 Classroom Playlists MS: K: Geometry: Compose Shapes 	• Form Larger Shapes	



Mississippi Standards	Waterford Digital Activities	Waterford Resources
First Grade		
Operations and Algebraic Thinking (OA)	
Represent and solve problems involving add	tion 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 Books: Facts About Families Addition and Subtraction Fact Families Addition and Subtraction Relationship Doubles Subtract Doubles Classroom Playlists MS: 1: Operations and Algebraic Thinking: Addition Word Problems MS: 1: Operations and Algebraic Thinking: Subtraction Word Problems 	Word Problems Using Subtraction Within 20
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.	 Add 3 One-digit Numbers Classroom Playlists MS: 1: Operations and Algebraic Thinking: Addition Word Problems with Three Whole Number 	Word Problems Adding 3 Numbers
Understand and apply properties of operatio	ns and the relationship between addition and subtraction.	
1.0A.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 Classroom Playlists MS: 1: Operations and Algebraic Thinking: Properties of Operations 	Strategies to Add and Subtract



Mississippi Standards	Waterford Digital Activities	Waterford Resources
Represent and solve problems involving addi	ition and subtraction continued .	
1.0A.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 AddendsSubtraction PatternsAddition and Subtraction Fact FamiliesMake 10	Understand Subtraction as an Unknown Addend Prob- lem
Add and subtract within 20.		
1.OA.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).	 Songs: 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 Classroom Playlists MS: 1: Operations and Algebraic Thinking: Relate Counting to Addition MS: 1: Operations and Algebraic Thinking: Relate Counting to Subtraction 	Relate Counting to Addition and Subtraction



Mississippi Standards	Waterford Digital Activities	Waterford Resources
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 Classroom Playlists MS: 1: Operations and Algebraic Thinking: Add and Subtract Within 20 MS: 1: Operations and Algebraic Thinking: Fluently Add MS: 1: Operations and Algebraic Thinking: Fluently Subtract 	Add and Subtract within 20
Work with addition and subtraction equation	ns.	
1.0A.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? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.	 Songs: Fact Families Books: 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 Classroom Playlists MS: 1: Operations and Algebraic Thinking: Equal Sign 	• Equal Sign



Mississippi Standards	Waterford Digital Activities	Waterford Resources	
Work with addition and subtraction equation	Work with addition and subtraction equations continued.		
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 Classroom Playlists MS: 1: Operations and Algebraic Thinking: Unknown Whole Number: Addition MS: 1: Operations and Algebraic Thinking: Unknown Whole Number: Subtraction 		
Number and Operations in Base Ten (N	ВТ)		
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.	 Songs: Counting On Count On Number Chart Classroom Playlists MS: 1: Numbers and Operations: Number Recognition and Sense MS: 1: Numbers and Operations: Read and Write Numbers 	• Count to 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.2a 10 can be thought of as a bundle of ten ones—called a "ten." 	 Songs: Place Value Place Value of 2-digit Numbers Expanded Notation Classroom Playlists MS: 1: Numbers and Operations: Place Value 10-19 	• Tens as a Bundle of Ones	



Mississippi Standards	Waterford Digital Activities	Waterford Resources	
Understand place value continued.	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.	 Songs: Place Value Place Value of 2-digit Numbers Expanded Notation Classroom Playlists MS: 1: Numbers and Operations: Place Value: 10-19 	• 11-19 Broken Down	
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 Classroom Playlists MS: 1: Numbers and Operations: Place Value 	• Ten Groupings	
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)' Classroom Playlists MS: 1: Numbers and Operations: Compare Two-digit Numbers 	Compare Two-Digit Numbers	
Use place value understanding and propertion	es 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 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 Add 2-digit Numbers with Regrouping MS 2-digit Numbers and Operations: Add Within 100 	• Adding within 100	



Mississippi Standards	Waterford Digital Activities	Waterford Resources	
Use place value understanding and propertie	Use place value understanding and properties of operations to add and subtract <i>continued</i> .		
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.	 Songs: Skip Counting Books: Navajo Beads Add Subtract Add Tens Subtract Tens Skip Count by 10 Number Chart Classroom Playlists MS: 1: Numbers and Operations: Find 10 More MS: 1: Numbers and Operations: Number Patterns 	• Ten More or Less	
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 Classroom Playlists MS: 1: Numbers and Operations: Subtract Multiples of 10 	• Subtracting in 10s	
Measurement and Data (MD)			
Measure lengths indirectly and by iterating le	ength 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 Classroom Playlists MS: 1: Measurement and Data: Order Objects by Length 	Order by Length	



Mississippi Standards	Waterford Digital Activities	Waterford Resources
Measure lengths indirectly and by iterating length units continued.		
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 Classroom Playlists MS: 1: Measurement and Data: Length 	• Length Measurement
Tell and write time with respect to a clock an	d a calendar.	
1.MD.3a Tell and write time in Hours and Half-hours using analog and digital clocks.	 Songs: Clock Hands Books: Mr. Romano's Secret: A Time Story Tell Time to the Hour Tell Time to the Half-Hour Order Numbers on a Clock Classroom Playlists MS: 1: Measurement and Data: Tell Time in Hours MS: 1: Measurement and Data: Tell Time in Half-hours 	Hours and Half-hours
1.MD.3b Identify the days of the week and the number of days in a week.	 Songs: Days of the Week Classroom Playlists MS: 1: Measurement and Data: Days of the Week 	
1.MD.3c Identify the months of the year, the number of months in a year, and the number of weeks in a month.	Songs: Days in a Month; Months of the Year	



Mississippi Standards	Waterford Digital Activities	Waterford Resources
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 Classroom Playlists MS: 1: Measurement and Data: Graphs MS: 1: Measurement and Data: Tally Marks 	• Data Categorization
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 Books: Bugs for Sale Coin Identification Coin Value Quarters Count Quarters, Dimes, Nickels, and Pennies Count Nickels and Pennies or Dimes and Pennies Count Coins Classroom Playlists MS: 1: Measurement and Data: Value of U.S. Coins 	Coin Identification and Value
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 Classroom Playlists MS: 1: Measurement and Data: Compare Coins 	Coin Identification and Value



Mississippi Standards	Waterford Digital Activities	Waterford Resources
Work with money continued.		
1.MD.5c Count like U.S. coins up to the equivalent of a dollar.	 Songs: Money; Save Your Pennies Books: 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 Classroom Playlists MS: 1: Measurement and Data: Count Coins to a Dollar 	Coin Identification and Value
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 Books: 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 Classroom Playlists MS: 1: Measurement and Data: Equivalent Coin Values 	Coin Identification and Value



Mississippi Standards	Waterford Digital Activities	Waterford Resources
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 Classroom Playlists MS: 1: Geometry: Defining Attributes 	• Attributes
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.	 Songs: Kites Space Shapes Geoboard Tangrams Classroom Playlists MS: 1: Geometry: Compose Shapes 	
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.	 Songs: Fractions Books: Halves and Fourths and Thirds Equal-part Fractions Label Parts of Fractions Classroom Playlists MS: 1: Geometry: Partition Shapes 	• Equal Shares



Mississippi Standards	Waterford Digital Activities	Waterford Resources
Second Grade		
Operations and Algebraic Thinking (OA	x)	
Represent and solve problems involving add	ition and subtraction.	
2.0A.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.	 Books: Painting by Number Addition Subtraction Missing Addends and Subtrahends Subtraction Sentences Addition and Subtraction Facts Classroom Playlists MS: 2: Operations and Algebraic Thinking: Addition Word Problems MS: 2: Operations and Algebraic Thinking: Subtraction Word Problems 	One- and two-step word problems within 100
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 onedigit numbers.	 Songs: Fact Families; Doubles Subtraction Patterns Addition Facts to 2 Classroom Playlists MS: 2: Operations and Algebraic Thinking: Fluently Add MS: 2: Operations and Algebraic Thinking: Fluently Subtract 	Add and Subtract within 20
Work with equal groups of objects to gain fo	undations 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.	 Songs: Odd Todd and Even Steven Skip Count by 2 Addition Facts Classroom Playlists MS: 2: Operations and Algebraic Thinking: Odd or Even Numbers 	Odd and Even Recognition



Mississippi Standards	Waterford Digital Activities	Waterford Resources	
Work with equal groups of objects to gain foundations for multiplication <i>continued</i> .			
2.0A.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 Classroom Playlists MS: 2: Operations and Algebraic Thinking: Addition With Arrays 		
Numbers and Operations In Base Ten (I	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." 	 Songs: Place Value Place Value of 3-digit Numbers Classroom Playlists MS: 2: Numbers and Operations: Place Value of 3-digit Numbers 	• Thinking of 100 as a Bundle of Ten 10s	
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).	 Songs: Place Value Place Value of 3-digit Numbers Classroom Playlists MS: 2: Numbers and Operations: Place Value of 3-digit Numbers 	Grouping Hundreds	
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.	 Songs: Skip Counting Skip Count Skip Count by 10 Skip Count by 5 Number Sequences and Patterns Classroom Playlists MS: 2: Numbers and Operations: Skip Count by 5s MS: 2: Numbers and Operations: Skip Count by 10s 	• Counting within 1000	



Mississippi Standards	Waterford Digital Activities	Waterford Resources
Understand place value continued.		
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 Expanded Notation Classroom Playlists MS: 2: Numbers and Operations: Read and Write Numbers MS: 2: Numbers and Operations: Expanded Form 	Read and Write Numbers to 1000
 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. Use place value understanding and properties 	 Greater Than, Less Than (3-digit Numbers) Place Value of 3-digit Numbers Classroom Playlists MS: 2: Numbers and Operations: Compare Numbers 	• Less Than, Equal To, or Greater Than
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 without regrouping Mustract with Regrouping Mustract with Regrouping Classroom Playlists MS: 2: Numbers and Operations: Fluently Add MS: 2: Numbers and Operations: Fluently Subtract 	Add and Subtract within 100



Mississippi Standards	Waterford Digital Activities	Waterford Resources	
Use place value understanding and properti	Use place value understanding and properties of operations to add and subtract <i>continued</i> .		
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 Classroom Playlists MS: 2: Numbers and Operations: Add Two-digit Numbers MS: 2: Numbers and Operations: Add Three Two-digit Numbers 	Adding Four 2-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 Subtract with Regrouping Act Out Addition Act Out Subtraction Classroom Playlists MS: 2: Numbers and Operations: Add within 1000 MS: 2: Numbers and Operations: Subtract within 1000 	Add and Subtract within 1000	
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 Classroom Playlists MS: 2: Numbers and Operations: Number Patterns 	Mentally Adding or Subtracting 10 or 100	



Mississippi Standards	Waterford Digital Activities	Waterford Resources
Use place value understanding and properties of operations to add and subtract <i>continued</i> .		
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 Commutative Properties of Addition Act Out Addition Act Out Subtraction Classroom Playlists MS: 2: Numbers and Operations: Explain Addition and Subtraction 	Explaining Addition and Subtraction Strategies
Measurement and Data (MD)		
Measure and estimate lengths in standard u	nits.	
2.MD.1 Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.	 Songs: Measuring Plants Books: Birds at My House Length Measurement Tools Standard Units of Length Classroom Playlists MS: 2: Measurement and Data: Length 	• Measurement Tools
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 Classroom Playlists MS: 2: Measurement and Data: Length 	Measuring the Same Object Two Ways



Mississippi Standards	Waterford Digital Activities	Waterford Resources
Measure and estimate lengths in standard u	nits continued.	
2.MD.3 Estimate lengths using units of inches, feet, centimeters, and meters.	 Songs: Measuring Plants Length Standard Units of Length Measurement Tools 	• Estimating Lengths
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.	LengthStandard Units of Length	Measure Length
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.	 Books: Yangshi's Perimeter Story Problem Strategies Addition Subtraction Length Standard Units of Length Perimeter 	Add and Subtract Word Problems within 100
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 LineLength	



Mississippi Standards	Waterford Digital Activities	Waterford Resources	
Work with time with respect to a clock and a	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 Classroom Playlists MS: 2: Measurement and Data: Tell Time to Five Minutes 	• Tell and Write Time	
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 Books: 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 Classroom Playlists MS: 2: Measurement and Data: Word Problems with Money 	Solve Money Word Problems	
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?"	Songs: Months of the Year; Days in a Month; Days of the Week	• <u>Calendar</u>	



Mississippi Standards	Waterford Digital Activities	Waterford Resources
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.	 Measurement Tools Standard Units of Length 	Generating Measurement Data
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.	 Songs: Graphing Graphing Bar Graphs Picture Graphs Use Graphs and Tables Classroom Playlists MS: 2: Measurement and Data: Picture Graphs MS: 2: Measurement and Data: Picture and Bar Graphs MS: 2: Measurement and Data: Picture and Bar Graphs 	• <u>Graphs</u>
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 Books: The Shape of Things Space Shapes World Shapes Geoboard Classroom Playlists MS: 2: Geometry: Recognize Shapes 	• Draw Shapes
2.G.2 Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.	 Songs: Fractions Fractions of Regions Classroom Playlists MS: 2: Geometry: Partition Shapes 	



Mississippi Standards	Waterford Digital Activities	Waterford Resources	
Reason with shapes and their attributes con	Reason with shapes and their attributes <i>continued</i> .		
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.	 Songs: Fractions Books: Halves and Fourths and Thirds; The Fraction Twins Fractions Label Parts of Fractions Geoboard Fractions of Regions Fractions of Groups Classroom Playlists MS: 2: Geometry: Partition Shapes 	• Fractions	
Science	Science		
KINDERGARTEN			
Life Science			
L.K.1 Hierarchical Organization			
L.K.1A Students will demonstrate an underst	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).	 Songs: Living and Nonliving Living or Nonliving Plants and Animals Need Air Water Sun Classroom Playlists MS: K: Life Science: Living and Nonliving 	 Living Things Living or Nonliving 	



Mississippi Standards	Waterford Digital Activities	Waterford Resources
L.K.1A Students will demonstrate an understa	anding of living and nonliving things continued.	
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 Jane Goodall; I Want to Be a Scientist Like George Washington Carver Classroom Playlists MS: K: Life Science: Scientists 	
L.K.1B Students will demonstrate an understa	anding of how animals (including humans) use their physical fea	tures 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.	 Songs: Animal Bodies Books: Animal Bodies Animal Bodies Animal Groups Animal Teeth Classroom Playlists MS: K: Life Science: Animal Bodies 	
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 Classroom Playlists MS: K: Life Science: Animal Bodies 	



Mississippi Standards	Waterford Digital Activities	Waterford Resources
L.K.2 Reproduction and Heredity		
L.K.2 Students will demonstrate an understa	nding of how living things change in form as they go through the	e 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.	 Songs: Plants Are Growing Books: A Seed Grows; The Old Maple Tree Plant Life Cycle and Growth Plant Experiment Classroom Playlists MS: K: Life Science: Plant Life Cycle 	• 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 Classroom Playlists MS: K: Life Science: Animal Life Cycle 	
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.	 Songs: Measuring Plants Plant Experiment Plant Life Cycle and Growth Classroom Playlists MS: K: Life Science: Plant Experiment 	Plants Water for Plants
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).	 Songs: Traits Books: George and Jack; A Seed Grows Classroom Playlists MS: K: Life Science: Traits 	• <u>Traits</u>



Mississippi Standards	Waterford Digital Activities	Waterford Resources
L.K.3 Ecology and Interdependence		
L.K.3A Students will demonstrate an underst	anding 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.	 Songs: Water Books: Mela's Water Pot Sun Plants Water Healthy Plants' Needs Plant Experiment Classroom Playlists MS: K: Life Science: Plant Needs 	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).	 Songs: Water Books: Mela's Water Pot; Everybody Needs to Eat Sun Water Plants and Animals Need Air Animals Need Water Classroom Playlists MS: K: Life Science: Plant and Animal Needs: 	
L.K.3B Students will demonstrate an underst	anding of the interdependence of living things and the environn	nent 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.	 Songs: Food From Plants Books: Everybody Needs to Eat Food From Plants Animal Teeth Classroom Playlists MS: K: Life Science: Food Chain 	



Mississippi Standards	Waterford Digital Activities	Waterford Resources
L.K.3B Students will demonstrate an underst	anding of the interdependence of living things and the enviror	nment in which they live continued.
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.*	 Food Chains Mountains Oceans Deserts Prairies Polar Lands Rainforests Wetlands Classroom Playlists MS: K: Life Science: Habitat: 	
L.K.4 Adaptations and Diversity		
L.K.4 Students will demonstrate an understa for survival.	nding that some groups of plants and animals are no longer liv	ing (extinct) because they were unable to meet their needs
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 Classroom Playlists MS: K: Life Science: Extinct Plants and Animals 	Dinosaur SizeFossils
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 Classroom Playlists MS: K: Life Science: Extinct Plants and Animals 	• <u>Dinosaur Size</u>



Mississippi Standards	Waterford Digital Activities	Waterford Resources
Physical Science		
P.K.5 Organization of Matter and Chem	ical Interactions	
P.K.5A Students will demonstrate an underst	anding 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.	 Songs: Solid or Liquid Books: Pancakes Matter States of Water Heat Changes Water Solid and Liquid Classroom Playlists MS: K: Physical Science: Solids and Liquids 	Solids, Liquids, and GasesHow It Works
P.K.5A Students will demonstrate an underst	anding of the solid and liquid states of matter continued.	
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 Classroom Playlists MS: K: Physical Science: Properties of Materials MS: K: Physical Science: Solids and Liquids 	 Solids, Liquids, and Gases How It Works
P.K.5B. Students will demonstrate an unders	tanding 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).	 Songs: Position Cat Books: Imagination Shapes Tangrams Position Classroom Playlists MS: K: Physical Science: Use Shapes 	



Mississippi Standards	Waterford Digital Activities	Waterford Resources
P.K.5B. Students will demonstrate an unders	tanding of how solid objects can be constructed from a smaller	set continued.
P.K.5B.2 Analyze a large composite structure to describe its smaller components using drawing and writing.	 Books: The Shape of Things Tangrams Simple Shapes Classroom Playlists MS: K: Physical Science: Use Shapes 	• 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 Classroom Playlists MS: K: Physical Science: Parts 	
Earth and Space Science		
E.K.8 Earth and the Universe		
E.K.8A Students will demonstrate an unders	tanding 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.	 Songs: Seasons Books: That's What I Like: A Book About Seasons Calendar/Graph Weather Weather Patterns Clouds Spring Summer Fall Winter Classroom Playlists MS: K: Earth and Space Science: Seasons: 	 Weather The Weather Around Us Weather Cards
E.K.8B Students will demonstrate an unders	tanding 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).	 Books: My Family Campout Sun, Moon, and Earth Sun Classroom Playlists MS: K: Earth and Space Science: Sunlight 	 The Sky Above Us Sun and Shade Pictures



Mississippi Standards	Waterford Digital Activities	Waterford Resources
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).	 Books: My Family Campout Sun, Moon, and Earth Sun Classroom Playlists MS: K: Earth and Space Science: Sunlight 	 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.*	Songs: The Scientific MethodScience Investigation	
E.K.10 Earth's Resources		
E.K.10 Students will demonstrate an underst	anding 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 Classroom Playlists MS: K: Earth and Space Science: Recycling 	RecyclingOur 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.	 Songs: Pollution Rap Care of Earth Care of Water Pollution and Recycling Classroom Playlists MS: K: Earth and Space Science: Conserve Earth's Resources MS: K: Earth and Space Science: Recycling 	• Recycling • Our Earth



Mississippi Standards	Waterford Digital Activities	Waterford Resources	
E.K.10 Students will demonstrate an understa	E.K.10 Students will demonstrate an understanding of how humans use Earth's resources continued.		
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.*	 Songs: The Scientific Method Books: Birds At My House Science Investigation Pollution and Recycling 		
GRADE ONE			
Life Science			
L.1.1 Hierarchical Organization			
L.1.1 Students will demonstrate an understan	ding 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.	 Songs: Plants are Growing Plants Functions of Plant Parts Classroom Playlists MS: 1: Life Science: Plant Parts MS: 1: Life Science: Edible Plant Parts	• 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).	 Songs: Plants are Growing Plants Functions of Plant Parts Classroom Playlists MS: 1: Life Science: Plant Parts 		



Mississippi Standards	Waterford Digital Activities	Waterford Resources
L.1.1 Students will demonstrate an understar	ding of the basic needs and structures of plants continued.	
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 Classroom Playlists MS: 1: Life Science: Plants Need Water 	• Water for Plants
L.1.1.4 Create a model which explains the function of each plant structure (roots, stem, leaves, petals, flowers, seeds).	 Songs: Plants are Growing Plants Functions of Plant Parts Classroom Playlists MS: 1: Life Science: Plant Parts 	• Green and Growing
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 Classroom Playlists MS: 1: Life Science: Scientists	
L.1.2 Reproduction and Heredity		
L.1.2 Students will demonstrate an understa	nding of how living things change in form as they go through th	e 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 Classroom Playlists MS: 1: Life Science: Plant Life Cycle 	



Mississippi Standards	Waterford Digital Activities	Waterford Resources
L.1.2 Students will demonstrate an understa	nding of how living things change in form as they go through	the general stages of a life cycle continued.
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 Classroom Playlists MS: 1: Life Science: Life Cycle 	
L.1.3 Ecology and Interdependence		
L.1.3A Students will demonstrate an underst	anding 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 Classroom Playlists MS: 1: Life Science: Plant Needs 	 Water for Plants Light for Plants Green and Growing
L.1.3B Students will demonstrate an underst	anding of the interdependence of flowering plants and pollina	ating 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.	 Books: The Bee's Secret Social Insects Insects Classroom Playlists MS: 1: Life Science: Insects 	Insect Parts Poster
L.1.4 Adaptations and Diversity		
L.1.4 Students will demonstrate an understa	nding of the ways plants adapt to their environment in order t	o 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).	 Songs: Seasons Books: A Seed Grows; That's What I Like: A Book About Seasons; The Old Maple Tree Winter Spring Summer Fall Classroom Playlists MS: 1: Life Science: Plant Adaptations 	• Light for Plants



Mississippi Standards	Waterford Digital Activities	Waterford Resources
L.1.4 Students will demonstrate an understar	nding of the ways plants adapt to their environment in order to s	urvive continued.
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 Classroom Playlists MS: 1: Life Science: Plant Characteristics 	
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.*	 Songs: The Scientific Method; Pollution Rap Books: I Want to Be a Scientist Like George Washington Carver Science Investigation Pollution and Recycling Classroom Playlists MS: 1: Life Science: Pollution and Recycling 	• Earth
Physical Science		
P.1.6 Motions, Forces, and Energy		
P.1.6A Students will demonstrate an understa	anding 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 Classroom Playlists MS: 1: Physical Science: Light 	
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 Classroom Playlists MS: 1: Physical Science: Light 	



Mississippi Standards	Waterford Digital Activities	Waterford Resources	
P.1.6B Students will demonstrate an understa	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).	 Books: What Sounds Say Sound Waves Classroom Playlists MS: 1: Physical Science: Sound 	• <u>Sound</u>	
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.*	 Songs: The Scientific Method Books: I Want to Be a Scientist Like Thomas Edison Science Investigation Classroom Playlists MS: 1: Physical Science: Thomas Edison 	• Sound • Light	
Earth and Space Science			
E.1.9 Earth's Systems and Cycles			
E.1.9A Students will demonstrate an understa seasonal weather patterns.	nding of the patterns of weather by describing, recording, and a	analyzing weather data to answer questions about daily and	
E.1.9A.1 Analyze and interpret data from observations and measurements to describe local weather conditions (including temperature, wind, and forms of precipitation).	 Books: Whatever the Weather Weather Calendar/Graph Weather Classroom Playlists MS: 1: Earth and Space Science: Weather 	 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: The Four Seasons Weather Tools Weather Patterns Winter Spring Summer Fall Classroom Playlists MS: 1: Earth and Space Science: Weather 	 Weather The Weather Around Us Weather Cards 	



Mississippi Standards	Waterford Digital Activities	Waterford Resources	
E.1.9A Students will demonstrate an understa seasonal weather patterns continued.	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 continued.		
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 Classroom Playlists MS: 1: Earth and Space Science: Weather 		
E.1.9A.4 Obtain and communicate information about severe weather conditions to explain why certain safety precautions are necessary.	 Books: Lightning Bells Storms Lightning Safety Weather Experiment Classroom Playlists MS: 1: Earth and Space Science: Severe Weather 		
E.1.9B Students will demonstrate an understa	anding 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.	 Songs: Water Cycle Books: Water Is All Around Water Sources Oceans Classroom Playlists MS: 1: Earth and Space Science: Bodies of Water 		
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.	 Books: Water Is All Around Water Sources Oceans Classroom Playlists MS: 1: Earth and Space Science: Bodies of Water 		
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.	 Songs: Rock Cycle Books: Mela's Water Pot Rock Cycle Classroom Playlists MS: 1: Earth and Space Science: Movement of Water 	• Our Earth	



Mississippi Standards	Waterford Digital Activities	Waterford Resources
E.1.10 Earth's Resources		
E.1.10 Students will demonstrate an understa	nding of human dependence on clean and renewable water reso	ources.
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.	 Songs: Precipitation Books: Water Is All Around; Mela's Water Pot Water Cycle Care of Water Classroom Playlists MS: 1: Earth and Space Science: Water Sources 	
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 Classroom Playlists MS: 1: Earth and Space Science: 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.*	 Songs: The Scientific Method Science Investigation Care of Water 	
GRADE TWO		
Life Science		
L.2.1 Hierarchical Organization		
L.2.1 Students will demonstrate an understar	ding of the classification of animals based on physical character	ristics.
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 Invertebrates Classroom Playlists MS: 2: Life Science: Vertebrates MS: 2: Life Science: Invertebrates 	VertebratesInvertebrates



Mississippi Standards	Waterford Digital Activities	Waterford Resources
L.2.1 Students will demonstrate an understanding of the classification of animals based on physical characteristics continued.		
L.2.1.2 Classify vertebrates (mammals, fish, birds, amphibians, and reptiles) based on their physical characteristics.	 Songs: Vertebrates Books: Guess What I Am Vertebrates Mammals Fish Birds Amphibians Reptiles Classroom Playlists MS: 2: Life Science: Classify Vertebrates: 	 Mammal Attribute Poster Fish Attribute 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).	 Songs: Vertebrates Books: Guess What I Am Animal Groups Amphibians Classroom Playlists MS: 2: Life Science: Classify Vertebrates: 	• Vertebrates
L.2.1.4 Construct a scientific argument for classifying vertebrates that have unusual characteristics, such as bats, penguins, snakes, salamanders, dolphins, and duckbilled platypuses (i.e., bats have wings yet they are mammals).	 Songs: Vertebrates Books: Guess What I Am Vertebrates Animal Groups Mammals Fish Birds Amphibians Reptiles Classroom Playlists MS: 2: Life Science: Classify Vertebrates: 	



Mississippi Standards	Waterford Digital Activities	Waterford Resources
L.2.2 Reproduction and Heredity		
L.2.2 Students will demonstrate an understa	nding of how living things change in form as they go through the	e 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.	 Books: The Old Maple Tree Plant Life Cycle and Growth Classroom Playlists MS: 2: Life Science: Tree Life Cycle 	
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 Classroom Playlists MS: 2: Life Science: Amphibians 	 Amphibians Amphibian Attribute Poster
L.2.3 Ecology and Interdependence		
L.2.3A Students will demonstrate an underst	anding of the interdependence of living things and the environm	nent 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 Classroom Playlists MS: 2: Life Science: Animal Adaptations 	
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 Classroom Playlists MS: 2: Life Science: Animals Make Changes 	• Animal Bodies



Mississippi Standards	Waterford Digital Activities	Waterford Resources
L.2.3B Students will demonstrate an underst	anding 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., predatorprey relationships, herbivore, carnivore, omnivore).	 Herbivores, Carnivores, and Omnivores Food Chains Polar Lands Food Chain Prairies Food Chain Wetlands Food Chain Classroom Playlists MS: 2: Life Science: Animal Interactions 	
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 Classroom Playlists MS: 2: Life Science: Animal Interactions 	
L.2.4 Adaptations and Diversity		
L.2.4 Students will demonstrate an understa	nding 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).	 Books: Animal Bodies Animal Bodies Mountains Deserts Rainforests Prairies Classroom Playlists MS: 2: Life Science: Animal Adaptations MS: 2: Life Science: Plant and Animal Adaptations 	



Mississippi Standards	Waterford Digital Activities	Waterford Resources		
L.2.4 Students will demonstrate an understanding of the ways animals adapt to their environment in order to survive <i>continued</i> .				
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.*	 Songs: The Scientific Method Science Investigation Animal Adaptations and Human Tools Classroom Playlists MS: 2: Life Science: Animal Adaptations Solve Human Problems 			
Physical Science				
P.2.5 Organization of Matter and Chemi	cal Interactions			
P.2.5 Students will demonstrate an understan	nding 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).	 Songs: Solid or Liquid Books: Pancakes Matter Solid and Liquid Solid, Liquid, Gas Matter Experiment Classroom Playlists MS: 2: Physical Science: Solids, Liquids, and Gases 	• _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.	 Songs: Measuring Plants Length Classroom Playlists MS: 2: Physical Science: 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 Classroom Playlists MS: 2: Physical Science: Weight MS: 2: Physical Science: Volume 			



Mississippi Standards	Waterford Digital Activities	Waterford Resources			
P.2.5 Students will demonstrate an understa	P.2.5 Students will demonstrate an understanding of the properties of matter continued.				
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.	 Books: Water Water Cycle Changes in Matter Heat Changes Water Classroom Playlists MS: 2: Physical Science: Changes in Matter 				
P.2.6 Students will demonstrate an understa	nding of how the motion of objects is affected by pushes, pulls, a	nd 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).	 Songs: Push and Pull Books: Mr. Mario's Neighborhood Push and Pull Classroom Playlists MS: 2: Physical Science: Push and Pull 				
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.	 Books: 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.*	 Songs: The Scientific Method Books: Mr. Mario's Neighborhood Science Investigation Push and Pull Classroom Playlists MS: 2: Physical Science: Push and Pull 				



Mississippi Standards	Waterford Digital Activities	Waterford Resources		
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.	 Books: Star Pictures Sun, Moon, and Earth Classroom Playlists MS: 2: Earth and Space Science: Stars 	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.	 Books: That's What I Like: A Book About Seasons Sun, Moon, and Earth Weather Patterns Classroom Playlists MS: 2: Earth and Space Science: Seasonal 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.	 Songs: Moon Books: Star Pictures; Moon Song Sun, Moon, and Earth Moon Classroom Playlists MS: 2: Earth and Space Science: Moon 	Astronomy The Sky Above Us		
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).	 Books: I Want to Be a Scientist Like Stephen Hawking: Defying Gravity: The Story of Mae Jemison Classroom Playlists MS: 2: Earth and Space Science: Scientists 			



Mississippi Standards	Waterford Digital Activities	Waterford Resources		
E.2.8 Students will demonstrate an understanding of the appearance, movements, and patterns of the sun, moon, and stars <i>continued</i> .				
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).	 Books: Moon Song Sun, Moon, and Earth Moon Patterns Classroom Playlists MS: 2: Earth and Space Science: Sun and Moon MS: 2: Earth and Space Science: 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.*	• Sun, Moon, and Earth			
E.2.10 Earth's Resources				
E.2.10 Students will demonstrate an understa	anding 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).	 Songs: Rocks Natural Resources Soil Water Rocks Classroom Playlists MS: 2: Earth and Space Science: Properties of Earth Materials 	 Natural Resources Rocks 		
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.	 Songs: Rocks Natural Resources Soil Water Rocks Classroom Playlists MS: 2: Earth and Space Science: Earth Resources 	• Natural Resources		



Mississippi Standards	Waterford Digital Activities	Waterford Resources		
E.2.10 Students will demonstrate an understanding of how humans use Earth's resources continued.				
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).	 Songs: Rocks Natural Resources Soil Water Rocks Classroom Playlists MS: 2: Earth and Space Science: Earth Resources 	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 Classroom Playlists MS: 2: Earth and Space Science: Erosion 			
E.2.10.5 With teacher guidance, investigate possible solutions to prevent or repair soil erosion.	 Songs: The Scientific Method Science Investigation Rock Cycle Classroom Playlists MS: 2: Earth and Space Science: Erosion 			

Books and Related Activities



Pre-Math and 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 / Fun 15 / 16 Ants / Counting to 17 / 18 Carrot Stew / 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

Marching Band Counting / Flower Counting / Country 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 Fish to Catch / Fun 15 / 16 Ants / Counting to 17 / 18 Carrot Stew / 19 On the Beach / 20 Fingers and Toes

Basic Math and Science

Math and Science Books

One More Cat / Can You Guess? A Story for Two Voices / 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 / Navajo Beads / Where in the World Would You Go Today? / I Want to Be a Scientist Like Wilbur and Orville Wright

Fluent Math and Science

Math and 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 / Navaio 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.

Research-Driven Development

Waterford is committed to ongoing development based on the latest research findings. Please note that this correlation is accurate as of the date on the cover.

Family Engagement Resources



Spanish Family Engagement Resources

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

Songs

Beginning Math Songs

Odd Todd and Even Steven / Salsa Counting / On the Bayou—Addition / Subtract Those Cars / More Than, Fewer Than / A Nice Addition / Marching Band Counting / Doubles 1–5 / Multiply by 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 III / J: Jack and Jill / K: Three Little Kittens / L: Mary Had a Little Lamb / M: Little Miss Muffett / O: Polly, Put the Kettle On / P: This Little Pig / Q: Quack, Quack, Quack / R: Little Rabbit / S: Eensy, Weensy Spider / U: The Bus / V: My Valentine / W: Wee Willie Winkie / X: A-hunting We Will Go / Y: Yankee Doodle

Beginning Reading Songs

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

<u>Waterford Mentor</u> 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).