

100%
Correlation

Curriculum Correlation August 2025

**Waterford
Early Learning:
Math & Science**

**Georgia's
Mathematics
Standards 2023 &
Science Standards
2016**

This document provides a detailed correlation of **Waterford Early Learning** to **Georgia's Mathematics Standards 2023 & Science Standards 2016**.

Correlation Description

This document aligns Georgia's Mathematics Standards 2023 & Science Standards 2016 to Waterford.org's digital activities and supporting resources.

Waterford Digital Activities

Waterford programs include engaging, evidence-based 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](https://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 [→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](#).

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Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
Mathematics		
Kindergarten		
NUMERICAL REASONING – counting, money, place value, numbers to 20, addition, subtraction and fluency		
K.NR.1: Demonstrate and explain the relationship between numbers and quantities up to 20; connect counting to cardinality (the last number counted represents the total quantity in a set).		
K.NR.1.1 Count up to 20 objects in a variety of structured arrangements and up to 10 objects in a scattered arrangement.	<ul style="list-style-type: none"> Counting Songs Number Songs Make and Count Groups Number Counting Number Instruction Numbers Review One-to-one Correspondence 	<ul style="list-style-type: none"> How Many?
K.NR.1.2 When counting objects, explain that the last number counted represents the total quantity in a set (cardinality), regardless of the arrangement and order.	<ul style="list-style-type: none"> Make and Count Groups Number Counting Number Instruction Match Numbers One-to-One Correspondence 	<ul style="list-style-type: none"> Object Counting Grouping
K.NR.1.3 Given a number from 1-20, identify the number that is one more or one less.	<ul style="list-style-type: none"> Songs: Counting Backward; Counting On Book: A Space Adventure Count On by 1 Count Down Counting Back Order Numbers Number Chart 	
K.NR.1.4 Identify pennies, nickels, and dimes and know their name and value.	<ul style="list-style-type: none"> Song: Save Your Pennies Coin Identification Coin Value Count Dimes, Nickels, and Pennies Count Nickels and Pennies or Dimes and Pennies 	

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
K.NR.2: Use count sequences within 100 to count forward and backward in sequence.		
K.NR.2.1 Count forward to 100 by tens and ones and backward from 20 by ones.	<ul style="list-style-type: none"> Songs: Counting On; Counting Backward; Skip Counting Book: A Space Adventure Number Songs Counting Songs Number Counting Number Instruction Skip Count by 10 Count Down Counting Back 	<ul style="list-style-type: none"> Count to 100 by Ones and Tens
K.NR.2.2 Count forward beginning from any number within 100 and count backward from any number within 20.	<ul style="list-style-type: none"> Songs: Counting On; Counting Backward Book: A Space Adventure Counting Songs Number Counting Number Instruction Count Down Counting Back 	<ul style="list-style-type: none"> Count Forward
K.NR.3: Use place value understanding to compose and decompose numbers from 11–19.		
K.NR.3.1 Describe numbers from 11 to 19 by composing (putting together) and decomposing (breaking apart) the numbers into ten ones and some more ones.	<ul style="list-style-type: none"> Place Value 	<ul style="list-style-type: none"> Tens and Ones
K.NR.4: Identify, write, represent, and compare numbers up to 20.		
K.NR.4.1 Identify written numerals 0–20 and represent a number of objects with a written numeral 0–20 (with 0 representing a count of no objects).	<ul style="list-style-type: none"> Math Books Counting Songs Number Songs Number Counting Number Instruction 	<ul style="list-style-type: none"> Write Numbers 0–20

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
K.NR.4: Identify, write, represent, and compare numbers up to 20 <i>continued</i>.		
K.NR.4.2 Compare two sets of up to 10 objects and identify whether the number of objects in one group is more or less than the other group, using the words "greater than," "less than," or "the same as".	<ul style="list-style-type: none"> • Song: Greater Than, Less Than • Book: For the Birds • Greater Than, Less Than • More Than, Fewer Than • More Than • Fewer Than • Make and Count Groups 	<ul style="list-style-type: none"> • Greater, Less, or Equal
K.NR.5: Explain the concepts of addition, subtraction, and equality and use these concepts to solve real-life problems within 10.		
K.NR.5.1 Compose (put together) and decompose (break apart) numbers up to 10 using objects and drawings.	<ul style="list-style-type: none"> • Songs: Addition; On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction • Book: Five Delicious Muffins • Make and Count Groups • Add Groups • Subtract Groups • Act Out Addition • Act Out Subtraction 	<ul style="list-style-type: none"> • Decompose Numbers
K.NR.5.2 Represent addition and subtraction within 10 from a given authentic situation using a variety of representations and strategies.	<ul style="list-style-type: none"> • Songs: Addition; On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction • Book: Five Delicious Muffins • Add Groups • Subtract Groups • Minuends • Sums • Act Out Addition • Act Out Subtraction 	<ul style="list-style-type: none"> • Addition and Subtraction Word Problems

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
K.NR.5: Explain the concepts of addition, subtraction, and equality and use these concepts to solve real-life problems within 10 <i>continued</i>.		
K.NR.5.3 Use a variety of strategies to solve addition and subtraction problems within 10.	<ul style="list-style-type: none"> • Songs: Addition; On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction • Book: Five Delicious Muffins • Add Groups • Subtract Groups • Minuends • Sums • Act Out Addition • Act Out Subtraction 	<ul style="list-style-type: none"> • Represent Addition and Subtraction with Objects
K.NR.5.4 Fluently add and subtract within 5 using a variety of strategies to solve practical, mathematical problems.	<ul style="list-style-type: none"> • Songs: Addition; On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction • Book: Five Delicious Muffins • Add Groups • Subtract Groups • Minuends • Sums • Act Out Addition • Act Out Subtraction: Addition; 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 SubtractionBook: Five Delicious Muffins • Add Groups • Subtract Groups • Minuends • Sums • Act Out Addition • Act Out Subtraction 	<ul style="list-style-type: none"> • Songs: Addition; On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction • Book: Five Delicious Muffins • Add Groups • Subtract Groups • Minuends • Sums • Act Out Addition • Act Out Subtraction

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
PATTERNING & ALGEBRAIC REASONING – repeating patterns and time		
K.PAR.6: Explain, extend, and create repeating patterns with a repetition, not exceeding 4 and describe patterns involving the passage of time.		
K.PAR.6.1 Create, extend, and describe repeating patterns with numbers and shapes, and explain the rationale for the pattern.	<ul style="list-style-type: none"> • Song: Train Station Pattern • Patterns • Pattern: AB; ABB; ABC • Number Chart • Number Patterns 	<ul style="list-style-type: none"> • Patterns
K.PAR.6.2 Describe patterns involving the passage of time using words and phrases related to actual events.	<ul style="list-style-type: none"> • Book: Mr. Romano's Secret, A Time Story • Weather • Calendar/Graph Weather • Observe a Simple System • First, Next, and Last • Sequence Events 	
MEASUREMENT & DATA REASONING – attributes of objects, classifying objects		
K.MDR.7: Observe, describe, and compare the physical and measurable attributes of objects and analyze graphical displays of data.		
K.MDR.7.1 Directly compare, describe, and order common objects, using measurable attributes (length, height, width, or weight) and describe the difference.	<ul style="list-style-type: none"> • Songs: Savanna Size, Measuring Plants • Capacity • Length • Weight • Big and Little • Tall and Short • Heavy and Light • Size • Order Size 	<ul style="list-style-type: none"> • Measurable Attributes

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
K.MDR.7: Observe, describe, and compare the physical and measurable attributes of objects and analyze graphical displays of data continued.		
K.MDR.7.2 Classify and sort up to ten objects into categories by an attribute; count the number of objects in each category and sort the categories by count.	<ul style="list-style-type: none"> Songs: Same and Different; All Sorts of Laundry Book: Buttons, Buttons Sort Make and Count Groups 	<ul style="list-style-type: none"> Classifying Objects
K.MDR.7.3 Ask questions and answer them based on gathered information, observations, and appropriate graphical displays to solve problems relevant to everyday life.	<ul style="list-style-type: none"> Song: Push and Pull Book: Mr. Mario's Neighborhood Science Investigation 	
GEOMETRIC & SPATIAL REASONING – 2D and 3D shapes, relative locations, attributes		
K.GSR.8: Identify, describe, and compare basic shapes encountered in the environment, and form two-dimensional shapes and three-dimensional figures.		
K.GSR.8.1 Identify, sort, classify, analyze, and compare two-dimensional shapes and three-dimensional figures, in different sizes and orientations, using informal language to describe their similarities, differences, number of sides and vertices, and other attributes.	<ul style="list-style-type: none"> Song: Corners and Sides Simple Shapes Solid Shapes Space Shapes Congruence Similar Figures 	<ul style="list-style-type: none"> Compare Shapes
K.GSR.8.2 Describe the relative location of an object using positional words.	<ul style="list-style-type: none"> Songs: Position Cat; Kites; Get Over the Bugs Book: Up In the Air Position Over, Under, Above, Below Inside, Outside, Between Above, Below, Next to, On 	<ul style="list-style-type: none"> Describing Objects

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
K.GSR.8: Identify, describe, and compare basic shapes encountered in the environment, and form two-dimensional shapes and three-dimensional figures continued.		
K.GSR.8.3 Use basic shapes to represent specific shapes found in the environment by creating models and drawings.	<ul style="list-style-type: none"> Songs: Kites; Shapes, Shapes, Shapes Books: The Shape of Things; Imagination Shapes Circle, Square, Triangle, Rectangle Star, Semicircle, Octagon, Oval, Rhombus Simple Shapes Solid Shapes World Shapes 	<ul style="list-style-type: none"> Model Shapes
K.GSR.8.4 Use two or more basic shapes to form larger shapes.	<ul style="list-style-type: none"> Geoboard 	<ul style="list-style-type: none"> Form Larger Shapes
1st Grade		
NUMERICAL REASONING – counting, numbers, equality, place value, addition, subtraction		
1.NR.1: Extend the count sequence to 120. Read, write, and represent numerical values to 120 and compare numerical values to 100.		
1.NR.1.1 Count within 120, forward and backward, starting at any number. In this range, read and write numerals and represent a number of objects with a written numeral.	<ul style="list-style-type: none"> Songs: Counting On; Counting Backward Book: A Space Adventure Counting Songs Number Counting Number Instruction Count On Count Down Counting Back 	<ul style="list-style-type: none"> Count to 120
1.NR.1.2 Explain that the two digits of a 2-digit number represent the amounts of tens and ones.	<ul style="list-style-type: none"> Place Value Place Value of 2-digit Numbers 	<ul style="list-style-type: none"> Ten Groupings
1.NR.1.3 Compare and order whole numbers up to 100 using concrete models, drawings, and the symbols $>$, $=$, and $<$.	<ul style="list-style-type: none"> Place Value Greater Than, Less Than (2-digit Numbers) 	<ul style="list-style-type: none"> Compare Two-Digit Numbers

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
1.NR.2: Explain the relationship between addition and subtraction and apply the properties of operations to solve real-life addition and subtraction problems within 20.		
1.NR.2.1 Use a variety of strategies to solve addition and subtraction problems within 20.	<ul style="list-style-type: none"> • Songs: Fact Families; Counting On • Books: Facts about Families • Addition and Subtraction Fact Families • Addition Sentences • Subtraction Sentences • Commutative Property of Addition • Addition and Subtraction Relationship • Missing Addends • Missing Minuends and Subtrahends • Add 3 One-digit Numbers • Subtraction Patterns 	<ul style="list-style-type: none"> • Add and Subtract within 20
1.NR.2.2 Use pictures, drawings, and equations to develop strategies for addition and subtraction within 20 by exploring strings of related problems.	<ul style="list-style-type: none"> • Songs: Fact Families; Counting On • Books: Facts about Families • Addition and Subtraction Fact Families • Addition Sentences • Subtraction Sentences • Commutative Property of Addition • Addition and Subtraction Relationship • Missing Addends • Missing Minuends and Subtrahends • Add 3 One-digit Numbers • Subtraction Patterns 	<ul style="list-style-type: none"> • Add and Subtract within 20
1.NR.2.3 Recognize the inverse relationship between subtraction and addition within 20 and use this inverse relationship to solve authentic problems.	<ul style="list-style-type: none"> • Song: Fact Families • Book: Facts About Families • Addition and Subtraction Fact Families • Addition and Subtraction Relationship • Commutative Property of Addition • Addition Sentences • Subtraction Sentences • Missing Addends • Missing Minuends and Subtrahends 	

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
1.NR.2: Explain the relationship between addition and subtraction and apply the properties of operations to solve real-life addition and subtraction problems within 20 continued.		
1.NR.2.4 Fluently add and subtract within 10 using a variety of strategies.	<ul style="list-style-type: none"> • Songs: Fact Families; Counting On • Books: Facts about Families • Addition and Subtraction Fact Families • Addition Sentences • Subtraction Sentences • Commutative Property of Addition • Addition and Subtraction Relationship • Missing Addends • Missing Minuends and Subtrahends • Add 3 One-digit Numbers • Subtraction Patterns 	<ul style="list-style-type: none"> • Add and Subtract within 20
1.NR.2.5 Use the meaning of the equal sign to determine whether equations involving addition and subtraction are true or false.	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Equal Sign
1.NR.2.6 Determine the unknown whole number in an addition or subtraction equation relating to three whole numbers.	<ul style="list-style-type: none"> • Addition Sentences • Subtraction Sentences • Addition and Subtraction Fact Families • Missing Addends • Missing Minuends and Subtrahends 	

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
1.NR.2: Explain the relationship between addition and subtraction and apply the properties of operations to solve real-life addition and subtraction problems within 20 continued.		
1.NR.2.7 Apply properties of operations as strategies to solve addition and subtraction problem situations within 20.	<ul style="list-style-type: none"> • Songs: Fact Families; Counting On • Books: Facts About Families; 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 	<ul style="list-style-type: none"> • Add and Subtract within 20
PATTERNING & ALGEBRAIC REASONING – repeating patterns, growing, patterns, and shrinking patterns		
1.PAR.3: Identify, describe, extend, and create repeating patterns, growing patterns, and shrinking patterns found in real-life situations.		
1.PAR.3.1 Investigate, create, and make predictions about repeating patterns with a core of up to 3 elements resulting from repeating an operation, as a series of shapes, or a number string.	<ul style="list-style-type: none"> • Song: Train Station Pattern • Patterns • Pattern: AB; ABB; ABC • Number Chart • Number Patterns • Logic Game 	
1.PAR.3.2 Identify, describe, and create growing, shrinking, and repeating patterns based on the repeated addition or subtraction of 1s, 2s, 5s, and 10s.	<ul style="list-style-type: none"> • Song: Skip Counting • Book: Navajo Beads; Jump Rope Rhymes • Skip Count by 2 • Skip Count by 5 • Skip Count by 10 • Number Patterns 	

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
GEOMETRIC & SPATIAL REASONING – shapes, attributes, partitions of circles and rectangles		
1.GSR.4: Compose shapes, analyze the attributes of shapes, and relate their parts to the whole.		
1.GSR.4.1 Identify common two-dimensional shapes and three-dimensional figures, sort and classify them by their attributes and build and draw shapes that possess defining attributes.	<ul style="list-style-type: none"> • Songs: Kites; Shapes, Shapes, Shapes; Corners and Sides • Books: The Shape of Things; Imagination Shapes • Circle, Square, Triangle, Rectangle • Star, Semicircle, Octagon, Oval, Rhombus • Simple Shapes • Solid Shapes • World Shapes 	<ul style="list-style-type: none"> • Shape Recognition
1.GSR.4.2 Compose two-dimensional shapes (rectangles, squares, triangles, half-circles, and quarter-circles) and three-dimensional figures (cubes, rectangular prisms, cones, and cylinders) to create a shape formed of two or more common shapes and compose new shapes from the composite shape.	<ul style="list-style-type: none"> • Song: Kites • Space Shapes • Geoboard • Tangrams 	<ul style="list-style-type: none"> • Form Larger Shapes
1.GSR.4.3 Partition circles and rectangles into two and four equal shares.	<ul style="list-style-type: none"> • Song: Fractions • Books: Halves and Fourths and Thirds; Half For You and • Half For Me • Equal-part Fractions • Label Parts of Fractions 	<ul style="list-style-type: none"> • Equal Shares

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
NUMERICAL REASONING – base ten structure, addition and subtraction within 100		
1.NR.5: Use concrete models, the base ten structure, and properties of operations to add and subtract within 100.		
1.NR.5.1 Use a variety of strategies to solve applicable, mathematical addition and subtraction problems with one- and two-digit whole numbers.	<ul style="list-style-type: none"> • Songs: Fact Families; Counting On • Books: Facts about Families • Addition and Subtraction Fact Families • Addition Sentences • Subtraction Sentences • Commutative Property of Addition • Addition and Subtraction Relationship • Missing Addends • Missing Minuends and Subtrahends • Add 3 One-digit Numbers • Subtraction Patterns 	<ul style="list-style-type: none"> • Add and Subtract within 20
1.NR.5.2 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.	<ul style="list-style-type: none"> • Song: Skip Counting • Book: Navajo Beads • Add Tens • Subtract Tens • Skip Count by 10 • Number Chart 	<ul style="list-style-type: none"> • Ten More or Less
1.NR.5.3 Add and subtract multiples of 10 within 100.	<ul style="list-style-type: none"> • Addition • Add Tens • Subtract Tens • Use Manipulatives • Add Vertical Squares • Add with Beads • Subtraction Patterns • Subtract • Place Value • Number Chart • 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 	<ul style="list-style-type: none"> • Adding within 100

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
MEASUREMENT & DATA REASONING – length, time, money		
1.MDR.6: Use appropriate tools to measure, order, and compare intervals of length and time, as well as denominations of money to solve real-life, mathematical problems and answer relevant questions.		
1.MDR.6.1 Estimate, measure, and record lengths of objects using non-standard units, and compare and order up to three objects using the recorded measurements. Describe the objects compared.	<ul style="list-style-type: none"> Length Nonstandard Units of Length 	<ul style="list-style-type: none"> Order by Length
1.MDR.6.2 Tell and write time in hours and half-hours using analog and digital clocks, and measure elapsed time to the hour on the hour using a predetermined number line.	<ul style="list-style-type: none"> Song: Clock Hands Books: Mr. Romano's Secret: A Time Story Tell Time to the Hour Tell Time to the Half-Hour 	<ul style="list-style-type: none"> Hours and Half-Hours
1.MDR.6.3 Identify the value of quarters and compare the values of pennies, nickels, dimes, and quarters.	<ul style="list-style-type: none"> Songs: Money; Save Your Pennies Book: Bugs For Sale Coin Identification Coin Value Quarters Count Dimes, Nickels, and Pennies Count Quarters, Dimes, Nickels, and Pennies Count Nickels and Pennies or Dimes and Pennies Count Coins Equivalent Sums of Money 	<ul style="list-style-type: none"> Coin Identification and Value
1.MDR.6.4 Ask questions and answer them based on gathered information, observations, and appropriate graphical displays to compare and order whole numbers.	<ul style="list-style-type: none"> Song: Graphing Books: Painting by Number; The Booneville Nine Graphing Bar Graphs Picture Graphs Use Graphs and Tables Number Chart Place Value Order Numbers Greater Than, Less Than 	<ul style="list-style-type: none"> Graphs

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
2nd Grade		
NUMERICAL REASONING – counting within 1000, place value, addition and subtraction, fluency to 20, developing multiplication through arrays		
2.NR.1: Using the place value structure, explore the count sequences to represent, read, write, and compare numerical values to 1000 and describe basic place-value relationships and structures.		
2.NR.1.1 Explain the value of a three-digit number using hundreds, tens, and ones in a variety of ways.	<ul style="list-style-type: none"> • Song: Place Value • Place Value • Place Value of 3-digit Numbers 	<ul style="list-style-type: none"> • Less Than, Equal to, or Greater Than
2.NR.1.2 Count forward and backward by ones from any number within 1000. Count forward by fives from multiples of 5 within 1000. Count forward and backward by 10s and 100s from any number within 1000. Count forward by 25s from 0.	<ul style="list-style-type: none"> • Songs: Counting On; Counting Backward; Skip Counting • Books: A Space Adventure; Jump Rope Rhymes • Count on • Count Back • Number Chart • Skip Count by 5 • Skip Count by 10 	<ul style="list-style-type: none"> • Counting within 1000
2.NR.1.3 Represent, compare, and order whole numbers to 1000 with an emphasis on place value and equality. Use $>$, $=$, and $<$ symbols to record the results of comparisons.	<ul style="list-style-type: none"> • Sequences of 2-digit Numbers • Sequences of 3-digit Numbers • Greater Than, Less Than (3-digit Numbers) • Number Chart • Place Value • Place Value of 3-digit Numbers • Order Numbers 	<ul style="list-style-type: none"> • Less Than, Equal to, or Greater Than
2.NR.2: Apply multiple part-whole strategies, properties of operations and place value understanding to solve real-life, mathematical problems involving addition and subtraction within 1,000.		
2.NR.2.1 Fluently add and subtract within 20 using a variety of mental, part-whole strategies.	<ul style="list-style-type: none"> • Songs: Fact Families; Doubles • Subtraction Patterns • Addition Facts to 20 	<ul style="list-style-type: none"> • Add and Subtract within 20

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
2.NR.2: Apply multiple part-whole strategies, properties of operations and place value understanding to solve real-life, mathematical problems involving addition and subtraction within 1,000 continued.		
2.NR.2.2 Find 10 more or 10 less than a given three-digit number and find 100 more or 100 less than a given three-digit number.	<ul style="list-style-type: none"> • Skip Count • Place Value • Number Chart • Number Patterns • Mental Math Games 	<ul style="list-style-type: none"> • Mentally Adding or Subtracting 10 or 100
2.NR.2.3 Solve problems involving the addition and subtraction of two-digit numbers using part-whole strategies.	<ul style="list-style-type: none"> • Book: Painting by Number • Addition • Subtraction • Missing Addends and Subtrahends • Subtraction Sentences • Addition and Subtraction Facts 	<ul style="list-style-type: none"> • One-and Two-Step Word Problems within 100
2.NR.2.4 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	<ul style="list-style-type: none"> • Place Value • Addition and Subtraction Relationship • Commutative Properties of Addition • Addition • Subtraction • Add without Regrouping • Add with Regrouping • Subtract without regroupinSubtract with Regrouping 	<ul style="list-style-type: none"> • Add and Subtract Within 100
2.NR.3: Work with equal groups to gain foundations for multiplication through real-life, mathematical problems.		
2.NR.3.1 Determine whether a group (up to 20) has an odd or even number of objects. Write an equation to express an even number as a sum of two equal addends.	<ul style="list-style-type: none"> • Song: Odd Todd and Even Steven • Skip Count by 2 • Addition Facts 	<ul style="list-style-type: none"> • Odd and Even Recognition
2.NR.3.2 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.	<ul style="list-style-type: none"> • Addition • Multiply Using Repeated Addition • Multiply Using Arrays 	

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
PATTERNING & ALGEBRAIC REASONING – patterns up to 20 and addition and subtraction within 1,000		
2.PAR.4: Identify, describe, extend, and create repeating patterns, growing patterns, and shrinking patterns.		
2.PAR.4.1 Identify, describe, and create a numerical pattern resulting from repeating an operation such as addition and subtraction.	<ul style="list-style-type: none"> • Logic Game • Number Chart • Number Sequences and Patterns • Addition and Subtraction Relationship • Addition and Subtraction Fact Families • Subtraction Patterns 	
2.PAR.4.2 Identify, describe, and create growing patterns and shrinking patterns involving addition and subtraction up to 20.	<ul style="list-style-type: none"> • Logic Game • Number Chart • Number Sequences and Patterns • Addition and Subtraction Relationship • Addition and Subtraction Fact Families • Subtraction Patterns 	
MEASUREMENT & DATA REASONING – length, distance, time, and money		
2.MDR.5: Estimate and measure the lengths of objects and distance to solve problems found in real-life using standard units of measurement, including inches, feet, and yards.		
2.MDR.5.1 Construct simple measuring instruments using unit models. Compare unit models to rulers.	<ul style="list-style-type: none"> • Length • Nonstandard Units of Length • Measurement Tools 	
2.MDR.5.2 Estimate and measure the length of an object or distance to the nearest whole unit using appropriate units and standard measuring tools.	<ul style="list-style-type: none"> • Song: Measuring Plants • Length • Standard Units of Length • Measurement Tools 	<ul style="list-style-type: none"> • Estimating Lengths
2.MDR.5.3 Measure to determine how much longer one object is than another and express the length difference in terms of a standard-length unit.	<ul style="list-style-type: none"> • Length • Standard Units of Length 	<ul style="list-style-type: none"> • Measure Length

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
2.MDR.5: Estimate and measure the lengths of objects and distance to solve problems found in real-life using standard units of measurement, including inches, feet, and yards.		
2.MDR.5.4 Ask questions and answer them based on gathered information, observations, and appropriate graphical displays to solve problems relevant to everyday life.	<ul style="list-style-type: none"> • Song: Graphing • Graphing • Bar Graphs • Picture Graphs • Use Graphs and Tables 	<ul style="list-style-type: none"> • Graphs
2.MDR.5.5 Represent whole-number sums and differences within a standard unit of measurement on a number line diagram.	<ul style="list-style-type: none"> • Number Line • Length • Addition • Subtraction • Measurement Tools 	
2.MDR.6: Solve real-life problems involving time and money.		
2.MDR.6.1 Tell and write time from analog and digital clocks to the nearest five minutes, and estimate and measure elapsed time using a timeline, to the hour or half hour on the hour or half hour.	<ul style="list-style-type: none"> • 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 • Sequence Times 	<ul style="list-style-type: none"> • Tell and Write Time
2.MDR.6.2 Find the value of a group of coins and determine combinations of coins that equal a given amount that is less than one hundred cents, and solve problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately.	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Solve Money Word Problems

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
GEOMETRIC & SPATIAL REASONING – sorting shapes, lines of symmetry, partitioning circles and rectangles		
2.GSR.7: Draw and partition shapes and other objects with specific attributes and conduct observations of everyday items and structures to identify how shapes exist in the world.		
2.GSR.7.1 Describe, compare and sort 2-D shapes including polygons, triangles, quadrilaterals, pentagons, hexagons, and 3-D shapes including rectangular prisms and cones, given a set of attributes.		<ul style="list-style-type: none"> • Compare Shapes • Attributes • 3D Flashcards
2.GSR.7.2 Identify at least one line of symmetry in everyday objects to describe each object as a whole.	<ul style="list-style-type: none"> • Song: Symmetry • Book: Symmetry and Me • Symmetry 	
2.GSR.7.3 Partition circles and rectangles into two, three, or four equal shares. Identify and describe equal-sized parts of the whole using fractional names ("halves," "thirds," "fourths," "half of," "third of," "quarter of," etc.).	<ul style="list-style-type: none"> • Song: Fractions • Books: Halves and Fourths and Thirds; The Fraction Twins • Fractions • Label Parts of Fractions • Fractions of Regions • Fractions of Groups 	<ul style="list-style-type: none"> • Fractions
2.GSR.7.4 Recognize that equal shares of identical wholes may be different shapes within the same whole.	<ul style="list-style-type: none"> • Song: Fractions • Books: Halves and Fourths and Thirds; The Fraction Twins • Fractions • Label Parts of Fractions • Fractions of Regions • Fractions of Groups 	<ul style="list-style-type: none"> • Fractions

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
Science		
Kindergarten		
Earth and Space Science		
<p>SKE1. Obtain, evaluate, and communicate observations about time patterns (day to night and night to day) and objects (sun, moon, stars) in the day and night sky.</p> <p>SKE1.a. Ask questions to classify objects according to those seen in the day sky, the night sky, and both.</p>	<ul style="list-style-type: none"> • Songs: The Moon; Sun Blues • Books: Moon Song; Star Pictures; My Family Campout • Sun • Moon • Constellations • Sun, Moon, and Earth 	<ul style="list-style-type: none"> • The Moon • The Sky Above Us • Sun, Moon, and Earth
<p>SKE1.b. Develop a model to communicate the changes that occur in the sky during the day, as day turns into night, during the night, and as night turns into day using pictures and words. (Clarification statement: Students are not expected to understand tilt of the Earth, rotation, or revolution.)</p>	<ul style="list-style-type: none"> • Songs: The Moon; Sun Blues • Books: Moon Song; Star Pictures; My Family Campout • Sun • Moon • Constellations • Sun, Moon, and Earth 	<ul style="list-style-type: none"> • The Moon • The Sky Above Us
<p>SKE2. Obtain, evaluate, and communicate information to describe the physical attributes of earth materials (soil, rocks, water, and air).</p> <p>SKE2.a. Ask questions to identify and describe earth materials—soil, rocks, water, and air.</p>	<ul style="list-style-type: none"> • Songs: Water • Book: Water Is All Around • Natural Resources • Water • Rocks • Rock Cycle • Soil • Water • Air 	<ul style="list-style-type: none"> • Rocks

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
Earth and Space Science continued		
SKE2.b. Construct an argument supported by evidence for how rocks can be grouped by physical attributes (size, weight, texture, color).	<ul style="list-style-type: none"> • Book: Red Rock, River Rock • Size • Weight • Length • Sort • Touch • Color Practice 	
SKE2.c. Use tools to observe and record physical attributes of soil such as texture and color.	<ul style="list-style-type: none"> • Science Tools • Soil • Rocks • Touch • Color Practice 	
Physical Science		
SKP1. Obtain, evaluate, and communicate information to describe objects in terms of the materials they are made of and their physical attributes. SKP1.a. Ask questions to compare and sort objects made of different materials. (Common materials include clay, cloth, plastic, wood, paper, and metal.)	<ul style="list-style-type: none"> • Sort • Materials • Big and Little • Length • Weight 	
SKP1.b. Use senses and science tools to classify common objects, such as buttons or swatches of cloth, according to their physical attributes (color, size, shape, weight, and texture).	<ul style="list-style-type: none"> • Book: Buttons, Buttons • Song: Scientific Method • Science Tools • Sort • Color Practice • Size • Weight • Heavy and Light • Big and Little • Sight • Hearing • Touch • Smell 	

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
Physical Science continued		
SKP1.c. Plan and carry out an investigation to predict and observe whether objects, based on their physical attributes, will sink or float.	<ul style="list-style-type: none"> • Buoyancy Experiment • Density Experiment • Heavy and Light 	
SKP2. Obtain, evaluate, and communicate information to compare and describe different types of motion. SKP2.a. Plan and carry out an investigation to determine the relationship between an object's physical attributes and its resulting motion (straight, circular, back and forth, fast and slow, and motionless) when a force is applied. (Examples could include toss, drop, push, and pull.)	<ul style="list-style-type: none"> • Songs: Push and Pull; Gravity • Books: Mr. Mario's Neighborhood; The Big Hill; Up and Down • Push and Pull • Rock Cycle 	<ul style="list-style-type: none"> • Air Movement • How It Works
SKP2.b. Construct an argument as to the best way to move an object based on its physical attributes.	<ul style="list-style-type: none"> • Song: Push and Pull • Book: Mr. Mario's Neighborhood • Push and Pull 	
Life Science		
SKL1. Obtain, evaluate, and communicate information about how organisms (alive and not alive) and non-living objects are grouped. SKL1.a. Construct an explanation based on observations to recognize the differences between organisms and nonliving objects	<ul style="list-style-type: none"> • Song: Living and Nonliving • Living or Nonliving • Plants and Animals • Rocks • Plants Need Water • Animals Need Water • Living Things 	<ul style="list-style-type: none"> • Living Things • Plants

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
Life Science continued		
<p>SKL1.b. Develop a model to represent how a set of organisms and nonliving objects are sorted into groups based on their attributes.</p>	<ul style="list-style-type: none"> • Songs: Savanna Size; Measuring Plants; Shapes, Shapes, Shapes; Marmot Shapes; Living and Nonliving • Book: Buttons, Buttons • Living or Nonliving • Plants and Animals • Size • Capacity • Length • Heavy and Light • Tall and Short • Big and Little • Materials • Sort • Living Things 	<ul style="list-style-type: none"> • How It Works
<p>SKL2. Obtain, evaluate, and communicate information to compare the similarities and differences in groups of organisms.</p> <p>SKL2.a. Construct an argument supported by evidence for how animals can be grouped according to their features.</p>	<ul style="list-style-type: none"> • Songs: Animal Bodies; Birds; Vertebrates; Fish; Plant or Animal; Invertebrates; Plant or Animal • Books: I Want to Be a Scientist Like Jane Goodall; Guess What I Am; Creepy Crawlers; Animal Bodies; Everybody Needs to Eat • Food From Plants • Animal Bodies • Mammals • Birds • Reptiles • Amphibians • Plant or Animal • Invertebrates • Insects • Worms • Science Investigation 	<ul style="list-style-type: none"> • Writing With Facts

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
Life Science continued		
SKL2.b. Construct an argument supported by evidence for how plants can be grouped according to their features.	<ul style="list-style-type: none"> Songs: Plant or Animal; Plants Are Growing; Food From Plants; Measuring Plants Books: A Seed Grows; Little Tree; I Want to Be a Scientist Like Carl Linnaeus; I Want to Be a Scientist Like Alexander von Humboldt Food From Plants Plants Plant Parts Plant or Animal Science Investigation 	<ul style="list-style-type: none"> Writing With Facts Writing Web
SKL2.c. Ask questions and make observations to identify the similarities and differences of offspring to their parents and to other members of the same species.	<ul style="list-style-type: none"> Song: Traits Books: George and Jack; A Seed Grows; Mine Build Knowledge: Mine Traits of Living Things 	<ul style="list-style-type: none"> Traits
First Grade		
Earth and Space Science		
SI1. Obtain, evaluate, and communicate weather data to identify weather patterns. SI1.a. Represent data in tables and/or graphs to identify and describe different types of weather and the characteristics of each type.	<ul style="list-style-type: none"> Songs: Seasons; Precipitation; Storms; Graphing Books: That's What I Like: A Book About Seasons; Whatever the Weather Weather Calendar/Graph Weather Weather Patterns Clouds Lightning Safety Bar Graphs Picture Graphs Make a Table 	<ul style="list-style-type: none"> Weather The Weather Around Us Weather Cards

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
Earth and Space Science continued		
SI.E1.b. Ask questions to identify forms of precipitation such as rain, snow, sleet, and hailstones as either solid (ice) or liquid (water).	<ul style="list-style-type: none"> Songs: Precipitation; Solid or Liquid Book: Whatever the Weather Solid and Liquid Science Investigation States of Water 	
SI.E1.c. Plan and carry out investigations on current weather conditions by observing, measuring with simple weather instruments (thermometer, wind vane, rain gauge), and recording weather data (temperature, precipitation, sky conditions, and weather events) in a periodic journal, on a calendar, and graphically.	<ul style="list-style-type: none"> Songs: Precipitation; Storms; Graphing Book: Whatever the Weather Weather Calendar/Graph Weather Weather Tools Science Tools Weather Patterns Clouds Bar Graphs Picture Graphs Make a Table 	<ul style="list-style-type: none"> Weather The Weather Around Us Weather Cards
SI.E1.d. Analyze data to identify seasonal patterns of change. (Clarification statement: Examples could include temperature, rainfall/snowfall, and changes to the environment.)	<ul style="list-style-type: none"> Songs: Seasons; Precipitation; The Four Seasons Books: That's What I Like: A Book About Seasons; Whatever the Weather Weather Calendar/Graph Weather Weather Patterns Weather Affects People and Animals Spring Summer Fall Winter 	<ul style="list-style-type: none"> Weather The Weather Around Us Weather Cards

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
Physical Science		
SIP1. Obtain, evaluate, and communicate information to investigate light and sound. SIP1.a. Use observations to construct an explanation of how light is required to make objects visible.	<ul style="list-style-type: none"> • Books: My Family Campout; Lightning Bugs • Light Properties • Properties of Light 	<ul style="list-style-type: none"> • Light • Sound
SIP1.b. Ask questions to identify and compare sources of light.	<ul style="list-style-type: none"> • Light Sources • Sources of Light • Light Experiment • Light Properties • Light Exploration 	<ul style="list-style-type: none"> • Light
SIP1.c. Plan and carry out an investigation of shadows by placing objects at various points from a source of light.	<ul style="list-style-type: none"> • Book: My Family Campout • Light Properties • Properties of Light • Light Exploration • Light Experiment 	<ul style="list-style-type: none"> • Light
SIP1.d. Construct an explanation supported by evidence that vibrating materials can make sound and that sound can make materials vibrate.	<ul style="list-style-type: none"> • Song: Sound • Book: What Sounds Say • Sound Waves 	<ul style="list-style-type: none"> • Sound
SIP1.e. Design a signal that can serve as an emergency alert using light and/or sound to communicate over a distance.	<ul style="list-style-type: none"> • Song: Inventing • Books: I Want to Be a Scientist Like Thomas Edison; Inventions All Around 	<ul style="list-style-type: none"> • Light • Sound

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
Physical Science continued		
<p>SIP2. Obtain, evaluate, and communicate information to demonstrate the effects of magnets on other magnets and other objects.</p> <p>SIP2.a. Construct an explanation of how magnets are used in everyday life. (Clarification statement: Everyday life uses could include refrigerator magnets, toys, magnetic latches, and name tags.)</p>	<ul style="list-style-type: none"> • Magnets 	
<p>SIP2.b. Plan and carry out an investigation to demonstrate how magnets attract and repel each other and the effect of magnets on common objects.</p>	<ul style="list-style-type: none"> • Magnets 	
Life Science		
<p>SIL1. Obtain, evaluate, and communicate information about the basic needs of plants and animals.</p> <p>SIL1.a. Develop models to identify the parts of a plant—root, stem, leaf, and flower.</p>	<ul style="list-style-type: none"> • Song: Plants Are Growing • Books: A Seed Grows; The Watermelon Seed • Plants • Functions of Plant Parts 	<ul style="list-style-type: none"> • Plant Parts
<p>SIL1.b. Ask questions to compare and contrast the basic needs of plants (air, water, light, and nutrients) and animals (air, water, food, and shelter).</p>	<ul style="list-style-type: none"> • Songs: Water; Food From Plants • Books: Mela's Water Pot; Everybody Needs to Eat • Sun • Plants • Water • Plants and Animals Need Air • Healthy Plants' Needs 	<ul style="list-style-type: none"> • Water For Plants • Green and Growing
<p>SIL1.c. Design a solution to ensure that a plant or animal has all of its needs met.</p>	<p>Waterford encourages everyone to have writing, drawing, and art materials available for children's creations.</p>	<ul style="list-style-type: none"> • Water For Plants • Green and Growing

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
Second Grade		
Earth and Space Science		
S2E1. Obtain, evaluate, and communicate information about stars having different sizes and brightness. S2E1.a. Ask questions to describe the physical attributes (size and brightness) of stars.	<ul style="list-style-type: none"> • Book: Star Pictures • Constellations • Sun 	<ul style="list-style-type: none"> • The Sky Above Us
Earth and Space Science continued		
S2E1.b. Construct an argument to support the claim that although the sun appears to be the brightest and largest star, it is actually medium in size and brightness.	<ul style="list-style-type: none"> • Song: Sun Blues • Sun 	
S2E2. Obtain, evaluate, and communicate information to develop an understanding of the patterns of the sun and the moon and the sun's effect on Earth. S2E2.a. Plan and carry out an investigation to determine the effect of the position of the sun in relation to a fixed object on Earth at various times of the day.	<ul style="list-style-type: none"> • Light Exploration • Sources of Light • Light Experiment 	<ul style="list-style-type: none"> • Light
S2E2.b. Design and build a structure that demonstrates how shadows change throughout the day.	<ul style="list-style-type: none"> • Light Exploration • Sources of Light • Light Experiment 	<ul style="list-style-type: none"> • Light
S2E2.c. Represent data in tables and/or graphs of the length of the day and night to recognize the change in seasons.	<ul style="list-style-type: none"> • Songs: Seasons; Graphing • Book: That's What I Like: A Book About Seasons • Science Investigation • Bar Graphs • Picture Graphs • Make a Table 	<ul style="list-style-type: none"> • Sun, Moon, and Earth

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
Earth and Space Science continued		
S2E2.d. Use data from personal observations to describe, illustrate, and predict how the appearance of the moon changes over time in a pattern. (Clarification statement: Students are not required to know the names of the phases of the moon or understand the tilt of the Earth.)	<ul style="list-style-type: none"> Song: The Moon Books: Moon Song Moon Moon Patterns 	<ul style="list-style-type: none"> The Moon The Sky Above Us
S2E3. Obtain, evaluate, and communicate information about how weather, plants, animals, and humans cause changes to the environment. (Clarification statement: Changes should be easily observable and could be seen on school grounds or at home.) S2E3.a. Ask questions to obtain information about major changes to the environment in your community.	<ul style="list-style-type: none"> Song: Four Ecosystems Books: Where in the World Would You Go Today?; Winter Snoozers; Birds at my House; The Old Maple Tree; Turtle's Pond Mountains Deserts Rainforests 	<ul style="list-style-type: none"> Our Earth
S2E3.b. Construct an explanation of the causes and effects of a change to the environment in your community.	<ul style="list-style-type: none"> Books: Winter Snoozers; Birds at my House; The Old Maple Tree; Turtle's Pond 	<ul style="list-style-type: none"> Writing With Facts
Physical Science		
S2P1. Obtain, evaluate, and communicate information about the properties of matter and changes that occur in objects. S2P1.a. Ask questions to describe and classify different objects according to their physical properties. (Clarification statement: Examples of physical properties could include color, mass, length, texture, hardness, strength, absorbency, and flexibility.)	<ul style="list-style-type: none"> Matter Changes in Matter Size Capacity Length Heavy and Light Tall and Short Big and Little Materials Sort Density Experiment Buoyancy Experiment 	

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
Physical Science continued		
S2P1.b. Construct an explanation for how structures made from small pieces (linking cubes, building blocks) can be disassembled and then rearranged to make new and different structures.		<ul style="list-style-type: none"> • Writing With Facts
S2P1.c. Provide evidence from observations to construct an explanation that some changes in matter caused by heating or cooling can be reversed and some changes are irreversible. (Clarification statement: Changes in matter could include heating or freezing of water, baking a cake, boiling an egg.)	<ul style="list-style-type: none"> • Books: Warm Soup for Dedushka; Pancakes Matter • Changes in Matter • Movement of Heat 	<ul style="list-style-type: none"> • Solid and Liquid • Solids, Liquids, and Gases • States of Water
S2P2. Obtain, evaluate, and communicate information to explain the effect of a force (a push or a pull) in the movement of an object (changes in speed and direction). S2P2.a. Plan and carry out an investigation to demonstrate how pushing and pulling on an object affects the motion of the object.	<ul style="list-style-type: none"> • Songs: Push and Pull • Book: Mr. Mario's Neighborhood • Push and Pull 	<ul style="list-style-type: none"> • Push and Pull
S2P2.b. Design a device to change the speed or direction of an object.	<ul style="list-style-type: none"> • Songs: Push and Pull; Graphing • Book: Mr. Mario's Neighborhood • Push and Pull • Bar Graph • Picture Graph encourages everyone to have writing, drawing, and art materials available for children's creations. 	
S2P2.c. Record and analyze data to decide if a design solution works as intended to change the speed or direction of an object with a force (a push or a pull).	<ul style="list-style-type: none"> • Songs: Push and Pull; Graphing • Book: Mr. Mario's Neighborhood • Push and Pull • Bar Graph • Picture Graph 	

Georgia Mathematics & Science Standards	Waterford Digital Activities	Waterford Resources
Life Science		
<p>S2L1. Obtain, evaluate, and communicate information about the life cycles of different living organisms.</p> <p>S2L1.a. Ask questions to determine the sequence of the life cycle of common animals in your area: a mammal such as a cat, dog or classroom pet, a bird such as a chicken, an amphibian such as a frog, and an insect such as a butterfly.</p>	<ul style="list-style-type: none"> • Books: Watch the Woolly Worm • Animal Life Cycle and Growth • Amphibians • Mammals • Birds • Observe a Simple System 	<ul style="list-style-type: none"> • Butterfly Life Cycle • Bird Life Cycle • Frog Life Cycle • Amphibians
<p>S2L1.b. Plan and carry out an investigation of the life cycle of a plant by growing a plant from a seed and by recording changes over a period of time.</p>	<ul style="list-style-type: none"> • Song: Graphing • Books: Little Tree; A Seed Grows; The Watermelon Seed; The Old Maple Tree • Plant Life Cycle and Growth • Plant Experiment • Bar Graphs • Picture Graphs 	<ul style="list-style-type: none"> • The Plant Life Cycle
<p>S2L1.c. Construct an explanation of an animal's role in dispersing seeds or in the pollination of plants.</p>	<ul style="list-style-type: none"> • Books: The Bee's Secret; The Old Maple Tree 	
<p>S2L1.d. Develop models to illustrate the unique and diverse life cycles of organisms other than humans.</p>	<ul style="list-style-type: none"> • Books: Watch the Woolly Worm; Little Tree; A Seed Grows; The Watermelon Seed; The Old Maple Tree • Animal Life Cycle and Growth • Amphibians • Mammals • Birds • Observe a Simple System • Plant Life Cycle and Growth • Plant Experiment 	<ul style="list-style-type: none"> • Butterfly Life Cycle • Bird Life Cycle • Frog Life Cycle • Amphibians • The Plant Life Cycle

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 X1 / Halves and Fourths and Thirds / Navajo Beads / Red Rock, River Rock / I Want to Be a Mathematician Like Srinivasa Ramanujan / The Fraction Twins / Yangshi's Perimeter / I Want to Be a Mathematician Like Archimedes / Birds at My House / Painting by Number / The Fable Fair



Support

Professional Services offers a continuum of customizable services. [Learn more here.](#)

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.

Spanish Family Engagement Resources

All Waterford books and many of the resources available to families at [→family.waterford.org](https://family.waterford.org) can be found in Spanish or with Spanish support.

Songs

Beginning Math Songs

Odd Todd and Even Steven / Salsa Counting / On the Bayou—Addition / Subtract Those Cars / More Than, Fewer Than / A Nice Addition / Marching Band Counting / Doubles 1–5 / Multiply by 0

Nursery Songs and Rhymes

Rhyming Words / A: The Apple Tree / B: Bluebird, Bluebird / C: Pat-a-Cake / D: Hey Diddle, Diddle / E: One Elephant Went Out to Play / F: The Farmer in the Dell / G: Ten Little Goldfish / H: All the Pretty Little Horses / I: Mother, Mother, I Am Ill / J: Jack and Jill / K: Three Little Kittens / L: Mary Had a Little Lamb / M: Little Miss Muffett / 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, 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](https://www.youtube.com/channel/UCqWz8pR8p8p8p8p8p8p8p8p8).

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 Early Learning Family

Waterford Early Learning Family 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).