

100%
Aligned

Alignment

November 2025

**Waterford
Early Learning:
Math**

**Georgia DRC
BEACON Early Years
K-2 Mathematics
2024**

This document provides a detailed alignment of **Waterford Early Learning** to **Georgia DRC BEACON Early Years K-2 Mathematics 2024**.

Alignment Description

This document aligns Georgia DRC BEACON Early Years K-2 Mathematics 2024 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 Standards	Waterford Digital Activities	Waterford Resources
Kindergarten: Claims, Targets, and Content Standards		
Numerical Reasoning		
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 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

Georgia Standards	Waterford Digital Activities	Waterford Resources
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
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: On the Bayou; Bakery Subtraction; Sub-tract 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: On the Bayou; Bakery Subtraction; Sub-tract 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 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: On the Bayou; Bakery Subtraction; Sub-tract 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: On the Bayou; Bakery Subtraction; Sub-tract Those Cars; Circus Subtraction Book: Five Delicious Muffins Add Groups Subtract Groups Minuends Sums Act Out Addition 	
Patterning & Algebraic Reasoning		
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 Pattern ABB Pattern ABC Number Chart Number Patterns 	<ul style="list-style-type: none"> Patterns

Georgia Standards	Waterford Digital Activities	Waterford Resources
K.PAR.6: Explain, extend, and create repeating patterns with a repetition, not exceeding 4 and describe patterns involving the passage of time <i>continued</i>.		
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		
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
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 	

Georgia Standards	Waterford Digital Activities	Waterford Resources
Geometric & Spatial Reasoning		
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 • Over, Under, Above, Below • Inside, Outside, Between • Above, Below, Next to, On 	<ul style="list-style-type: none"> • Describing Objects
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

Georgia Standards	Waterford Digital Activities	Waterford Resources
Grade 1: Claims, Targets, and Content Standards		
NUMERICAL REASONING		
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
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

Georgia 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 <i>continued</i>.		
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 	
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

Georgia 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 <i>continued</i>.		
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 	
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

Georgia Standards	Waterford Digital Activities	Waterford Resources
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 Standards	Waterford Digital Activities	Waterford Resources
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 Pattern ABB Pattern ABC Number Chart Number Patterns 	
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 	
Measurement & Data Reasoning		
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

Georgia Standards	Waterford Digital Activities	Waterford Resources
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 <i>continued</i>.		
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
Geometric & Spatial Reasoning		
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

Georgia Standards	Waterford Digital Activities	Waterford Resources
1.GSR.4: Compose shapes, analyze the attributes of shapes, and relate their parts to the whole <i>continued</i>.		
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
Grade 2: Claims, Targets, and Content Standards		
Numerical Reasoning		
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

Georgia Standards	Waterford Digital Activities	Waterford Resources
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 <i>continued</i>.		
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
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

Georgia 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 <i>continued</i>.		
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 regrouping Subtract 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 	
Patterning & Algebraic Reasoning		
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 	

Georgia Standards	Waterford Digital Activities	Waterford Resources
2.PAR.4: Identify, describe, extend, and create repeating patterns, growing patterns, and shrinking patterns <i>continued</i>.		
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		
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 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 Standards	Waterford Digital Activities	Waterford Resources
GEOMETRIC & SPATIAL REASONING		
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

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/UCq0k11111111111111111111).

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 Family

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