

# **Curriculum** Correlation April 2025



# Waterford Early Learning: Math & Science

Ohio's Learning Standards | Mathematics 2017 | Science 2018

\*Correlation content includes a sampling of Waterford Digital Activities and Resources

# Overview



#### This document provides a detailed correlation of Waterford Early Learning to Ohio's Learning Standards | Mathematics 2017 | Science 2018

### **Correlation Description**

This document aligns Ohio's Learning Standards: Mathematics 2017 & Science 2018 to Waterford.org's digital activities and supporting resources.

#### **Waterford Digital Activities**

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

at  $\rightarrow$  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 →<u>Waterford's Adaptive</u> 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 →<u>SmartStart</u> <u>Scope & Sequence</u>.

# **Table of Contents**



#### Math

#### Kindergarten

Counting and Cardinality (CC)	. 1
Operations and Algebraic Thinking (OA)	.4
Number and Operations In Base Ten (NBT)	. 5
Measurement and Data (MD)	.6
Geometry (G)	.7

#### Grade 1

Operations and Algebraic Thinking (OA)	.9
Number and Operations In Base Ten (NBT)	12
Measurement and Data (MD)	14
Geometry (G)	16

#### Grade 2

Operations and Algebraic Thinking (OA)	7
Measurement and Data (MD) 2	21
Geometry (G)	25

SCIENCE	26
Kindergarten	26
Earth and Space Science (ESS) Physical Science (PS) Life Science (LS)	26 27 27
Grade 1	28
Physical Science (PS) Life Science (LS) Earth and Space Science (ESS)	28 29 30
Grade 2	30
Physical Science (PS) Life Science (LS) Earth And Space Science (ESS)	30 31 31
Books and Related Activities	33
Family Engagement Resources	34

1

1

9

17



Ohio Standards	Waterford Digital Activities	Waterford Resources
Math	Kindergarten	
Counting and Cardinality		
Count to 100 by ones and tens		
<b>K.CC.1</b> Count to 100 by ones and by tens.	<ul> <li>Songs: Counting Songs; Skip Counting</li> <li>Number Instruction</li> <li>Classroom Playlists</li> <li>OH: K: Counting and Cardinality: Count to 100</li> </ul>	<u>Count to 100 by Ones and Tens</u>
Know number names and the count sequence.		
<b>K.CC.2</b> Count forward within 100 beginning from any given number other than 1.	<ul> <li>Songs: Counting Songs</li> <li>Count On</li> <li>Classroom Playlists</li> <li>OH: K: Counting and Cardinality: Count Forward</li> </ul>	• <u>Count Forward</u>
<b>K.CC.3</b> Write numerals from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).	<ul> <li>Songs: Counting Songs</li> <li>Number Instruction</li> <li>Classroom Playlists</li> <li>OH: K: Counting and Cardinality: Numbers and Counting Objects:</li> </ul>	• <u>Write Numbers 0–20</u>



Ohio Standards	Waterford Digital Activities	Waterford Resources
Count to tell the number of objects.		
K.CC.4 Understand the relationship between	numbers and quantities; connect counting to cardinality using a	variety of objects including pennies.
<b>K.CC.4a.</b> When counting objects, establish a one-to-one relationship by saying the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.	<ul> <li>Counting Songs (See titles at end of document.)</li> <li>Number Instruction</li> <li>Order Numbers</li> <li>One-to-one Correspondence</li> <li>Make and Count Groups</li> </ul>	Object Counting Basics
	<ul> <li>OH: K: Counting and Cardinality: Numbers and Counting Objects:</li> <li>OH: K: Counting and Cardinality: Count Objects</li> </ul>	
<b>K.CC.4b.</b> Understand that the last number name said tells the number of objects counted and that the number of objects is the same regardless of their arrangement or the order in which they were counted.	<ul> <li>Make and Count Groups</li> <li>Number Instruction</li> <li>One-to-one Correspondence</li> <li>Classroom Playlists</li> <li>OH: K: Counting and Cardinality: Numbers and Counting Objects:</li> <li>OH: K: Counting and Cardinality: Count Objects</li> </ul>	• Object Counting Grouping
<b>K.CC.4c.</b> Understand that each successive number name refers to a quantity that is one larger.	<ul> <li>Make and Count Groups</li> <li>One-to-one Correspondence</li> <li>Count on by 1</li> <li>Classroom Playlists</li> <li>OH: K: Counting and Cardinality: Numbers and Counting Objects:</li> </ul>	• Object Counting Succession



Ohio Standards	Waterford Digital Activities	Waterford Resources
Compare numbers.		
<b>K.CC.5.</b> Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects.	<ul> <li>Songs: Counting Songs; Number Songs</li> <li>Make and Count Groups</li> <li>Number Instruction</li> <li>One-to-one Correspondence</li> </ul> <b>Classroom Playlists</b> <ul> <li>OH: K: Counting and Cardinality: Numbers and Counting Objects:</li> <li>OH: K: Counting and Cardinality: Count Objects</li> </ul>	• How Many?
<b>K.CC.6.</b> Orally identify (without using inequality symbols) whether the number of objects in one group is greater/more than, less/fewer than, or the same as the number of objects in another group, not to exceed 10 objects in each group.	<ul> <li>Books: For the Birds</li> <li>More Than</li> <li>Fewer Than</li> <li>Make and Count Groups</li> </ul>	• <u>Greater, Less, or Equal</u>
	Classroom Playlists	
	<ul> <li>OH: K: Counting and Cardinality: More Than</li> <li>OH: K: Counting and Cardinality: Fewer Than</li> <li>OH: K: Counting and Cardinality: Greater Than, Less Than</li> <li>OH: K: Counting and Cardinality: More Than, Fewer Than</li> </ul>	
<b>K.CC.7.</b> Compare (without using inequality symbols) two numbers between 0 and 10 when presented as written numerals.	<ul> <li>Books: For the Birds</li> <li>More Than</li> <li>Fewer Than</li> <li>Classroom Playlists</li> <li>OH: K: Counting and Cardinality: Greater Than, Less Than</li> </ul>	• <u>Compare Two Numbers</u>



Ohio Standards	Waterford Digital Activities	Waterford Resources
Operations and Algebraic Thinking	(OA)	
Understand addition as putting togethe	er and adding to, and understand subtraction as taking a	apart and taking from.
<b>K.OA.1</b> Represent addition and subtraction with objects, fingers, mental images, drawings, sounds such as claps, acting out situations, verbal explanations, expressions, or equations. Drawings need not show details, but should show the mathematics in the problem. (This applies wherever drawings are mentioned in the Standards.)	<ul> <li>Songs: On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction</li> <li>Books: Five Delicious Muffins</li> <li>Make and Count Groups</li> <li>Add Groups</li> <li>Subtract Groups</li> <li>Act Out Addition</li> <li>Act Out Subtraction</li> <li>Classroom Playlists</li> <li>OH: K: Operations and Algebraic Thinking: Addition</li> <li>OH: K: Operations and Algebraic Thinking: Subtraction</li> </ul>	Represent Addition and Subtraction with Objects
<b>K.OA.2</b> Solve addition and subtraction problems (written or oral), and add and subtract within 10 by using objects or drawings to represent the problem.	<ul> <li>Songs: On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction</li> <li>Books: Five Delicious Muffins</li> <li>Add Groups</li> <li>Subtract Groups</li> <li>Minuends</li> <li>Act Out Addition</li> <li>Act Out Subtraction</li> <li>Classroom Playlists</li> <li>OH: K: Operations and Algebraic Thinking: Addition</li> <li>OH: K: Operations and Algebraic Thinking: Subtraction</li> </ul>	• Addition and Subtraction Word Problems



Ohio Standards	Waterford Digital Activities	Waterford Resources
Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from continued.		
<b>K.OA.3.</b> Decompose numbers and record compositions for numbers less than or equal to 10 into pairs in more than one way by using objects and, when appropriate, drawings or equations.	<ul> <li>Make and Count Groups</li> <li>Add Groups</li> <li>Subtract Groups</li> <li>Act Out Subtraction</li> <li>Make 10</li> <li>Classroom Playlists</li> <li>OH: K: Operations and Algebraic Thinking: Decompose Numbers</li> </ul>	• <u>Decompose Numbers</u>
<b>K.OA.4.</b> For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or, when appropriate, an equation.	<ul> <li>Make 10</li> <li>Missing Addends</li> <li>Count On</li> <li>Act Out Addition</li> <li>Classroom Playlists</li> <li>OH: K: Operations and Algebraic Thinking: Make 10</li> </ul>	• <u>Numbers That Make 10</u>
<b>K.OA.5.</b> Fluently add and subtract within 5.	<ul> <li>Songs: On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction</li> <li>Books: Five Delicious Muffins</li> <li>Add Groups</li> <li>Subtract Groups</li> <li>Minuends</li> <li>Act Out Addition</li> <li>Act Out Subtraction</li> </ul> <b>Classroom Playlists</b> <ul> <li>OH: K: Operations and Algebraic Thinking: Fluently Add</li> <li>OH: K: Operations and Algebraic Thinking: Fluently Subtract</li> </ul>	



Ohio Standards	Waterford Digital Activities	Waterford Resources
Number and Operations In Base Ten (NBT)		
Work with numbers 11–19 to gain found	ations for place value.	
<b>K.NBT.1</b> Compose and decompose numbers from 11 to 19 into a group of ten ones and some further ones by using objects and, when appropriate, drawings or equations, understand that these numbers are composed of a group of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.	<ul> <li>Songs: Place Value</li> <li>Place Value</li> <li>Classroom Playlists</li> <li>OH: K: Number and Operations: Compose and Decompose Numbers</li> </ul>	• <u>Tens and Ones</u>
Measurement and Data (MD)		
Identify, describe, and compare measu	rable attributes.	
<b>K.MD.1</b> Identify and describe measurable attributes (length, weight, and height) of a single object using vocabulary terms such as long/short, heavy/light, or tall/short.	<ul> <li>Songs: Measuring Plants</li> <li>Length</li> <li>Classroom Playlists</li> <li>OH: K: Measurement and Data: Length</li> <li>OH: K: Measurement and Data: Weight</li> <li>OH: K: Measurement and Data: Height</li> </ul>	• <u>Measurable Attributes</u>
<b>K.MD.2</b> Directly compare two objects with a measurable attribute in common to see which object has "more of" or "less of" the attribute, and describe the difference. For example, directly compare the heights of two children, and describe one child as taller/shorter.	<ul> <li>Songs: Savanna Size; Measuring Plants</li> <li>Capacity</li> <li>Length</li> <li>Big and Little</li> <li>Tall and Short</li> <li>Heavy and Light</li> <li>Classroom Playlists</li> <li>OH: K: Measurement and Data: Length</li> <li>OH: K: Measurement and Data: Weight</li> <li>OH: K: Measurement and Data: Height</li> </ul>	• <u>Comparing Objects</u>



Ohio Standards	Waterford Digital Activities	Waterford Resources	
Identify, describe, and compare measur	Identify, describe, and compare measurable attributes continued.		
<b>K.MD.3.</b> Classify objects into given categories, count the numbers of objects in each category and sort the categories by count. The number of objects in each category should be less than or equal to ten. Counting and sorting coins should be limited to pennies.	<ul> <li>Songs: Same and Different; All Sorts of Laundry</li> <li>Sort</li> <li>Make and Count Groups</li> </ul> Classroom Playlists <ul> <li>OH: Measurement and Data: Classify Objects</li> </ul>	• <u>Classifying Objects</u>	
Geometry (G)			
Identify and describe shapes (squares,	circles, triangles, rectangles, hexagons, cubes, cones, cyl	inders, and spheres).	
<b>K.G.1</b> Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.	<ul> <li>Songs: Position Cat; Kites; Get over the Bugs</li> <li>Books: The Shape of Things; Imagination Shapes; Up in the Air; Under</li> <li>Position</li> <li>Simple Shapes</li> <li>Solid Shapes</li> <li>World Shapes</li> <li>OH: K: Geometry: Shapes</li> </ul>	• Describing Objects	
<b>K.G.2.</b> Correctly name shapes regardless of their orientations or overall size.	<ul> <li>Songs: Kites</li> <li>Books: The Shape of Things; Imagination Shapes</li> <li>Simple Shapes</li> <li>Solid Shapes</li> <li>World Shapes</li> <li>Classroom Playlists</li> <li>OH: K: Geometry: Shapes</li> </ul>	• <u>Shape Recognition</u>	



Ohio Standards	Waterford Digital Activities	Waterford Resources
Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres) continued.		
<b>K.G.3.</b> Identify shapes as two- dimensional (lying in a plane, "flat") or three- dimensional ("solid").	<ul> <li>Solid Shapes</li> <li>Space Shapes</li> <li>Simple Shapes</li> <li>Classroom Playlists</li> <li>OH: K: Geometry: Two-Dimensional or Three-Dimensional Shapes</li> </ul>	• <u>Two-dimensional Shapes</u>
Describe, compare, create, and compos	e shapes.	
<b>K.C.4.</b> Describe and compare two- or three- dimensional shapes, in different sizes and orientations, using informal language to describe their commonalities, differences, parts, and other attributes.	<ul> <li>Songs: Corners and Sides</li> <li>Corners and Sides</li> <li>Simple Shapes</li> <li>Solid Shapes</li> <li>Space Shapes</li> <li>Congruence</li> <li>Tangrams</li> <li>Similar Figures</li> </ul> Classroom Playlists <ul> <li>OH: K: Geometry: Compare Shapes</li> </ul>	• <u>Compare Shapes</u>
<b>K.G.5.</b> Model shapes in the world by building shapes from components, e.g., sticks and clay balls, and drawing shapes.	<ul> <li>Geoboard</li> <li>Tangrams</li> <li>Classroom Playlists</li> <li>OH: K: Geometry: Combine Shapes</li> </ul>	• <u>Model Shapes</u>
<b>K.G.6.</b> Combine simple shapes to form larger shapes.	<ul> <li>Geoboard</li> <li>Tangrams</li> <li>Classroom Playlists</li> <li>OH: K: Geometry: Combine Shapes</li> </ul>	• Form Larger Shapes



Ohio Standards	Waterford Digital Activities	Waterford Resources
Grade 1		
<b>Operations and Algebraic Thinking</b>	(OA)	
Represent and solve problems involving	g addition and subtraction.	
<b>1.OA.1</b> Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.	<ul> <li>Songs: Fact Families; Doubles</li> <li>Books: Facts about Families</li> <li>Doubles</li> <li>Addition and Subtraction Fact Families</li> <li>Addition and Subtraction Relationship</li> </ul> <b>Classroom Playlists</b> <ul> <li>OH: 1: Operations and Algebraic Thinking: Addition Word Problems</li> <li>OH: 1: Operations and Algebraic Thinking: Subtraction Word Problems</li> </ul>	Word Problems Using Subtraction Within 20
<b>1.OA.2</b> Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. Drawings need not show details, but should show the mathematics in the problem. (This applies wherever drawings are mentioned in the Standards.)	<ul> <li>Add 3 One-digit Numbers</li> <li>Classroom Playlists</li> <li>OH: 1: Operations and Algebraic Thinking: Addition Word Problems</li> </ul>	Word Problems Adding 3 Numbers



Ohio Standards	Waterford Digital Activities	Waterford Resources
Understand and apply properties of operations and the relationship between addition and subtraction.		
<b>1.OA.3</b> Apply properties of operations as strategies to add and subtract. For example, If $8 + 3 = 11$ is known, then $3 + 8 =$ 11 is also known (Commutative property of addition), to add $2 + 6 + 4$ , the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12 (Associative property of addition). Students need not use formal terms for these properties.	<ul> <li>Addition and Subtraction Relationship</li> <li>Addition and Subtraction Fact Families</li> <li>Subtraction Patterns</li> <li>Commutative Property of Addition</li> </ul> <b>Classroom Playlists</b> <ul> <li>OH: 1: Operations and Algebraic Thinking: Properties of Operations</li> </ul>	<u>Strategies to Add and Subtract</u>
<b>1.OA.4</b> Understand subtraction as an unknown-addend problem. For example, subtract 10 – 8 by finding the number that makes 10 when added to 8.	<ul> <li>Missing Addends</li> <li>Subtraction Patterns</li> <li>Addition and Subtraction Fact Families</li> </ul>	Understand Subtraction as an Unknown     Addend Problem
Add and subtract within 20.		
<b>1.OA.5</b> Relate counting to addition and subtraction, e.g., by counting on 2 to add 2.	<ul> <li>Songs: Counting On</li> <li>Books: Circus 20</li> <li>Skip Count by 2</li> <li>Count On</li> <li>Make and Count Groups</li> <li>Add Groups</li> <li>Subtract Groups</li> </ul>	• Relate Counting to Addition and Subtraction



Ohio Standards	Waterford Digital Activities	Waterford Resources
Add and subtract within 20 continued.		
<b>1.OA.6</b> Add and subtract within 20, demonstrating fluency with various strategies for addition and subtraction within 10. Strategies may include counting on, making ten, e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$ , decomposing a number leading to a ten, e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$ , using the relationship between addition and subtraction, e.g., knowing that $8 + 4 = 12$ , one knows $12 - 8 = 4$ , and creating equivalent but easier or known sums, e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$ .	<ul> <li>Songs: Fact Families; Counting On</li> <li>Books: Facts about Families</li> <li>Addition and Subtraction Fact Families</li> <li>Addition Sentences</li> <li>Subtraction Sentences</li> <li>Commutative Property of Addition</li> <li>Addition and Subtraction Relationship</li> <li>Missing Addends</li> <li>Missing Minuends and Subtrahends</li> <li>Add 3 One-digit Numbers</li> <li>Subtraction Patterns</li> </ul> <b>Classroom Playlists</b> <ul> <li>OH: Operations and Algebraic Thinking: Fluently Add</li> <li>OH: 1: Operations and Algebraic Thinking: Fluently Subtract</li> </ul>	• Add and Subtract within 20
Work with addition and subtraction eq	uations.	
<b>1.0A.7.</b> Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? $6 = 6$ , $7 = 8 - 1$ , $5 + 2 = 2 + 5$ , $4 + 1 = 5 + 2$ .	<ul> <li>Songs: Fact Families</li> <li>Books: Facts about Families</li> <li>Addition and Subtraction Fact Families</li> <li>Addition and Subtraction Relationship</li> <li>Commutative Property of Addition</li> <li>Addition Sentences</li> <li>Subtraction Sentences</li> <li>More Than</li> <li>Fewer Than</li> </ul>	• Equal Sign



Ohio Standards	Waterford Digital Activities	Waterford Resources
Work with addition and subtraction equations continued.		
<b>1.OA.8.</b> Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations: $8 + ? = 11, 5 = ? - 3, 6$ + 6 = ?.	<ul> <li>Addition Sentences</li> <li>Subtraction Sentences</li> <li>Addition and Subtraction Fact Families</li> <li>Missing Addends</li> <li>Missing Minuends and Subtrahends</li> </ul> Classroom Playlists <ul> <li>OH: 1: Operations and Algebraic Thinking: Unknown Whole Number</li> </ul>	
Number and Operations In Base Te	n (NBT)	
Extend the counting sequence.		
<b>1.NBT.1</b> Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.	<ul> <li>Songs: Counting On</li> <li>Count On</li> <li>Number Chart</li> <li>Classroom Playlists</li> <li>OH: 1: Numbers and Operations: Read and Write Numbers</li> </ul>	• <u>Count to 120</u>
Understand place value.		
<b>1.NBT.2</b> Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: 10 can be thought of as a bundle of ten ones — called a "ten", the numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones, and the numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).	<ul> <li>Songs: Place Value</li> <li>Place Value</li> <li>Place Value of 2-digit Numbers</li> <li>Add with Manipulatives</li> <li>Classroom Playlists</li> <li>OH: 1: Numbers and Operations: Place Value</li> </ul>	<ul> <li><u>Tens as a Bundle of Ones</u></li> <li><u>Ten Groupings</u></li> </ul>



Ohio Standards	Waterford Digital Activities	Waterford Resources
Understand place value continued.		
<b>1.NBT.3</b> Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.	<ul> <li>Songs: Place Value</li> <li>Place Value</li> <li>Classroom Playlists</li> <li>OH: 1: Numbers and Operations: Compare Numbers</li> </ul>	• <u>Compare two-digit Numbers</u>
Use place value understanding and pro	perties of operations to add and subtract.	
<b>1.NBT.4.</b> Add within 100, including adding a two-digit number and a one-digit number and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction, record the strategy with a written numerical method (drawings and, when appropriate, equations) and explain the reasoning used. Understand that when adding two-digit numbers, tens are added to tens, ones are added to ones, and sometimes it is necessary to compose a ten.	<ul> <li>Add Tens</li> <li>Add with Manipulatives</li> <li>Add Vertical Squares</li> <li>Add with Beads</li> <li>Addition and Subtraction Relationship</li> <li>Add 2-digit Numbers without Regrouping</li> <li>Classroom Playlists</li> <li>OH: 1: Numbers and Operations: Add within 100</li> <li>OH: 1: Numbers and Operations: Addition: Two-digit Numbers</li> </ul>	• Adding within 100
<b>1.NBT.5</b> Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count, explain the reasoning used.	<ul> <li>Songs: Skip Counting</li> <li>Books: Navajo Beads</li> <li>Add</li> <li>Subtract</li> <li>Add Tens</li> <li>Subtract Tens</li> <li>Skip Count by 10</li> <li>Number Chart</li> <li>Classroom Playlists</li> <li>OH: 1: Numbers and Operations: 10 More</li> <li>OH: 1: Numbers and Operations: Number Patterns</li> </ul>	• <u>Ten More or Less</u>



Ohio Standards	Waterford Digital Activities	Waterford Resources		
Use place value understanding and pro	Use place value understanding and properties of operations to add and subtract <i>continued</i> .			
<b>1.NBT.6</b> Subtract multiples of 10 in the range 10–90 from multiples of 10 in the range 10–90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction, relate the strategy to a written method and explain the reasoning used.	<ul> <li>Songs: Place Value</li> <li>Subtract Tens</li> <li>Subtraction Patterns</li> <li>Subtract</li> <li>Place Value</li> <li>Addition and Subtraction Relationship</li> <li>Use Manipulatives</li> </ul> Classroom Playlists <ul> <li>OH: 1: Numbers and Operations: Subtract Multiples of 10</li> </ul>	• <u>Subtracting in 10s</u>		
Measurement and Data (MD)				
Measure lengths indirectly and by itera	ting length units.			
<b>1.MD.1</b> Order three objects by length, compare the lengths of two objects indirectly by using a third object.	<ul> <li>Length</li> <li>Nonstandard Units of Length</li> <li>Classroom Playlists</li> <li>OH: 1: Measurement and Data: Order Objects</li> </ul>	• Order by Length		
<b>1.MD.2</b> Express the length of an object as a whole number of length units by laying multiple copies of a shorter object (the length unit) end to end, understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.	<ul> <li>Length</li> <li>Nonstandard Units of Length</li> <li>Classroom Playlists</li> <li>OH: 1: Measurement and Data: Length</li> </ul>	• <u>Length Measurement</u>		



Ohio Standards	Waterford Digital Activities	Waterford Resources
Work with time and money.		
1.MD.3 Work with time and money.		
<b>1.MD.3a</b> Tell and write time in hours and half-hours using analog and digital clocks.	<ul> <li>Songs: Clock Hands</li> <li>Tell Time to the Hour</li> <li><u>Classroom Playlists</u></li> <li>OH: 1: Measurement and Data: Tell Time</li> </ul>	• Hours and Half-hours
<b>1.MD.3b</b> Identify pennies and dimes by name and value.	<ul> <li>Songs: Money; Save Your Pennies</li> <li>Books: Bugs For Sale</li> <li>Coin Identification</li> </ul> Classroom Playlists <ul> <li>OH: 1: Measurement and Data: Money</li> </ul>	• Coin Identification and Value
Represent and interpret data.		
<b>1.MD.4</b> Organize, represent, and interpret data with up to three categories, ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.	<ul> <li>Songs: Tallying; Graphing</li> <li>Books: Painting by Number; One More Cat</li> <li>Tally Marks</li> <li>Graphs</li> <li>Make a Table</li> <li>Classroom Playlists</li> <li>OH: 1: Measurement and Data: Bar Graphs</li> <li>OH: 1: Measurement and Data: Picture Graphs</li> <li>OH: 1: Measurement and Data: Graphs</li> <li>OH: 1: Measurement and Data: Tally Marks</li> </ul>	<ul> <li><u>Data Categorization</u></li> <li><u>How Many?</u></li> </ul>



Ohio Standards	Waterford Digital Activities	Waterford Resources
Geometry		
Reason with shapes and their attribute	5.	
<b>1.G.1</b> Distinguish between defining attributes, e.g., triangles are closed and three-sided, versus non-defining attributes, e.g., color, orientation, overall size, build and draw shapes that possess defining attributes.	<ul> <li>Songs: Corners and Sides; Kites</li> <li>Geoboard</li> <li>Space Shapes</li> <li>Classroom Playlists</li> <li>OH: 1: Geometry: Defining Attributes</li> </ul>	• <u>Attributes</u>
Reason with shapes and their attributes continued.		
<b>1.G.2</b> Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape., Students do not need to learn formal names such as "right rectangular prism."	<ul> <li>Songs: Kites</li> <li>Space Shapes</li> <li>Geoboard</li> <li>Tangrams</li> <li>Classroom Playlists</li> <li>OH: 1: Geometry: Compose Shapes</li> </ul>	• Form Larger Shapes
<b>1.G.3</b> Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of or four of the shares in real-world contexts. Understand for these examples that decomposing into more equal shares creates smaller shares.	<ul> <li>Songs: Fractions</li> <li>Books: Halves and Fourths and Thirds; Half for You and Half for Me</li> <li>Equal-part Fractions</li> <li>Label Parts of Fractions</li> <li>Classroom Playlists</li> <li>OH: 1: Geometry: Partition Shapes</li> </ul>	• Equal Shares



Ohio Standards	Waterford Digital Activities	Waterford Resources
Grade 2		
<b>Operations and Algebraic Thinking</b>	(OA)	
Represent and solve problems involving	g addition and subtraction.	
<b>2.OA.1</b> Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	<ul> <li>Books: Painting by Number; Circus 20</li> <li>Subtraction Sentences</li> <li>Classroom Playlists</li> <li>OH: 2: Operations and Algebraic Thinking: Addition Word Problems</li> <li>OH: 2: Operations and Algebraic Thinking: Subtraction Word Problems</li> </ul>	• One- and Two-step Word Problems within 100
Add and subtract within 20.		
<b>2.OA.2</b> Fluently add and subtract within 20 using mental strategies. By end of grade 2, know from memory all sums of two one-digit numbers.	<ul> <li>Songs: Fact Families; Doubles</li> <li>Doubles</li> <li>Subtraction Patterns</li> <li>Classroom Playlists</li> <li>OH: Operations and Algebraic Thinking: Fluently Add</li> <li>OH: Operations and Algebraic Thinking: Fluently Subtract</li> </ul>	• Add and Subtract within 20
Work with equal groups of objects to g	ain foundations for multiplication.	
<b>2.OA.3.</b> Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s, write an equation to express an even number as a sum of two equal addends.	<ul> <li>Songs: Odd Todd and Even Steven</li> <li>Skip Count by 2</li> <li>Classroom Playlists</li> <li>OH: 2: Operations and Algebraic Thinking: Odd or Even</li> </ul>	• Odd and Even Recognition
<b>2.OA.4.</b> 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> <li>Multiply Using Repeated Addition</li> <li>Multiply Using Arrays</li> <li>Classroom Playlists</li> <li>OH: 2: Operations and Algebraic Thinking: Arrays</li> </ul>	



Ohio Standards	Waterford Digital Activities	Waterford Resources
Understand place value.		
2.NBT.1 Understand that the three digits of a Understand the following as special cases:	three-digit number represent amounts of hundreds, tens, and or	nes, e.g., 706 equals 7 hundreds, 0 tens, and 6 ones.
<b>2.NBT.1a</b> 100 can be thought of as a bundle of ten tens - called a "hundred."	<ul><li>Songs: Place Value</li><li>Place Value</li><li>Place Value of 3-digit Numbers</li></ul>	<ul> <li>Thinking of 100 as a Bundle of 10s</li> </ul>
	<ul> <li>Classroom Playlists</li> <li>OH: 2: Numbers and Operations: Place Value</li> </ul>	
<b>2.NBT.1b</b> The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).	<ul> <li>Songs: Place Value</li> <li>Place Value</li> <li>Place Value of 3-digit Numbers</li> </ul> Classroom Playlists <ul> <li>OH: 2: Numbers and Operations: Place Value</li> </ul>	• <u>Grouping Hundreds</u>
<b>2.NBT.2</b> Count forward and backward within 1,000 by ones, tens, and hundreds starting at any number, skip-count by 5s starting at any multiple of 5.	<ul> <li>Songs: Skip Counting; Counting Backward; Counting On</li> <li>Books: A Space Adventure; Jump Rope Rhymes</li> <li>Count On</li> <li>Count Down</li> <li>Skip Count</li> <li>Skip Count by 10</li> <li>Skip Count by 5</li> </ul> Classroom Playlists <ul> <li>OH: 2: Numbers and Operations: Skip Count</li> </ul>	• <u>Counting within 1, 000</u>
<b>2.NBT.3</b> Read and write numbers to 1,000 using base-ten numerals, number names, expanded form, and equivalent representations, e.g., 716 is 700 + 10 + 6, or 6 + 700 + 10, or 6 ones and 71 tens, etc.	<ul> <li>Songs: Place Value</li> <li>Sequences of 2-digit Numbers</li> <li>Sequences of 3-digit Numbers</li> <li>Number Chart</li> <li>Place Value</li> <li>Classroom Playlists</li> <li>OH: 2: Numbers and Operations: Read and Write Numbers</li> <li>OH: 2: Numbers and Operations: Expanded Form</li> </ul>	• <u>Read and Write Numbers to 1000</u>



Ohio Standards	Waterford Digital Activities	Waterford Resources
2.NBT.1 Understand that the three digits of a Understand the following as special cases <i>co</i>	three-digit number represent amounts of hundreds, tens, and on <i>ntinued</i>	nes, e.g., 706 equals 7 hundreds, 0 tens, and 6 ones.
<b>2.NBT.4</b> Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.	<ul> <li>Place Value of 3-digit Numbers</li> <li>Classroom Playlists</li> <li>OH: 2: Numbers and Operations: Compare Numbers</li> </ul>	• Less Than, Equal To, or Greater Than
Use place value understanding and properties of operations to add and subtract.		
<b>2.NBT.5</b> Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	<ul> <li>Songs: Place Value</li> <li>Place Value</li> <li>Addition and Subtraction Relationship</li> <li>Add with Regrouping</li> <li>Subtract with Regrouping</li> <li>Classroom Playlists</li> <li>OH: Operations and Algebraic Thinking: Fluently Add</li> <li>OH: Operations and Algebraic Thinking: Fluently Subtract</li> </ul>	• Add and Subtract within 100
<b>2.NBT.6</b> Add up to four two-digit numbers using strategies based on place value and properties of operations.	<ul> <li>Songs: Place Value</li> <li>Place Value</li> <li>Classroom Playlists</li> <li>OH: 2: Numbers and Operations: Add Three Two-digit Numbers</li> </ul>	• Adding Four Two-digit Numbers



Ohio Standards	Waterford Digital Activities	Waterford Resources	
Use place value understanding and properties of operations to add and subtract <i>continued</i> .			
<b>2.NBT.7</b> Add and subtract within 1,000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction, record the strategy with a written numerical method (drawings and, when appropriate, equations) and explain the reasoning used. Understand that in adding or subtracting three-digit numbers, hundreds are added or subtracted from tens, ones are added or subtracted from ones, and sometimes it is necessary to compose or decompose tens or hundreds.	<ul> <li>Songs: Place Value</li> <li>Place Value</li> <li>Addition and Subtraction Relationship</li> <li>Add with Regrouping</li> <li>Subtract with Regrouping</li> <li>Act Out Addition</li> <li>Act Out Subtraction</li> </ul> <b>Classroom Playlists</b> <ul> <li>OH: 2: Numbers and Operations: Add within 1,000</li> <li>OH: 2: Numbers and Operations: Subtract within 1,000</li> </ul>	• Add and Subtract within 100	
<b>2.NBT.8</b> Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.	<ul> <li>Songs: Place Value</li> <li>Skip Count</li> <li>Place Value</li> <li>Number Chart</li> <li>Number Patterns</li> </ul> Classroom Playlists <ul> <li>OH: 2: Numbers and Operations: Mentally Add and Subtract 10 or 100</li> </ul>	• Mentally Adding and Subtracting 10 or 100	
<b>2.NBT.9</b> Explain why addition and subtraction strategies work, using place value and the properties of operations. Explanations may be supported by drawings or objects.	<ul> <li>Songs: Place Value</li> <li>Place Value</li> <li>Number Line</li> <li>Addition and Subtraction Relationship</li> <li>Act Out Addition</li> <li>Act Out Subtraction</li> <li>Classroom Playlists</li> <li>OH: 2: Numbers and Operations: Explain Addition and Subtraction</li> </ul>	• Explaining Addition and Subtraction Strategies	



Ohio Standards	Waterford Digital Activities	Waterford Resources
Measurement And Data (MD)		
Measure and estimate lengths in standa	ard units.	
<b>2.MD.1</b> Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.	<ul> <li>Songs: Measuring Plants</li> <li>Books: Birds at My House</li> <li>Length</li> <li>Measurement Tools</li> <li>Standard Units of Length</li> </ul> Classroom Playlists <ul> <li>OH: 2: Measurement and Data: Length</li> </ul>	<u>Measurement Tools</u>
<b>2.MD.2</b> Measure the length of an object twice, using length units of different lengths for the two measurements, describe how the two measurements relate to the size of the unit chosen.	<ul> <li>Length</li> <li>Standard Units of Length</li> <li>Measurement Tools</li> <li>Classroom Playlists</li> <li>OH: 2: Measurement and Data: Length</li> </ul>	<ul> <li>Measuring the Same Object Two Ways</li> </ul>
<b>2.MD.3</b> Estimate lengths using units of inches, feet, centimeters, and meters.	<ul> <li>Songs: Measuring Plants</li> <li>Length</li> <li>Standard Units of Length</li> <li>Measurement Tools</li> </ul>	• Estimating Lengths
<b>2.MD.4</b> Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.	<ul> <li>Length</li> <li>Standard Units of Length</li> </ul>	• <u>Measure Length</u>



Ohio Standards	Waterford Digital Activities	Waterford Resources
Relate addition and subtraction to length.		
<b>2.MD.5</b> Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same whole number units, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. Drawings need not show details, but should show the mathematics in the problem. (This applies wherever drawings are mentioned in the Standards.)	<ul> <li>Length</li> <li>Standard Units of Length</li> <li>Classroom Playlists</li> <li>OH: 2: Measurement and Data: Length</li> </ul>	• Add and Subtract Word Problems Within 100
<b>2.MD.6</b> Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2,, and represent whole number sums and differences within 100 on a number line diagram.	<ul><li>Number Line</li><li>Length</li></ul>	
Work with time and money.		
<b>2.MD.7</b> Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	<ul> <li>Songs: Telling Time; Clock Hands</li> <li>Tell Time</li> <li>Tell Time to Five Minutes</li> <li>Tell Time to the Quarter Hour</li> <li>Tell Time to the Minute</li> <li>Tell Time to the Hour</li> </ul> Classroom Playlists <ul> <li>OH: 2: Measurement and Data: Tell Time to Five Minutes</li> </ul>	• <u>Tell and Write Time</u>



Ohio Standards	Waterford Digital Activities	Waterford Resources
2.MD.8 Solve problems with money.		
<b>2.MD.8a</b> Identify nickels and quarters by name and value.	<ul> <li>Songs: Money; Save Your Pennies</li> <li>Books: Bugs For Sale</li> <li>Coin Identification</li> <li>Coin Value</li> <li>Quarters</li> <li>Make Change</li> <li>Count Coins</li> <li>Count Bills and Coins</li> <li>Equivalent Sums of Money</li> </ul> Classroom Playlists <ul> <li>OH: 2: Measurement and Data: Money: Name and Value</li> </ul>	• Solve Money Word Problems
<b>2.MD.8b</b> Find the value of a collection of quarters, dimes, nickels, and pennies.	<ul> <li>Songs: Money; Save Your Pennies</li> <li>Books: Bugs For Sale</li> <li>Coin Identification</li> <li>Coin Value</li> <li>Quarters</li> <li>Make Change</li> <li>Count Coins</li> <li>Count Bills and Coins</li> <li>Equivalent Sums of Money</li> </ul> Classroom Playlists <ul> <li>OH: 2: Measurement and Data: Money: Collection of Coins</li> </ul>	Solve Money Word Problems



Ohio Standards	Waterford Digital Activities	Waterford Resources
2.MD.8 Solve problems with money con	tinued.	
<b>2.MD.8c</b> Solve word problems by adding and subtracting within 100, dollars with dollars and cents with cents (not using dollars and cents simultaneously) using the \$ and ¢ symbols appropriately (not including decimal notation).	<ul> <li>Songs: Money; Save Your Pennies</li> <li>Books: Bugs For Sale</li> <li>Coin Identification</li> <li>Coin Value</li> <li>Quarters</li> <li>Make Change</li> <li>Count Coins</li> <li>Count Bills and Coins</li> <li>Equivalent Sums of Money</li> </ul>	Solve Money Word Problems
	<ul> <li>Classroom Playlists</li> <li>OH: 2: Measurement and Data: Money</li> </ul>	
Represent and interpret data.		
<b>2.MD.9</b> Generate measurement data by measuring lengths of several objects to the nearest whole unit or by making repeated measurements of the same object. Show the measurements by creating a line plot, where the horizontal scale is marked off in whole number units.		• <u>Generating Measurement Data</u>
<b>2.MD.10</b> Organize, represent, and interpret data with up to four categories, complete picture graphs when single-unit scales are provided, complete bar graphs when single-unit scales are provided, solve simple put-together, take-apart, and compare problems in a graph.	<ul> <li>Songs: Graphing</li> <li>Bar Graphs</li> <li>Picture Graphs</li> <li>Classroom Playlists</li> <li>OH: 2: Measurement and Data: Organize Data</li> </ul>	• <u>Graphs</u>



Ohio Standards	Waterford Digital Activities	Waterford Resources
Geometry (G)		
Reason with shapes and their attribute	5.	
<b>2.G.1</b> Recognize and identify triangles, quadrilaterals, pentagons, and hexagons based on the number of sides or vertices. Recognize and identify cubes, rectangular prisms, cones, and cylinders.	<ul> <li>Songs: Corners and Sides; Kites</li> <li>Books: The Shape of Things</li> <li>Corners and Sides</li> <li>Space Shapes</li> <li>World Shapes</li> <li>Geoboard</li> </ul> Classroom Playlists <ul> <li>OH: 2: Geometry: Shapes</li> </ul>	• <u>Draw Shapes</u>
<b>2.G.2</b> Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.	<ul> <li>Songs: Fractions</li> <li>Fractions of Regions</li> <li>Classroom Playlists</li> <li>OH: 2: Geometry: Partition Shapes</li> </ul>	
<b>2.G.3</b> Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, or fourths and quarters, and use the phrases half of, third of, or fourth of and quarter of. Describe the whole as two halves, three thirds, or four fourths in real-world contexts. Recognize that equal shares of identical wholes need not have the same shape.	<ul> <li>Songs: Fractions</li> <li>Books: Halves and Fourths and Thirds; The Fraction Twins</li> <li>Label Parts of Fractions</li> <li>Fractions of Regions</li> <li>Fractions of Groups</li> </ul> <b>Classroom Playlists</b> <ul> <li>OH: 2: Geometry: Partition Shapes</li> </ul>	• <u>Fractions</u>



Ohio Standards	Waterford Digital Activities	Waterford Resources
SCIENCE	Kindergarten	
EARTH AND SPACE SCIENCE (ESS)		
Topic: Daily and Seasonal Changes		
<b>K.ESS.1:</b> Weather changes are long-term and short-term.	<ul> <li>Songs: Seasons</li> <li>Books: Whatever the Weather; Clouds</li> <li>Weather</li> <li>Calendar/Graph Weather</li> <li>Weather Patterns</li> <li>Clouds</li> <li>Spring</li> <li>Summer</li> <li>Fall</li> <li>Winter</li> <li>Classroom Playlists</li> <li>OH: K: Earth Science: Weather</li> </ul>	<ul> <li><u>The Weather Around Us</u></li> <li><u>Weather Cards</u></li> </ul>
<b>K.ESS.2:</b> The moon, sun and stars can be observed at different times of the day or night.	<ul> <li>Songs: The Moon; Sun Blues</li> <li>Books: Moon Song; Star Pictures; My Family Campout</li> <li>Sun</li> <li>Moon</li> <li>Constellations</li> <li>Classroom Playlists</li> <li>OH: K: Earth Science: Moon, Sun, and Stars</li> </ul>	<ul> <li><u>The Sky Above Us</u></li> <li><u>The Moon</u></li> </ul>



Ohio Standards	Waterford Digital Activities	Waterford Resources
PHYSICAL SCIENCE (PS)		
Topic: Properties of Everyday Objects an	nd Materials	
<b>K.PS.1:</b> Objects and materials can be sorted and described by their properties.	<ul> <li>Books: Warm Soup for Dedushka</li> <li>Materials</li> <li>Sort</li> <li>Classroom Playlists</li> <li>OH: K: Physical Science: Sort</li> </ul>	
<b>K.PS.2:</b> Some objects and materials can be made to vibrate to produce sound.	<ul> <li>Songs: Sound</li> <li>Books: Sound; What Sounds Say</li> <li>Sound Waves</li> <li>Sound Exploration</li> </ul> Classroom Playlists <ul> <li>OH: K: Physical Science: Sound</li> </ul>	• <u>Sound</u>
LIFE SCIENCE (LS)		
Topic: Physical and Behavioral Traits of L	iving Things	
<b>K.LS.1:</b> Living things grow and reproduce. Living things are found worldwide.	<ul> <li>Songs: Animal Bodies; Four Ecosystems; Plants Are Growing; Oceans</li> <li>Books: Animal Bodies; Where in the World Would You Go Today?; A Seed Grows</li> <li>Animal Bodies</li> <li>Ecosystems</li> <li>Animal Behavior</li> <li>Deserts</li> <li>Mountains</li> <li>Oceans</li> <li>Rainforests</li> <li>Classroom Playlists</li> <li>OH: K: Life Science: Living Things</li> </ul>	<ul> <li><u>Green and Growing</u></li> <li><u>Places on Earth</u></li> </ul>



Ohio Standards	Waterford Digital Activities	Waterford Resources	
Topic: Physical and Behavioral Traits of L	Topic: Physical and Behavioral Traits of Living Things continued		
<b>K.LS.2:</b> Living things have physical traits and behaviors which influence their survival.	<ul> <li>Songs: Water; Food from Plants; Animal Bodies</li> <li>Books: Water; Animal Bodies; Everybody Needs to Eat; I Wish I Had Ears Like a Bat; Fawn Eyes</li> <li>Water</li> <li>Food From Plants</li> <li>Animal Bodies</li> <li>Sun</li> <li>Plants</li> <li>Plants and Animals Need Air</li> <li>Animal Behavior</li> <li>Deserts</li> </ul> Classroom Playlists <ul> <li>OH: K: Life Science: Traits</li> </ul>	<ul> <li>Water for Plants</li> <li>Green and Growing</li> <li>Traits</li> </ul>	
Grade 1			
PHYSICAL SCIENCE (PS)			
Topic: Motion and Materials			
<b>1.PS.1:</b> Properties of objects and materials can change.	<ul> <li>Books: Warm Soup for Dedushka; Pancakes Matter</li> <li>Changes in Matter</li> <li>Heat Changes Water</li> <li>States of Water</li> <li>Matter Experiment</li> </ul> Classroom Playlists <ul> <li>OH: 1: Physical Science: Properties</li> </ul>	• <u>Temperature and Melting</u>	
<b>1.PS.2:</b> Objects can be moved in a variety of ways, such as straight, zigzag, circular and back and forth.	<ul> <li>Songs: Push and Pull</li> <li>Push and Pull</li> <li>Classroom Playlists</li> <li>OH: 1: Physical Science: Movement</li> </ul>	• <u>How it Works</u>	



Ohio Standards	Waterford Digital Activities	Waterford Resources
LIFE SCIENCE (LS)		
Topic: Basic Needs of Living Things		
<b>1.LS.1:</b> Living things have basic needs, which are met by obtaining materials from the physical environment.	<ul> <li>Songs: Water; Food from Plants</li> <li>Books: Everybody Needs to Eat; Water</li> <li>Plants and Animals Need Air</li> <li>Animals Need Water</li> <li>Sun</li> <li>Water</li> <li>Plants</li> <li>Food From Plants</li> <li>Classroom Playlists</li> <li>OH: 1: Life Science: Needs of Living Things</li> </ul>	<ul> <li><u>Water for Plants</u></li> <li><u>Green and Growing</u></li> </ul>
<b>1.LS.2:</b> Living things survive only in environments that meet their needs.	<ul> <li>Songs: Animal Bodies; Four Ecosystems; Oceans</li> <li>Books: Animal Bodies; Where in the World Would You Go Today?</li> <li>Animal Bodies</li> <li>Oceans</li> <li>Deserts</li> <li>Mountains</li> <li>Rainforests</li> <li>Prairies</li> <li>Animal Behavior</li> </ul> Classroom Playlists <ul> <li>OH: 1: Life Science: Environments</li> </ul>	• <u>Places on Earth</u>



Ohio Standards	Waterford Digital Activities	Waterford Resources
EARTH AND SPACE SCIENCE (ESS)		
Topic: Sun, Energy, and Weather		
<b>1.ESS.1:</b> The sun is the principal source of energy.	<ul> <li>Songs: Sun Blues</li> <li>Sun</li> <li>Classroom Playlists</li> <li>OH: 1: Earth Science: Sun</li> </ul>	
<b>1.ESS.2:</b> Water on Earth is present in many forms.	<ul> <li>Songs: Water; Uses of Water; Precipitation; Water Cycle</li> <li>Books: Water; Water is All Around</li> <li>Water</li> <li>Water Sources</li> <li>Water Cycle</li> <li>Care of Water</li> <li>States of Water</li> <li>Heat Changes Water</li> <li>Classroom Playlists</li> <li>OH: 1: Earth Science: Water on Earth</li> </ul>	
Grade 2		
PHYSICAL SCIENCE (PS)		
Topic: Changes in Motion		
<b>2.PS.I:</b> Forces change the motion of an object.	<ul> <li>Songs: Push and Pull; Air</li> <li>Push and Pull</li> <li>Air</li> <li>Classroom Playlists</li> <li>OH: 2: Physical Science: Forces</li> </ul>	



Ohio Standards	Waterford Digital Activities	Waterford Resources
LIFE SCIENCE (LS)		
Topic: Interactions within Habitats		
<b>2.LS.1:</b> Living things cause changes on Earth.	<ul> <li>Books: Winter Snoozers; Birds at My House; The Old Maple Tree</li> <li>Care of Earth</li> </ul>	
<b>2.LS.2:</b> All organisms alive today result from their ancestors, some of which may be extinct. Not all kinds of organisms that lived in the past are represented by living organisms today.	<ul> <li>Books: A Seed Grows; The Old Maple Tree; Fossils under Our Feet</li> </ul>	• <u>Traits</u>
EARTH AND SPACE SCIENCE (ESS)		
Topic: The Atmosphere		
<b>2.ESS.1:</b> The atmosphere is primarily made up of air.	<ul> <li>Songs: Air</li> <li>Air</li> <li>Care of Air</li> <li>Classroom Playlists</li> <li>OH: 2: Earth Science: Air</li> </ul>	
<b>2.ESS.2:</b> Water is present in the atmosphere.	<ul> <li>Songs: Water; Uses of Water; Precipitation; Water Cycle</li> <li>Books: Water; Water is All Around; What Is a Cloud?</li> <li>Water</li> <li>Water Sources</li> <li>Water Cycle</li> <li>States of Water</li> <li>Heat Changes Water</li> </ul>	



Ohio Standards	Waterford Digital Activities	Waterford Resources
Topic: The Atmosphere continued		
<b>2.ESS.3:</b> Long- and short-term weather changes occur due to changes in energy.	<ul> <li>Songs: Seasons; Storms; Water</li> <li>Books: Whatever the Weather; What Is a Cloud?; Water</li> <li>Spring</li> <li>Summer</li> <li>Fall</li> <li>Winter</li> <li>Water</li> <li>Classroom Playlists</li> <li>OH: 2: Earth Science: Weather</li> </ul>	

# **Books and Related Activities**



#### **Pre-Math and Science**

#### **Math Books**

Zero In My Toybox / One Day on the Farm / Two Feet / Look for Three / Four Fine Friends / Grandpa's Great Athlete: A Book About 5 / Hide and Seek Six / Just Seven / Eight at the Lake / 9 Cat Night / Ten for My Machine / The Search for Eleven / The Tasty Number Twelve / Thirteen in My Garden / Fourteen Camel Caravan / Fifteen on a Spring Day / Dinner for Sixteen / The Seventeen Machine / Eighteen Carrot Stew / Nineteen Around the World / Twenty Clay Children / Poor Wandering 1 / Snowy Twos Day / 1, 2, 3, 4 in the Jungle / Give Me 5 / Suzy Ladybug / 7 Train / 8 Octopus Legs / Highway 9 / 10 Astronauts / When I Saw 11 / I Love the Number 12 / 13 Clues / Fun 15 / 16 Ants / Counting to 17 / 18 Carrot Stew / 20 Fingers and Toes

#### **Science Books**

That's What I Like: A Book about Seasons / I Want to Be a Scientist Like Jane Goodall / Mr. Mario's Neighborhood / Mela's Water Pot / I Want to Be a Scientist Like Wilbur and Orville Wright / Follow the Apples! / I Want to Be a Scientist Like George Washington Carver / Guess What I Am / Where in the World Would You Go Today? / Star Pictures / I Wish I Had Ears Like a Bat / Creepy Crawlers

#### **Counting Songs**

Marching Band Counting / Flower Counting / Country Counting / Funky Counting / Reggae Counting / Salsa Counting / Techno Counting / Bagpipe Counting / Counting on the Mountain

#### **Number Songs**

Count to 31 / Hotel 100 / Zero Is a Big Round Hole / Poor Wandering 1 / Snowy Twos Day / 1, 2, 3, 4 in the Jungle / Give Me 5 / Suzy Ladybug / 7 Train / 8 Octopus Legs / Highway 9 / 10 Astronauts / When I Saw 11 / I Love the Number 12 / 13 Clues / 14 Fish to Catch / Fun 15 / 16 Ants / Counting to 17 / 18 Carrot Stew / 19 On the Beach / 20 Fingers and Toes

#### **Basic Math and Science**

#### Math and Science Books

One More Cat / Can You Guess? A Story for Two Voices / I Want to Be a Scientist Like Antoni van Leeuwenhoek / Whatever the Weather / I Want to Be a Mathematician Like Sophie Germain / Water Is All Around / Mr. Romano's Secret: A Time Story / A Seed Grows | How Long is a Minute? | Marty's Mixed-up Mom / I Want to Be a Scientist Like Louis Pasteur / Pancakes Matter / Jump Rope Rhymes / Facts About Families | Fifteen Bayou Band | Hooray, Hooray for the One Hundredth Day! / Symmetry and Me / Animal Bodies | Everybody Needs to Eat | The Circus Came to Town / I Want to Be a Mathematician Like Thales | Bugs for Sale | Heads or Tails | Your Backvard | 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 / Navaio Beads / Red Rock, River Rock / I Want to Be a Mathematician Like Srinivasa Ramanujan / The Fraction Twins / Yangshi's Perimeter / I Want to Be a Mathematician Like Archimedes / Birds at My House / Painting by Number / The Fable Fair

#### Support

Professional Services offers a continuum of customizable services. Learn more here.

#### **Research-Driven Development**

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



#### Spanish Family Engagement Resources

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

#### Songs

#### **Beginning Math Songs**

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

#### **Nursery Songs and Rhymes**

Rhyming Words / A: The Apple Tree / B: Bluebird, Bluebird / C: Pat-a-Cake / D: Hey Diddle, Diddle / E: One Elephant Went Out to Play / F: The Farmer in the Dell / G: Ten Little Goldfish / H: All the Pretty Little Horses / I: Mother, Mother, I Am III / J: Jack and Jill / K: Three Little Kittens / L: Mary Had a Little Lamb / M: Little Miss Muffett / N: I Touch My Nose Like This / 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.

#### Weekly Homelink Newsletters

Weekly newsletters (28 in all) are available for teachers to share with families. The newsletters explain what children are learning during the week and provide resources and activities to involve families.

#### Math Homelink Newsletters

Match, Position, Shapes, Counting, Patterns Sort, Size, Number Sense (1–10), Order (1–10), Count On, Measurement (length), Count Down, Addition (10), Numbers 11–15, Numbers 16–20

#### **Science Homelink Newsletters**

The World Around Us (5 senses), Living Things (living v. non-living), Plants, Vertebrates, Invertebrates, The Sky Above Us (sun, moon, stars), Our Earth (recycle, ecosystems), How it Works (push/pull, solid/liquid, magnets, materials)

#### **Reading Homelink Newsletters**

## Alphabet Knowledge Comprehension and Vocabulary

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

#### **Readiness Skills Letters**

Naming Parts of the Body; First, Next, Last; One-to-One Correspondence; Opposites; Look at Details (identify same and different)

#### **Phonological Awareness Letters**

What Is Rhyming?, Which Words Rhyme?, Sentences Are Made Up of Words, Making Compound Words, Breaking Compound Words, What Is a Syllable?, Put Syllables Together to Make Words, Break Words into Syllables, The First Sound in a Word, Words with the Same First Sound, Making Words from First Sounds and the Rest



#### **Waterford Mentor**

<u>Waterford Mentor</u> is a secure website where families can log in to see their child's usage and learning achievements. Waterford families also receive short messages with ideas on how to engage in their child's learning and have access to hundreds of resources and activities. Waterford Mentor is available online and in the Mentor app (for iOS and Android).