

# Alignment October 2025

99% Aligned

Waterford
Early Learning:
Math & Science

### Overview



This document provides a detailed alignment of Waterford Early Learning to Oklahoma Academic Standards for Mathematics 2022 & Science 2020.

### **Alignment Description**

This document aligns Oklahoma Academic Standards for Mathematics 2022 & Science 2020. to Waterford.org's digital activities and supporting resources.

#### **Waterford Digital Activities**

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

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

#### **Waterford Resources**

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

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

#### **Waterford Curriculum Details**

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

#### Adaptive, Individualized Learning

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

#### **Data-Informed Instruction**

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

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

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

#### **Reading Sequence**

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

#### **Math and Science Sequence**

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

#### **SmartStart Sequence**

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

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Oklahoma Standards	Waterford Digital Activities	Waterford Resources
Mathematics		
Kindergarten		
Numbers and Operations (N)		
K.N.1 Understand the relationship between q	uantities and whole numbers.	
<b>K.N.1.1</b> Count aloud forward in sequence to 100 by 1's and 10's.	<ul> <li>Number Songs</li> <li>Counting Songs</li> <li>Math Books</li> <li>Number Instruction</li> <li>Number Counting</li> <li>Skip Count by 10</li> </ul> Classroom Playlists <ul> <li>OK: K Numbers and Operations: Count to 100</li> </ul>	Count to 100 by Ones and Tens
<b>K.N.1.2</b> Recognize that a number can be used to represent how many objects are in a set up to 10.	<ul> <li>Math Books</li> <li>Number Songs</li> <li>Counting Songs</li> <li>Number Counting</li> <li>Number Instruction</li> <li>Make and Count Groups</li> <li>Bug Bits</li> <li>Match Numbers</li> </ul> Classroom Playlists <ul> <li>OK: K: Numbers and Operations: Count Objects</li> </ul>	Writing from 0 to 20
<b>K.N.1.3</b> Use ordinal numbers to represent the position of an object in a sequence up to 10.	<ul> <li>Songs: Ordinals</li> <li>Books: The Circus Came to Town</li> <li>Ordinal Numbers</li> <li>Classroom Playlists</li> <li>OK: K: Numbers and Operations: Ordinal Numbers</li> </ul>	• Ordinals: 1st–10th



Oklahoma Standards	Waterford Digital Activities	Waterford Resources
K.N.1 Understand the relationship between q	uantities and whole numbers continued.	
<b>K.N.1.4</b> Recognize without counting (subitize) the quantity of a small group of objects in organized and random arrangements up to 10.	<ul> <li>Moving Target (Dots)</li> <li>Bug Bits</li> <li>Classroom Playlists</li> <li>OK: K: Numbers and Operations: Subitizing</li> </ul>	
<b>K.N.1.5</b> Count forward, with and without objects, from any given number up to 20.	<ul> <li>Counting Songs</li> <li>Count On</li> <li>Dot-to-Dot</li> </ul> Classroom Playlists <ul> <li>OK: K: Numbers and Operations: Count Forward</li> </ul>	Counting Forward
<b>K.N.1.6</b> Read, write, discuss, and represent whole numbers from 0 to at least 20. Representations may include numerals, pictures, real objects and picture graphs, spoken words, and manipulatives.	<ul> <li>Math Books</li> <li>Counting Songs</li> <li>Number Counting</li> <li>Number Instruction</li> <li>Make and Count Groups</li> </ul> Classroom Playlists <ul> <li>OK: K: Numbers and Operations: Read, Write, and Represent Numbers</li> </ul>	• Write Numbers 0–20
K.N.1.7 Find a number that is 1 more or 1 less than a given number up to 10.	<ul> <li>Number Instruction</li> <li>Make and Count Groups</li> <li>Count On</li> <li>Counting Back</li> <li>Number Counting</li> <li>Number Chart</li> </ul> Classroom Playlists <ul> <li>OK: K: Numbers and Operations: Find One More</li> <li>OK: K: Numbers and Operations: Find 1 More and 1 Less</li> </ul>	Counting Forward



Oklahoma Standards	Waterford Digital Activities	Waterford Resources	
K.N.1 Understand the relationship between q	K.N.1 Understand the relationship between quantities and whole numbers continued.		
<b>K.N.1.8</b> Compare and order whole numbers from 0 to 10 with and without objects, using the vocabulary "more than," "less than," or "equal to."	<ul> <li>Songs: Greater Than, Less Than; More Than, Fewer Than</li> <li>Books: For the Birds</li> <li>Greater Than, Less Than</li> <li>More Than, Fewer Than</li> <li>More Than</li> <li>Fewer Than</li> </ul> Classroom Playlists <ul> <li>OK: K: Numbers and Operations: Compare Numbers</li> </ul>	• Comparing Two Numbers	
K.N.2 Develop conceptual understanding wit	h addition and subtraction (up to 10) using objects and pictures.		
<b>K.N.2.1</b> Compose and decompose numbers up to 10 using objects and pictures.	<ul> <li>Make and Count Groups</li> <li>Add Groups</li> <li>Act Out Addition</li> <li>Subtract Groups</li> <li>Act Out Subtraction</li> </ul> Classroom Playlists <ul> <li>OK: K: Numbers and Operations: Read, Write, and Represent Numbers</li> </ul>	Decompose Numbers	
K.N.3 Understand the relationship between w	hole numbers and fractions through fair share.		
<b>K.N.3.1</b> Distribute a set of objects into at least two smaller equal sets.	<ul> <li>Songs: Fractions</li> <li>Books: Half for You and Half for Me</li> <li>Make and Count Groups</li> <li>Classroom Playlists</li> <li>OK: K: Numbers and Operations: Equal Sets</li> </ul>		
K.N.4 Identify coins by name.			
<b>K.N.4.1</b> Identify pennies, nickels, dimes, and quarters by name.	<ul><li>Songs: Save Your Pennies</li><li>Coin Identification</li></ul> Classroom Playlists	<ul> <li>Coin Identification Cards</li> <li>Coin Identification</li> </ul>	
	OK: K: Numbers and Operations: Identify Coins		



Oklahoma Standards	Waterford Digital Activities	Waterford Resources
Algebraic Reasoning and Algebra (A)		
K.A.1 Duplicate patterns in a variety of contex	ts.	
<b>K.A.1.1</b> Sort and group up to 10 objects into a set based upon characteristics such as color, , and shape. Explain verbally what the objects have in common.	<ul> <li>Songs: All Sorts of Laundry</li> <li>Books: Buttons, Buttons</li> <li>Sort</li> </ul> Classroom Playlists <ul> <li>OK: K: Algebraic Reasoning: Sort</li> </ul>	• Classifying Objects
<b>K.A.1.2</b> Recognize, duplicate, complete, and extend repeating, increasing, and decreasing patterns in a variety of contexts (i.e., shape, color, , objects, sounds, movement).	<ul> <li>Songs: Train Station Patterns</li> <li>Patterns</li> <li>Pattern: AB; ABB; ABC</li> </ul> Classroom Playlists <ul> <li>OK: K: Algebraic Reasoning: Patterns</li> </ul>	
Geometry and Measurement (GM)		
K.GM.1 Recognize and sort basic two-dimens	ional shapes, use two-dimensional and three-dimensional shape	s to represent real-world objects.
<b>K.GM.1.1</b> Recognize squares, circles, triangles, and rectangles.	<ul> <li>Songs: Marmot Shapes; Shapes, Shapes</li> <li>Books: The Shape of Things</li> <li>Circle, Square, Triangle, Rectangle</li> <li>Simple Shapes</li> <li>Classroom Playlists</li> <li>OK: K: Geometry and Measurement: Squares, Circles, Triangles, Rectangles</li> </ul>	Shape Recognition



Oklahoma Standards	Waterford Digital Activities	Waterford Resources
K.GM.1 Recognize and sort basic two-dimens	ional shapes, use two-dimensional and three-dimensional shape	s to represent real-world objects continued.
<b>K.GM.1.2</b> Sort two-dimensional objects using characteristics such as shape and .	<ul> <li>Songs: Marmot Shapes; All Sorts of Laundry</li> <li>Books: Buttons, Buttons</li> <li>Sort</li> <li>Simple Shapes</li> </ul>	Classifying Objects
	OK: K: Geometry and Measurement: Squares, Circles, Triangles, Rectangles  OK: K: Geometry and Measurement: Shapes	
<b>K.GM.1.3</b> Identify attributes of two-dimensional shapes using informal and formal geometric language interchangeably, such as the number of corners/vertices and the number of sides/edges.	<ul> <li>Songs: Marmot Shapes; Shapes, Shapes; Corners and Sides</li> <li>Books: The Shape of Things; Imagination Shapes</li> <li>Simple Shapes</li> <li>Classroom Playlists</li> <li>OK: K: Geometry and Measurement: Squares, Circles, Triangles, Rectangles</li> <li>OK: K: Geometry and Measurement: Shapes</li> </ul>	Shape Recognition
<b>K.GM.1.4</b> Use smaller two-dimensional shapes to fill in the outline of a larger two-dimensional shape.	Tangrams  Classroom Playlists  OK: K: Geometry and Measurement: Use Smaller Shapes	Pattern Block Puzzles
<b>K.GM.1.5</b> Compose larger, undefined shapes and structures using three-dimensional objects.	Space Shapes     Classroom Playlists     OK: K: Geometry and Measurement: Compose     Larger Shapes	• Form Larger Shapes



Oklahoma Standards	Waterford Digital Activities	Waterford Resources
K.GM.1 Recognize and sort basic two-dimensional shapes, use two-dimensional and three-dimensional shapes to represent real-world objects continued.		
<b>K.GM.1.6</b> Use basic shapes and spatial reasoning to represent objects in the real world.	<ul> <li>Songs: Position Cat; Kites; Get Over the Bugs; Shapes, Shapes, Shapes</li> <li>Books: The Shape of Things; Imagination Shapes; Up in the Air</li> <li>Over, Under, Above, Below</li> <li>Above, Below, Next to, On</li> <li>Over, Under, and Through</li> <li>Inside, Outside, Between</li> <li>Circle, Square, Triangle, Rectangle</li> </ul> Classroom Playlists	• Describing Objects
	OK: K: Geometry and Measurement: Represent Objects in the Real World	
K.GM.2 Compare and order objects according	g to location and measurable attributes.	
<b>K.GM.2.1</b> Use words to compare objects according to length, , weight, position, and location.	<ul> <li>Songs: Savanna; Measuring Plants; Position Cat; Get Over the Bugs; Monster Trucks</li> <li>Books: Up in the Air</li> <li>Position</li> <li>Over, Under, Above, Below</li> <li>Over, Under, and Through</li> <li>Inside, Outside, Between</li> <li>Above, Below, Next to, On</li> <li>First, Middle, Last</li> <li>Order</li> <li>Capacity</li> <li>Length</li> <li>Big and Little</li> <li>Tall and Short</li> <li>Heavy and Light</li> </ul>	• Comparing Objects
	Classroom Playlists	
	OK: K: Geometry and Measurement: Compare Objects	



Oklahoma Standards	Waterford Digital Activities	Waterford Resources
K.GM.2 Compare and order objects according	to location and measurable attributes continued.	
<b>K.GM.2.2</b> Order up to 6 objects using measurable attributes, such as length and weight.	<ul> <li>Songs: Measuring Plants</li> <li>Length</li> <li>Order</li> <li>Classroom Playlists</li> <li>OK: K: Geometry and Measurement: Compare Objects Order</li> </ul>	
<b>K.GM.2.3</b> Identify more than one shared attribute between objects, and sort objects into sets.	<ul> <li>Songs: Same and Different; All Sorts of Laundry</li> <li>Books: Buttons, Buttons</li> <li>Match</li> <li>Matching</li> <li>Sort</li> </ul> Classroom Playlists <ul> <li>OK: K: Geometry and Measurement: Shared Attributes</li> </ul>	Classifying Objects
<b>K.GM.2.4</b> Compare the number of objects needed to fill two different containers.	<ul> <li>Books: For the Birds</li> <li>Capacity</li> <li>Classroom Playlists</li> <li>OK: K: Geometry and Measurement: Capacity</li> </ul>	• Comparing Objects
K.GM.3 Tell time as it relates to daily life.		
<b>K.GM.3.1</b> Develop an awareness of simple time concepts within daily life, using ageappropriate vocabulary (e.g., yesterday, today, tomorrow, morning, afternoon, night).	<ul> <li>Yesterday/Tomorrow</li> <li>Today</li> <li>Classroom Playlists</li> <li>OK: K: Geometry and Measurement: Time Concepts</li> </ul>	



Oklahoma Standards	Waterford Digital Activities	Waterford Resources
Data and Probability (D)	'	
K.D.1 Collect, organize, and interpret categor	ical data.	
<b>K.D.1.1</b> Collect and organize information about objects and events in the	<ul><li>Calendar/Graph Weather</li><li>Science Observation: From Egg to Chick</li></ul>	Describing Objects
environment.	Classroom Playlists	
	<ul> <li>OK: K: Data and Probability: Collect and Organize Information</li> <li>OK: K: Data and Probability: Picture Graphs</li> </ul>	
K.D.1 Collect, organize, and interpret categor	ical data continued.	
<b>K.D.1.2</b> Use categorical data to create real-object graphs and pictographs.	<ul><li>Books: Milton's Mittens</li><li>Calendar/Graph Weather</li></ul>	
	Classroom Playlists	
	<ul> <li>OK: K: Data and Probability: Picture Graphs</li> <li>OK: K: Data and Probability: Collect and Organize Information</li> </ul>	
<b>K.D.1.3</b> Draw conclusions from real-object graphs and pictographs.	Books: Milton's Mittens     Calendar/Graph Weather	
	• OK: K: Data and Probability: Picture Graphs	
	OK: K: Data and Probability: Collect and Organize Information	
First Grade		
Numbers and Operations (N)		
1.N.1 Count, compare, and represent whole r	umbers up to 100, with an emphasis on grouping in terms of tens	and ones.
1.N.1.1 Recognize numbers to 20 without	Moving Target (Dots)	
counting (subitize) the quantity of structured arrangements.	Classroom Playlists	
structured arrangements.	OK: 1: Numbers and Operations: Subitize	



Oklahoma Standards	Waterford Digital Activities	Waterford Resources
1.N.1 Count, compare, and represent whole no	1.N.1 Count, compare, and represent whole numbers up to 100, with an emphasis on grouping in terms of tens and ones continued.	
<b>1.N.1.2</b> Use concrete representations to describe whole numbers between 10 and 100 in terms of tens and ones. Know that 10 is equivalent to 10 ones and 100 is equivalent to 10 tens.	<ul> <li>Songs: Place Value</li> <li>Place Value</li> <li>Classroom Playlists</li> <li>OK: 1: Numbers and Operations: Tens and Ones</li> </ul>	• Tens as a Bundle of Ones
1.N.1.3 Read, write, discuss, and represent whole numbers up to 100. Representations may include numerals, words, addition and subtraction, pictures, tally marks, number lines and manipulatives.	<ul> <li>Books: One More Cat</li> <li>Math Books</li> <li>Number Instruction</li> <li>Moving Target</li> <li>Make and Count Groups</li> <li>Act Out Addition</li> <li>Act Out Subtraction</li> <li>Bug Bits</li> <li>Match Numbers</li> <li>Classroom Playlists</li> <li>OK: 1: Numbers and Operations: Read, Write and Represent Numbers</li> <li>OK: 1: Numbers and Operations: Tens and Ones</li> </ul>	• Count to 120
<b>1.N.1.4</b> Count forward, with objects, from any given number up to 100 by 1s, 2s, 5s and 10s.	<ul> <li>Songs: Counting On; Skip Counting; Hotel 100</li> <li>Books: Navajo Beads; Jump Rope Rhymes</li> <li>Count On</li> <li>Skip Count</li> <li>Classroom Playlists</li> <li>OK: 1: Numbers and Operations: Count Forward</li> </ul>	• Sequence to 100



Oklahoma Standards	Waterford Digital Activities	Waterford Resources	
1.N.1 Count, compare, and represent whole nu	1.N.1 Count, compare, and represent whole numbers up to 100, with an emphasis on grouping in terms of tens and ones continued.		
<b>1.N.1.5</b> Count forward, without objects, by multiples of 1s, 2s, 5s, and 10s, up to 100.	<ul> <li>Songs: Counting On; Skip Counting; Hotel 100</li> <li>Books: Jump Rope Rhymes</li> <li>Count On</li> <li>Skip Count</li> <li>Classroom Playlists</li> <li>OK: 1: Numbers and Operations: Count Forward</li> </ul>	• Sequence to 100	
<b>1.N.1.6</b> Find a number that is 10 more or 10 less than a given number up to 100.	<ul><li>Number Chart</li><li>Add 10</li><li>Subtract 10</li></ul>	<ul><li>Ten More or Less</li><li>Number Chart</li></ul>	
1.N.1.7 Compare and order whole numbers from 0 to 100.	<ul> <li>Books: For the Birds</li> <li>Greater Than, Less Than</li> <li>More Than, Fewer Than</li> <li>More Than</li> <li>Fewer Than</li> <li>Order Numbers</li> </ul> Classroom Playlists <ul> <li>OK: 1: Numbers and Operations: Compare Numbers</li> <li>OK: 1: Numbers and Operations: Order Numbers</li> <li>OK: 1: Numbers and Operations: Read, Write and Represent Numbers:</li> </ul>		
<b>1.N.1.8</b> Use knowledge of number relationships to locate the position of a given whole number, up to 20, on an open number line.	<ul> <li>Number Line</li> <li>Number Chart</li> <li>Classroom Playlists</li> <li>OK: 1: Numbers and Operations: Read, Write and Represent Numbers: Number Line: 10-20</li> </ul>	• Number Line	



Oklahoma Standards	Waterford Digital Activities	Waterford Resources
1.N.1 Count, compare, and represent whole n	umbers up to 100, with an emphasis on grouping in terms of tens	s and ones continued.
<b>1.N.1.9</b> Use words such as "more than," "less than," and "equal to" to describe the relative value of numbers.	<ul> <li>Songs: Greater Than, Less Than; More Than, Fewer Than</li> <li>More Than, Fewer Than</li> <li>Greater Than, Less Than</li> <li>Classroom Playlists</li> <li>OK: 1: Numbers and Operations: Compare Numbers</li> </ul>	Compare Two-digit Numbers
1.N.2 Solve addition and subtraction problem	s with sums and minuends of up to 10 in real-world and mathem	atical contexts.
<b>1.N.2.1</b> Represent and solve problems using addition and subtraction with sums and minuends of up to 10.	<ul> <li>Songs: Bee Happy Addition; 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>Act Out Addition</li> <li>Act Out Subtraction</li> <li>Classroom Playlists</li> <li>OK: 1: Numbers and Operations: Addition</li> <li>OK: 1: Numbers and Operations: Subtraction</li> </ul>	Addition and Subtraction Word Problems
<b>1.N.2.2</b> Determine if equations involving addition and subtraction are true.	<ul> <li>Songs: Bee Happy Addition; 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>Act Out Addition</li> <li>Act Out Subtraction</li> <li>Addition and Subtraction Fact Families</li> </ul>	Addition and Subtraction Word Problems



Oklahoma Standards	Waterford Digital Activities	Waterford Resources
1.N.2 Solve addition and subtraction problem	s with sums and minuends of up to 10 in real-world and mathem	natical contexts continued.
1.N.2.3 Demonstrate fluency with basic facts of addition and subtraction with sums and minuends of up to 10.	<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>Missing Addends</li> <li>Missing Minuends and Subtrahends</li> <li>Subtraction Patterns</li> <li>Doubles Plus 1, Sums to 10</li> <li>Mental Math</li> <li>Speed Games</li> <li>Subtract Doubles to 10</li> <li>Sums to</li> <li>Classroom Playlists</li> <li>OK: 1: Numbers and Operations: Addition Fluency</li> <li>OK: 1: Numbers and Operations: Subtraction Fluency</li> </ul>	Addition and Subtraction Word Problems
1.N.3 Develop foundational ideas for fractions		
<b>1.N.3.1</b> Partition a regular polygon using physical models and recognize when those parts are equal.	<ul><li>Songs: Fractions</li><li>Books: Halves and Fourths and Thirds</li><li>Equal-part Fractions</li></ul>	
<b>1.N.3.2</b> Partition (fair share) sets of objects into two and three equal groups.	<ul> <li>Songs: Fractions</li> <li>Books: Half for You and Half for Me; Halves and Fourths and Thirds</li> <li>Equal-part Fractions</li> <li>Fractions of Groups</li> <li>Label Parts of Fractions</li> <li>Classroom Playlists</li> <li>OK: 1: Numbers and Operations: Partition Sets</li> </ul>	



Oklahoma Standards	Waterford Digital Activities	Waterford Resources
1.N.4 Identify coins and their values.		
<b>1.N.4.1</b> Identify pennies, nickels, dimes, and quarters by name and value.	<ul> <li>Songs: Money</li> <li>Books: Bugs For Sale</li> <li>Coin Identification</li> <li>Coin Value</li> <li>Quarters</li> </ul> Classroom Playlists	<ul> <li>Coin Identification</li> <li>Coin Identification Cards</li> </ul>
	OK: 1: Numbers and Operations: Coin Identification  OK: 1: Numbers and Operations: Coin Value	
<b>1.N.4.2</b> Write a number with the cent symbol to describe the value of a coin.	<ul><li>Songs: Money</li><li>Books: Bugs For Sale</li><li>Coin Identification</li><li>Coin Value</li></ul>	
	OK: 1: Numbers and Operations: Coin Identification     OK: 1: Numbers and Operations: Coin Value	
<b>1.N.4.3</b> Determine the value of a collection of pennies, nickels, or dimes up to one dollar counting by 1s, 5s, and 10s.	<ul> <li>Songs: Money</li> <li>Books: Bugs For Sale</li> <li>Count Quarters, Dimes, Nickels, and Pennies</li> <li>Count Dimes, Nickels, and Pennies</li> <li>Count Nickels and Pennies or Dimes and Pennies</li> </ul>	Coin Identification
	<ul> <li>Classroom Playlists</li> <li>OK: 1: Numbers and Operations: Coin Value</li> </ul>	



Oklahoma Standards	Waterford Digital Activities	Waterford Resources
Algebraic Reasoning and Algebra (A)		
1.A.1 Identify patterns found in real-world and	mathematical problems.	
<b>1.A.1.1</b> Identify, create, complete, and extend repeating, increasing, and decreasing patterns in a variety of contexts (e.g., quantity, numbers, or shapes).	<ul> <li>Songs: Train Station Patterns</li> <li>Books: How King Snake Got His Name</li> <li>Pattern AB</li> <li>Pattern ABB</li> <li>Pattern ABC</li> </ul> Classroom Playlists <ul> <li>OK: 1: Algebraic Reasoning and Algebra: Patterns</li> </ul>	
Geometry and Measurement (GM)		
1.GM.1 Recognize and compose two- and thre	e-dimensional shapes.	
<b>1.GM.1.1</b> Identify regular and irregular trapezoids and hexagons by pointing to the shape when given the name.	<ul> <li>Songs: Kites</li> <li>Classroom Playlists</li> <li>OK: 1: Geometry and Measurement: Trapezoids and Hexagons</li> </ul>	
<b>1.GM.1.2</b> Compose larger, defined shapes using smaller two-dimensional shapes.	<ul> <li>Songs: Kites</li> <li>Space Shapes</li> <li>Tangrams</li> </ul> Classroom Playlists <ul> <li>OK: 1: Geometry and Measurement: Compose Larger Shapes</li> </ul>	• Form Larger Shapes
<b>1.GM.1.3</b> Compose structures with three-dimensional shapes.	<ul> <li>Space Shapes</li> <li>Classroom Playlists</li> <li>OK: 1: Geometry and Measurement: Compose Structures</li> </ul>	



Oklahoma Standards	Waterford Digital Activities	Waterford Resources
1.GM.1 Recognize and compose two- and thre	ee-dimensional shapes continued.	
<b>1.GM.1.4</b> Recognize three-dimensional shapes such as cubes, cones, cylinders, pyramids, and spheres.	<ul> <li>Songs: Kites; Corners and Sides</li> <li>Space Shapes</li> <li>Solid Shapes</li> <li>Classroom Playlists</li> <li>OK: 1: Geometry and Measurement: Three-dimensional Shapes</li> </ul>	
1.GM.2 Select and use nonstandard and stand	dard units to describe length and volume/capacity.	
<b>1.GM.2.1</b> Use nonstandard and standard measuring tools to measure the length of objects.	<ul> <li>Songs: Measuring Plants</li> <li>Length</li> <li>Nonstandard Units of Length</li> <li>Standard Units of Length</li> <li>Measurement Tools</li> </ul> Classroom Playlists <ul> <li>OK: 1: Geometry and Measurement: Nonstandard Units of Length</li> <li>OK: 1: Geometry and Measurement: Standard Units of Length</li> </ul>	• Length Measurement
1.GM.2.2 Illustrate that the length of an object is the number of same- units of length that, when laid end-to-end with no gaps or overlaps, reach from one end of the object to the other.	<ul> <li>Songs: Measuring Plants</li> <li>Length</li> <li>Measurement Tools</li> <li>Classroom Playlists</li> <li>OK: 1: Geometry and Measurement: Nonstandard Units of Length</li> <li>OK: 1: Geometry and Measurement: Standard Units of Length</li> </ul>	Length Measurement
<b>1.GM.2.3</b> Measure the same object/distance with units of two different lengths and describe how and why the measurements differ.	<ul><li>Songs: Measuring Plants</li><li>Length</li><li>Measurement Tools</li></ul>	Measuring the Same Object Two Ways



Oklahoma Standards	Waterford Digital Activities	Waterford Resources
1.GM.2 Select and use nonstandard and stand	dard units to describe length and volume/capacity continued.	
<b>1.GM.2.4</b> Describe a length to the nearest whole unit using a number with standard and nonstandard units.	<ul> <li>Length</li> <li>Measurement Tools</li> </ul> Classroom Playlists <ul> <li>OK: 1: Geometry and Measurement: Nonstandard Units of Length</li> <li>OK: 1: Geometry and Measurement: Standard Units of Length</li> </ul>	Length Measurement
<b>1.GM.2.5</b> Use standard and nonstandard tools to identify volume/capacity. Compare and sort containers that hold more, less, or the same amount.	<ul> <li>Capacity</li> <li>Measurement Tools</li> <li>Classroom Playlists</li> <li>OK: 1: Geometry and Measurement: Capacity</li> </ul>	
1.GM.3 Describe and measure concepts of time	ne.	
<b>1.GM.3.1</b> Tell time to the hour and half-hour (analog and digital).	<ul> <li>Songs: Clock Hands</li> <li>Books: Mr. Romano's Secret, A Time Story</li> <li>Tell Time to the Hour</li> <li>Tell Time to the Half-hour</li> </ul> Classroom Playlists <ul> <li>OK: 1: Geometry and Measurement: Tell Time</li> </ul>	• Hours and Half-hours
<b>1.GM.3.2</b> Describe and measure calendar time by days, weeks, months, and years.	<ul> <li>Songs: Months of the Year; Days of the Week; Days in a Month</li> <li>Yesterday/Tomorrow</li> <li>Today</li> <li>Calendar/Graph Weather</li> <li>Classroom Playlists</li> <li>OK: 1: Geometry and Measurement: Calendar Time</li> </ul>	



Oklahoma Standards	Waterford Digital Activities	Waterford Resources
Data and Probability (D)		
1.D.1 Collect, organize, and interpret categorie	cal and numerical data.	
<b>1.D.1.1</b> Collect, sort, and organize data in up to three categories using representations (e.g., tally marks, tables, Venn diagrams).	<ul> <li>Songs: Tallying; Venn Diagrams</li> <li>Books: One More Cat; The Birds, the Beasts, and The Bat; The Boonville Nine</li> <li>Tally Marks</li> <li>Make a Table</li> <li>Venn Diagrams</li> <li>Classroom Playlists</li> <li>OK: 1: Data and Probability: Collect, Sort, and Organize Data</li> </ul>	• Data Categorization
<b>1.D.1.2</b> Use data to create pictographs and bar graphs that demonstrate one-to-one correspondence.	<ul> <li>Songs: Graphing</li> <li>Books: The Boonville Nine</li> <li>Graphs</li> <li>Bar Graphs</li> <li>Picture Graphs</li> </ul> Classroom Playlists <ul> <li>OK: 1: Data and Probability: Graphs</li> </ul>	Data Categorization
1.D.1 Collect, organize, and interpret categoric	cal and numerical data <i>continued.</i>	
<b>1.D.1.3</b> Draw conclusions from pictographs and bar graphs.	<ul> <li>Songs: Graphing</li> <li>Graphs</li> <li>Bar Graphs</li> <li>Picture Graphs</li> </ul> Classroom Playlists <ul> <li>OK: 1: Data and Probability: Graphs</li> </ul>	Data Categorization



Oklahoma Standards	Waterford Digital Activities	Waterford Resources
Second Grade		
Numbers and Operations (N)		
2.N.1 Compare and represent whole numbers	up to 1,000 with an emphasis on place value and equality.	
<b>2.N.1.1</b> Read, write, discuss, and represent whole numbers up to 1,000. Representations should include, but are not limited to, numerals, words, pictures, tally marks, number lines, and manipulatives.	<ul> <li>Number Instruction</li> <li>Number Recognition and Sense</li> <li>Make and Count Groups</li> <li>Match Numbers</li> <li>Classroom Playlists</li> <li>OK: 2: Numbers and Operations: Read, Write, and Represent Numbers</li> </ul>	Read and Write Numbers to 1000
<b>2.N.1.2</b> Use knowledge of number relationships to locate the position of a given whole number, up to 100, on an open number line.	<ul> <li>Number Line</li> <li>Classroom Playlists</li> <li>OK: 2: Numbers and Operations: Number Line</li> </ul>	
<b>2.N.1.3</b> Use place value to describe whole numbers between 10 and 1,000 in terms of hundreds, tens and ones, including written, standard, and expanded forms. Know that 10 is equivalent to 10 ones and 100 is equivalent to 10 tens.	<ul> <li>Songs: Place Value</li> <li>Place Value of 2-digit Numbers</li> <li>Place Value of 3-digit Numbers</li> <li>Classroom Playlists</li> <li>OK: 2: Numbers and Operations: Read, Write, and Represent Numbers</li> </ul>	• Thinking of 100 as a Bundle of 10s
<b>2.N.1.4</b> Find 10 more or 10 less than a given three-digit number. Find 100 more or 100 less than a given three-digit number.	<ul> <li>Skip Count</li> <li>Place Value</li> <li>Number Chart</li> <li>Number Patterns</li> </ul> Classroom Playlists	Mentally Adding or Subtracting 10 or 100
	OK: 2: Numbers and Operations: Number Patterns	



Oklahoma Standards	Waterford Digital Activities	Waterford Resources	
2.N.1 Compare and represent whole numbers	2.N.1 Compare and represent whole numbers up to 1,000 with an emphasis on place value and equality continued.		
<b>2.N.1.5</b> Use objects to determine whether a number is even or odd.	<ul> <li>Songs: Odd Todd and Even Steven</li> <li>Classroom Playlists</li> <li>OK: 2: Numbers and Operations: Odd or Even Numbers</li> </ul>	Odd and Even Recognition	
<b>2.N.1.6</b> Use place value understanding to round numbers to the nearest ten and nearest hundred (up to 1,000). Recognize when to round in real-world situations.	<ul> <li>Songs: Rounding</li> <li>Books: The Fable Fair</li> <li>Round to Tens</li> <li>Classroom Playlists</li> <li>OK: 2: Numbers and Operations: Rounding</li> </ul>		
<b>2.N.1.7</b> Use place value to compare and order whole numbers up to 1,000 using comparative language, numbers, and symbols (e.g., 425 > 276, 73 < 107, page 351 comes after page 350, 753 is between 700 and 800).	<ul> <li>Greater Than, Less Than</li> <li>Place Value</li> <li>Order Numbers</li> <li>Classroom Playlists</li> <li>OK: 2: Numbers and Operations: Compare and Order Numbers</li> </ul>	• Less Than, Equal To, or Greater Than	
2.N.2 Add and subtract one- and two-digit nu	umbers in real-world and mathematical problems.		
<b>2.N.2.1</b> Use the relationship between addition and subtraction to generate basic facts with sums and minuends of up to 20.	<ul> <li>Songs: Fact Families</li> <li>Addition and Subtraction Relationship</li> <li>Addition and Subtraction Fact Families</li> <li>Classroom Playlists</li> <li>OK: 2: Numbers and Operations: Addition and Subtraction Relationship</li> </ul>	Add and subtract within 20	



Oklahoma Standards	Waterford Digital Activities	Waterford Resources
2.N.2 Add and subtract one- and two-digit no	umbers in real-world and mathematical problems continued.	
<b>2.N.2.2</b> Demonstrate fluency with basic addition facts and related subtraction facts up to 20.	<ul> <li>Songs: Fact Families</li> <li>Addition and Subtraction Relationship</li> <li>Addition and Subtraction Fact Families</li> <li>Mental Math</li> <li>Speed Games</li> <li>Classroom Playlists</li> <li>OK: 2: Numbers and Operations: Addition Fluency</li> <li>OK: 2: Numbers and Operations: Subtraction Fluency</li> <li>OK: 2: Numbers and Operations: Addition and Subtraction Fluency</li> </ul>	Adding and subtracting within 20
<b>2.N.2.3</b> Estimate sums and differences up to 100.		Guess and Check
<b>2.N.2.4</b> Use strategies and algorithms based on knowledge of place value and equality to add and subtract two-digit numbers.	<ul> <li>Songs: Fact Families; Place Value</li> <li>Addition and Subtraction Relationship</li> <li>Addition and Subtraction Fact Families</li> <li>Place Value</li> <li>Classroom Playlists</li> <li>OK: 2: Numbers and Operations: Add Two-digit Numbers</li> <li>OK: 2: Numbers and Operations: Subtract Two-digit Numbers</li> </ul>	Explaining Addition and Subtraction Strategies



Oklahoma Standards	Waterford Digital Activities	Waterford Resources
2.N.2 Add and subtract one- and two-digit nu	imbers in real-world and mathematical problems continued.	
<b>2.N.2.5</b> Solve addition and subtraction problems involving whole numbers up to two digits.	<ul> <li>Songs: Fact Families</li> <li>Addition and Subtraction Relationship</li> <li>Addition and Subtraction Fact Families</li> </ul>	Add and Subtract within 100
	Classroom Playlists	
	<ul> <li>OK: 2: Numbers and Operations: One-digit and Two-digit Numbers</li> <li>OK: 2: Numbers and Operations: Add Two-digit Numbers</li> <li>OK: 2: Numbers and Operations: Subtract Two-digit Numbers</li> <li>OK: 2: Numbers and Operations: Add with Regrouping</li> <li>OK: 2: Numbers and Operations: Subtract with Regrouping</li> </ul>	
<b>2.N.2.6</b> Use concrete models and structured arrangements, such as repeated addition, arrays, and ten frames to develop an understanding of multiplication.	<ul> <li>Songs: Multiplication</li> <li>Books: Tyrannosaurus X 1</li> <li>Multiplication</li> <li>Multiply Using Arrays</li> <li>Multiply Using Repeated Addition</li> <li>Classroom Playlists</li> <li>OK: 2: Numbers and Operations: Multiplication</li> </ul>	
2.N.3 Explore the foundational ideas of fraction	ons.	
<b>2.N.3.1</b> Identify the parts of a set and area that represent fractions for halves, thirds, and fourths.	<ul> <li>Songs: Fractions</li> <li>Books: The Fraction Twins; Halves and Fourths and Thirds</li> <li>Label Parts of Fractions</li> <li>Fractions of Regions</li> <li>Fractions of Groups</li> </ul> Classroom Playlists	• Fractions
	OK: 2: Numbers and Operations: Fractions	



Oklahoma Standards	Waterford Digital Activities	Waterford Resources	
2.N.3 Explore the foundational ideas of fraction	2.N.3 Explore the foundational ideas of fractions continued.		
<b>2.N.3.2</b> Construct equal-d portions through fair sharing (length, set, and area models for halves, thirds, and fourths).	<ul> <li>Songs: Fractions</li> <li>Books: The Fraction Twins; Halves and Fourths and Thirds</li> <li>Label Parts of Fractions</li> <li>Fractions of Regions</li> <li>Fractions of Groups</li> <li>Classroom Playlists</li> <li>OK: 2: Numbers and Operations: Fractions</li> </ul>	• Fractions	
2.N.4 Determine the value of a set of coins.	Ord 2. Harrisons and Operations. Tractions		
<b>2.N.4.1</b> Determine the value of a collection of coins up to one dollar using the cent symbol.	<ul> <li>Songs: Money</li> <li>Books: Bugs For Sale; Fudge For Sale</li> <li>Coin Identification</li> <li>Coin Value</li> <li>Count Coins</li> <li>Count Bills and Coins</li> <li>Count Quarters, Dimes, Nickels, and Pennies</li> </ul> Classroom Playlists <ul> <li>OK: 2: Numbers and Operations: Coin Value</li> </ul>	Solve Money Word Problems	
<b>2.N.4.2</b> Use a combination of coins to represent a given amount of money up to one dollar.	<ul> <li>Songs: Money</li> <li>Coin Identification</li> <li>Coin Value</li> <li>Count Coins</li> <li>Count Bills and Coins</li> <li>Count Quarters, Dimes, Nickels, and Pennies</li> <li>Equivalent Sums of Money</li> </ul> Classroom Playlists <ul> <li>OK: 2: Numbers and Operations: Coin Value</li> </ul>	Solve Money Word Problems	



Oklahoma Standards	Waterford Digital Activities	Waterford Resources
Algebraic Reasoning and Algebra (A)		
2.A.1 Describe the relationship found in patte	rns to solve real-world and mathematical problems.	
<b>2.A.1.1</b> Represent, create, describe, complete, and extend increasing and decreasing patterns with quantity and numbers in a variety of contexts.	<ul> <li>Patterns of 2-digit Numbers</li> <li>Patterns of 3-digit Numbers</li> <li>Addition Patterns</li> <li>Subtraction Patterns</li> <li>Number Patterns</li> <li>Number Sequences and Patterns</li> <li>Classroom Playlists</li> <li>OK: 2: Algebraic Reasoning and Algebra: Number Patterns</li> </ul>	
<b>2.A.1.2</b> Represent and describe repeating patterns involving shapes in a variety of contexts.	<ul> <li>Songs: Train Station Patterns</li> <li>Books: How King Snake Got His Pattern</li> <li>Extend Patterns</li> <li>Classroom Playlists</li> <li>OK: 2: Algebraic Reasoning and Algebra: Patterns</li> </ul>	
2.A.2 Use number sentences involving unknown	owns to represent and solve real-world and mathematical proble	ms.
<b>2.A.2.1</b> Use objects and number lines to represent number sentences.	<ul> <li>Songs: Finding the Difference</li> <li>Number Line</li> <li>Addition Sentences</li> <li>Subtraction Sentences</li> <li>Classroom Playlists</li> <li>OK: 2: Algebraic Reasoning and Algebra: Number Sentences</li> </ul>	



Oklahoma Standards	Waterford Digital Activities	Waterford Resources	
2.A.2 Use number sentences involving unknown	2.A.2 Use number sentences involving unknowns to represent and solve real-world and mathematical problems continued.		
<b>2.A.2.2</b> Generate models and situations to represent number sentences and vice versa.	<ul> <li>Songs: Problem Solving</li> <li>Books: Painting By Number; Circus 20</li> <li>Addition Sentences</li> <li>Subtraction Sentences</li> <li>Add Vertical Squares</li> <li>Add With Manipulatives</li> </ul> Classroom Playlists		
	<ul> <li>OK: 2: Algebraic Reasoning and Algebra: Number Sentences</li> </ul>		
<b>2.A.2.3</b> Apply the commutative property, identity property, and number sense to find values for unknowns that make addition and subtraction number sentences true or false.	<ul> <li>Addition and Subtraction Relationship</li> <li>Commutative Properties of Addition</li> <li>Addition and Subtraction Fact Families</li> <li>Missing Minuends and Subtrahends</li> <li>Missing Addends</li> </ul>		
	OK: 2: Algebraic Reasoning and Algebra: Properties		
Geometry and Measurement (GM)			
2.GM.1 Analyze attributes of two- and three-dimensional figures and develop generalizations about their properties.			
<b>2.GM.1.1</b> Recognize regular and irregular trapezoids and hexagons.	Songs: Kites     Classroom Playlists		
	OK: 2: Geometry and Measurement: Trapezoids and Hexagons		



Oklahoma Standards	Waterford Digital Activities	Waterford Resources
2.GM.1 Analyze attributes of two- and three-d	imensional figures and develop generalizations about their prop	perties continued.
<b>2.GM.1.2</b> Describe, compare, and classify two-dimensional figures according to their geometric attributes.	<ul> <li>Songs: Kites; Shapes, Shapes, Shapes</li> <li>Books: The Shape of Things; Imagination Shapes</li> <li>Circle, Square, Triangle, Rectangle</li> <li>Simple Shapes</li> </ul>	
	<ul> <li>Classroom Playlists</li> <li>OK: 2: Geometry and Measurement:         Two-dimensional Figures     </li> </ul>	
<b>2.GM.1.3</b> Compose and decompose two-dimensional shapes using triangles, squares, hexagons, trapezoids, and rhombi.	<ul> <li>Geoboard</li> <li>Tangrams</li> <li>Classroom Playlists</li> <li>OK: 2: Geometry and Measurement: Compose and Decompose</li> </ul>	
<b>2.GM.1.4</b> Sort three-dimensional shapes based on attributes such as number of faces, vertices, and edges.	<ul> <li>Songs: Corners and Sides</li> <li>World Shapes</li> <li>Space Shapes</li> <li>Classroom Playlists</li> <li>OK: 2: Geometry and Measurement: Three-dimensional Shapes</li> </ul>	
<b>2.GM.1.5</b> Recognize right angles and classify angles as smaller or larger than a right angle.		



Oklahoma Standards	Waterford Digital Activities	Waterford Resources	
2.GM.2 Understand length as a measurable a	2.GM.2 Understand length as a measurable attribute and explore capacity.		
<b>2.GM.2.1</b> Explain the relationship between the of the unit of measurement and the number of units needed to measure the length of an object.	<ul> <li>Songs: Measuring Plants</li> <li>Length</li> <li>Standard Units of Length</li> <li>Nonstandard Units of Length</li> <li>Measurement Tools</li> </ul> Classroom Playlists <ul> <li>OK: 2: Geometry and Measurement: Length</li> </ul>	• Length Measurement	
<b>2.GM.2.2</b> Explain the relationship between length and the numbers on a ruler by using a ruler to measure lengths to the nearest whole unit.	<ul> <li>Length</li> <li>Standard Units of Length</li> <li>Measurement Tools</li> <li>Classroom Playlists</li> <li>OK: 2: Geometry and Measurement: Length</li> </ul>		
<b>2.GM.2.3</b> Explore how varying shapes and styles of containers can have the same capacity.	<ul> <li>Books: Birds at My House</li> <li>Capacity</li> <li>Classroom Playlists</li> <li>OK: 2: Geometry and Measurement: Capacity</li> </ul>		
2.GM.3 Tell time to the quarter hour.			
2.GM.3.1 Distinguish between a.m. and p.m.		• Tell and Write Time	
<b>2.GM.3.2</b> Read and write time to the quarter-hour on an analog and digital clock.	<ul> <li>Songs: Telling Time</li> <li>Tell Time to the Hour</li> <li>Tell Time to the Half-hour</li> <li>Tell Time to the Quarter Hour</li> <li>Classroom Playlists</li> <li>OK: 2: Geometry and Measurement: Read and Write Time</li> </ul>		



Oklahoma Standards	Waterford Digital Activities	Waterford Resources	
Data and Probability (D)	Data and Probability (D)		
2.D.1 Collect, organize, and interpret data.			
<b>2.D.1.1</b> Explain that the length of a bar in a bar graph and the number of objects in a pictograph represents the number of data points for a given category.	<ul> <li>Songs: Graphing</li> <li>Bar Graphs</li> <li>Picture Graphs</li> </ul> Classroom Playlists <ul> <li>OK: 2: Data and Probability: Graphs</li> </ul>	• <u>Graphs</u>	
<b>2.D.1.2</b> Organize a collection of data with up to four categories using pictographs and bar graphs with intervals of 1s, 2s, 5s or 10s.	<ul> <li>Books: Painting By Number</li> <li>Bar Graphs</li> <li>Picture Graphs</li> <li>Classroom Playlists</li> <li>OK: 2: Data and Probability: Graphs</li> </ul>	• <u>Graphs</u>	
<b>2.D.1.3</b> Write and solve one-step word problems involving addition or subtraction using data represented within pictographs and bar graphs with intervals of one.	<ul> <li>Books: Painting By Number</li> <li>Bar Graphs</li> <li>Picture Graphs</li> <li>Classroom Playlists</li> <li>OK: 2: Data and Probability: Word Problems with Graphs</li> </ul>	Data Categorization	
<b>2.D.1.4</b> Draw conclusions and make predictions from information in a pictograph and bar graph.	<ul> <li>Books: Painting By Number</li> <li>Bar Graphs</li> <li>Picture Graphs</li> <li>Story Problem Strategies</li> <li>Problem Solving Strategies</li> </ul> Classroom Playlists <ul> <li>OK: 2: Data and Probability: Graphs</li> </ul>	Data Categorization     Graphs	



Oklahoma Standards	Waterford Digital Activities	Waterford Resources
SCIENCE		
Kindergarten		
Motion and Stability of Forces (PS2)		
<b>K.PS2.1</b> Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.	<ul> <li>Songs: Push and Pull</li> <li>Books: Mr. Mario's Neighborhood</li> <li>Push and Pull</li> <li>Classroom Playlists</li> <li>OK: K: Motion and Stability of Forces: Pushes and Pulls</li> </ul>	• How It Works
<b>K.PS2.2</b> Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or pull.*	<ul> <li>Songs: Push and Pull</li> <li>Push and Pull</li> <li>Classroom Playlists</li> <li>OK: K: Motion and Stability of Forces: Pushes and Pulls</li> </ul>	
Energy (PS3)		
<b>K.PS3.1</b> Make observations to determine the effect of sunlight on Earth's surface.	<ul> <li>Songs: Water; Plants Are Growing; Sun Blues</li> <li>Sun</li> <li>Water</li> <li>Classroom Playlists</li> <li>OK: K: Energy: Sunlight</li> </ul>	
<b>K.PS3.2</b> Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area.*		Sun and Shade Pictures



Oklahoma Standards	Waterford Digital Activities	Waterford Resources
From Molecules to Organisms: Structur	e and Function (LS1)	
<b>K.LS1.1</b> Use observations to describe patterns of what plants and animals (including humans) need to survive.	<ul> <li>Songs: Water; Food From Plants</li> <li>Books: Mela's Water Pot; Everybody Needs to Eat</li> <li>Sun</li> <li>Plants</li> <li>Water</li> <li>Plants and Animals Need Air</li> <li>Healthy Plants' Needs</li> </ul>	Water for Plants     Green and Growing
	<ul> <li>Classroom Playlists</li> <li>OK: K: From Molecules to Organisms: Plant Needs</li> <li>OK: K: From Molecules to Organisms: Animal Needs</li> <li>OK: K: From Molecules to Organisms: Plant and Animal Needs</li> </ul>	
Earth Systems (ESS2)		
<b>K.ESS.2.1</b> Use and share observations of local weather conditions to describe patterns over time.	<ul> <li>Songs: Seasons</li> <li>Books: That's What I Like: A Book About Seasons</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>OK: K: Earth's Systems: Weather</li> </ul>	<ul> <li>Weather</li> <li>The Weather Around Us</li> <li>Weather Cards</li> </ul>
<b>K.ESS2.2</b> Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.	<ul> <li>Books: Winter Snoozers; Birds at My House; The Old Maple Tree; Turtle's Pond</li> <li>Classroom Playlists</li> <li>OK: K: Earth's Systems: Plants and Animals Change Environment</li> </ul>	



Oklahoma Standards	Waterford Digital Activities	Waterford Resources
Earth and Human Activity (ESS3)		
<b>K.ESS3.1</b> Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.	<ul> <li>Songs: Four Ecosystems</li> <li>Books: Where in the World Would You Go Today?</li> <li>Oceans</li> <li>Mountains</li> <li>Deserts</li> <li>Rainforests</li> </ul> Classroom Playlists <ul> <li>OK: K: Earth and Human Activity: Habitats</li> </ul>	• Our Earth
<b>K.ESS3.2</b> Ask questions to understand the purpose of weather forecasting to prepare for and respond to severe weather.*	<ul> <li>Songs: Precipitation; Storms</li> <li>Books: Whatever the Weather</li> <li>Weather Tools</li> <li>Calendar/Graph Weather</li> <li>Classroom Playlists</li> <li>OK: K: Earth and Human Activity: Weather</li> </ul>	
First Grade		
Waves and Their Applications in Technology	ologies for Information Transfer (PS4)	
<b>1.PS4.1</b> Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.	<ul> <li>Songs: Sound</li> <li>Books: What Sounds Say</li> <li>Sound Waves</li> <li>Classroom Playlists</li> <li>OK: 1: Waves and their Applications: Sound</li> </ul>	• <u>Sound</u>



Oklahoma Standards	Waterford Digital Activities	Waterford Resources
Waves and Their Applications in Techno	ologies for Information Transfer (PS4) continued	
<b>1.PS4.2</b> Make observations to construct an evidence-based account that objects can be seen only when illuminated.	<ul> <li>Books: My Family Campout; Lightning Bugs; Noise in the Night</li> <li>Light Properties</li> <li>Properties of Light</li> <li>Classroom Playlists</li> <li>OK: 1: Waves and their Applications: Light</li> </ul>	
<b>1.PS4.3</b> Plan and conduct an investigation to determine the effect of placing objects made with different materials in the path of a beam of light.	<ul> <li>Books: My Family Campout</li> <li>Light Properties</li> <li>Properties of Light</li> <li>Classroom Playlists</li> <li>OK: 1: Waves and their Applications: Properties of Light</li> </ul>	
<b>1.PS4.4</b> Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.*	<ul> <li>Songs: Inventing</li> <li>Books: I Want to Be a Scientist Like Thomas Edison; Inventions All Around</li> <li>Classroom Playlists</li> <li>OK: 1: Waves and their Applications: Tools</li> </ul>	
From Molecules to Organisms: Structur	e and Function (LS1)	
1.LS1.1 Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.*	<ul> <li>Animal Adaptations and Human Tools</li> <li>Classroom Playlists</li> <li>OK: 1: From Molecules to Organisms: Human Tools</li> </ul>	



Waterford Digital Activities	Waterford Resources	
From Molecules to Organisms: Structure and Function (LS1) continued		
<ul> <li>Songs: Animal Bodies</li> <li>Animal Behavior</li> <li>Animal Bodies</li> <li>Classroom Playlists</li> <li>OK: 1: From Molecules to Organisms: Parents and Offspring</li> </ul>		
<ul> <li>Books: George and Jack; A Seed Grows</li> <li>Traits of Living Things</li> <li>Classroom Playlists</li> <li>OK: 1: From Molecules to Organisms: Parents and Offspring</li> </ul>	• <u>Traits</u>	
<ul> <li>Songs: The Moon; Sun Blues</li> <li>Books: Moon Songs: Star Pictures; My Family Campout</li> <li>Sun</li> <li>Moon</li> <li>Constellations</li> <li>OK: 1: Earth's Place in the Universe: Patterns</li> </ul>	• The Moon • The Sky Above Us	
<ul> <li>Sun</li> <li>Spring</li> <li>Summer</li> <li>Fall</li> <li>Winter</li> </ul> Classroom Playlists		
	e and Function (LS1) continued  Songs: Animal Bodies Animal Behavior Animal Bodies  Classroom Playlists OK: 1: From Molecules to Organisms: Parents and Offspring  Books: George and Jack; A Seed Grows Traits of Living Things  Classroom Playlists OK: 1: From Molecules to Organisms: Parents and Offspring  Songs: The Moon; Sun Blues Books: Moon Songs: Star Pictures; My Family Campout Sun Moon Constellations  Classroom Playlists OK: 1: Earth's Place in the Universe: Patterns  Sun Spring Summer Fall Winter	



Oklahoma Standards	Waterford Digital Activities	Waterford Resources
Earth and Human Activity (ESS3)		
<b>1.ESS3.1</b> Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.*	<ul> <li>Songs: Conservation; Pollution Rap</li> <li>Pollution and Recycling</li> <li>Care of Water</li> <li>Care of Earth</li> <li>Classroom Playlists</li> <li>OK: 1: Earth and Human Activity: Environment</li> </ul>	• Recycling • Our Earth
Second Grade		
Matter and Its Interactions (PS1)		
<b>2.PS1.1</b> Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.	<ul> <li>Songs: Matter</li> <li>Books: Warm Soup for Dedushka; Pancakes Matter</li> <li>Changes in Matter</li> <li>States of Water</li> <li>Materials</li> </ul> Classroom Playlists <ul> <li>OK: 2: Matter and Its Interactions: Materials</li> </ul>	Solids, Liquids, and Gases
<b>2.P51.2</b> Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for the intended purpose.*	<ul> <li>Songs: Matter</li> <li>Books: Warm Soup for Dedushka; Pancakes Matter</li> <li>Heat Movement</li> <li>Movement of Heat</li> <li>Heat Experiment</li> <li>Classroom Playlists</li> <li>OK: 2: Matter and Its Interactions: Materials</li> </ul>	
2.PS1.3 Make observations to construct an evidence-based account of how an object made of a small set of pieces can be disassembled and made into a new object	Books: I Want to Be a Scientist Like Wilbur and Orville Wright; Inventions All Around	



Oklahoma Standards	Waterford Digital Activities	Waterford Resources
Matter and Its Interactions (PSI) contin	ued	
<b>2.P51.4</b> Construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot.	<ul> <li>Books: Warm Soup for Dedushka</li> <li>Matter</li> <li>Changes in Matter</li> <li>Movement of Heat</li> <li>Classroom Playlists</li> <li>OK: 2: Matter and Its Interactions: Changes in Matter</li> </ul>	
Ecosystems: Interactions, Energy and D	ynamics (LS2)	
<b>2.LS2.1</b> Plan and conduct an investigation to determine if plants need sunlight and water to grow.	<ul> <li>Songs: Plants Are Growing</li> <li>Sun</li> <li>Water</li> <li>Plant Experiment</li> <li>Healthy Plants' Needs</li> </ul> Classroom Playlists <ul> <li>OK: 2: Ecosystems: Plant Needs</li> </ul>	• Light for Plants
<b>2.LS2.2</b> Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.*	<ul> <li>Books: The Bee's Secret; The Old Maple Tree</li> <li>Classroom Playlists</li> <li>OK: 2: Ecosystems: Seed Dispersal</li> <li>OK: 2: Ecosystems: Pollinating Plants</li> </ul>	



Oklahoma Standards	Waterford Digital Activities	Waterford Resources	
Biological Unity and Diversity (LS4)			
2.LS4.1 Make observations of plants and animals to compare the diversity of life in different habitats.	<ul> <li>Songs: Animal Bodies; Four Ecosystems</li> <li>Books: Animal Bodies; Where in the World Would You Go Today?; Your Backyard</li> <li>Ecosystems</li> <li>Animal Bodies</li> <li>Animal Behavior</li> <li>Oceans</li> <li>Deserts</li> <li>Prairies</li> <li>Rainforests</li> <li>Mountains</li> <li>Classroom Playlists</li> <li>OK: 2: Biological Unity and Diversity: Habitats</li> </ul>	• Places on Earth	
Earth's Place in the Universe (ESS1)			
2.ESS1.1 Use information from several sources to provide evidence that Earth events can occur quickly or slowly.	<ul> <li>Songs: The Four Seasons; Rock Cycle</li> <li>Books: That's What I Like: A Book About Seasons; Whatever the Weather; Fossils Under Our Feet</li> <li>Rock Cycle</li> <li>Fossils</li> <li>Spring</li> <li>Summer</li> <li>Fall</li> <li>Winter</li> <li>Water</li> <li>Classroom Playlists</li> <li>OK: 2: Earth's Place in the Universe: Earth Events</li> </ul>	• Rocks	



Oklahoma Standards	Waterford Digital Activities	Waterford Resources
Earth's Systems (ESS2)		
<b>2.ESS2.1</b> Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land.*	<ul> <li>Rock Cycle</li> <li>Classroom Playlists</li> <li>OK: 2: Earth's Systems: Erosion</li> </ul>	
<b>2.ESS2.2</b> Develop a model to represent the shapes and kind of land and bodies of water in an area.	<ul> <li>Songs: Water; Precipitation; Water Is All Around</li> <li>Water Sources</li> <li>Water</li> <li>Water Cycle</li> <li>Care of Water</li> <li>Oceans</li> </ul> Classroom Playlists <ul> <li>OK: 2: Earth's Systems: Represent Land and Water</li> </ul>	
<b>2.ESS2.3</b> Obtain information to identify where water is found on Earth and that it can be solid or liquid.	<ul> <li>Songs: Water; Uses of Water; Precipitation; Water Is All Around</li> <li>Water Sources</li> <li>Water</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>OK: 2: Earth's Systems: Earth's Water</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 Backyard | The Birds, the Beasts and the Bat / Halves and Fourths and Thirds / We All Exercise / Circus 20 / Red Rock, River Rock / Painting by Number / Navajo Beads / Where in the World Would You Go Today? / I Want to Be a Scientist Like Wilbur and Orville Wright

#### Fluent Math and Science

#### **Math and Science Books**

The Snow Project / Chloe's Cracker Caper / What Sounds Say / Fossils Under Our Feet / The Boonville Nine / I Want to Be a Scientist Like Alexander von Humboldt / I Want to Be a Scientist Like Marie Curie I Want to Be a Scientist Like Stephen Hawking / George and Jack / The Old Maple Tree / A Dinosaur's First Day / I Want to Be a Scientist Like Isaac Newton / My Family Campout / I Want to Be a Scientist Like Thomas Edison / Warm Soup for Dedushka / How Did the Chicken Cross the Road? / Inventions All Around / The Beginning of Numbers / I Want to Be a Mathematician Like Ada Byron Lovelace / Lightning Bells / Tyrannosaurus X 1 / Halves and Fourths and Thirds / Navaio Beads / Red Rock, River Rock / I Want to Be a Mathematician Like Srinivasa Ramanujan / The Fraction Twins / Yangshi's Perimeter / I Want to Be a Mathematician Like Archimedes / Birds at My House / Painting by Number / The Fable Fair



#### **Support**

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

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

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

## **Family Engagement Resources**



#### Spanish Family Engagement Resources

All Waterford books and many of the resources available to families at  $\rightarrow$  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 III / J: Jack and Jill / K: Three Little Kittens / L: Mary Had a Little Lamb / M: Little Miss Muffett / O: Polly, Put the Kettle On / P: This Little Pig / Q: Quack, Quack, Quack / R: Little Rabbit / S: Eensy, Weensy Spider / U: The Bus / V: My Valentine / W: Wee Willie Winkie / X: A-hunting We Will Go / Y: Yankee Doodle

#### **Beginning Reading Songs**

Comma, Comma / Homophone Monkey /
Antonym Ant / Apples and Bananas / Old
MacDonald's Vowels / ABC Show and Tell Sounds /
ABC Tongue Twisters / ABC Picture Sounds / Sheep in
the Shadows / C-K Rap / S Steals the Z / Blends /
Blicky Licky Land / Apostrophe Pig / Capital Letters—
Days / Charley Chick / Adjectives Describe / Lazy
Letter Q / Nouns / Verbs / Adverbs / Irregular Verbs
/ Preposition Cat / Verbs that Link / Consonants /

Pronouns, Sneaky Magic E / Silent Letters—G-H / Silent Letters—W / Drop Magic E / Bossy Mr. R / P-H and G-H Say Fff / Schwa Sound / Double the Fun / Strange Spelling / More Than One / Reading Detective—Peek at the Story

Many of these songs are available on the → Waterford.org YouTube channel.

#### **Weekly Homelink Newsletters**

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

#### **Math Homelink Newsletters**

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

#### **Science Homelink Newsletters**

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

### **Reading Homelink Newsletters**

# Alphabet Knowledge Comprehension and Vocabulary

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

#### **Readiness Skills Letters**

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

#### **Phonological Awareness Letters**

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



### **Waterford Family**

<u>Waterford Family</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 Family is available online and in the Waterford Family app (for iOS and Android).