

# Alignment September 2025

95% Aligned

Waterford
Early Learning:
Math & Science

## **Overview**



This document provides a detailed correlation of Waterford Early Learning to Texas Essential Knowledge and Skills Math 2017 & Science 2022.

## **Alignment Description**

This document aligns Texas Essential Knowledge and Skills Math 2017 & Science 2022 to Waterford.org's digital activities and supporting resources.

#### **Waterford Digital Activities**

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

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

#### **Waterford Resources**

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

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

#### **Waterford Curriculum Details**

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

#### Adaptive, Individualized Learning

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

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

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

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

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

#### **Reading Sequence**

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

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

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

#### **SmartStart Sequence**

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

## **Table of Contents**



Mathematics	SCIENCE	3!
Kindergarten Knowledge and Skills	1 Kindergarten	3!
Mathematical Process Standards.1Number and Operations.24Algebraic Reasoning.7Geometry and Measurement.7Data Analysis.9Personal Financial Literacy.10	Scientific and Engineering Practices Recurring Themes and Concepts.  Matter and It's Properties.  Force, Motion, and Energy  Earth and Space  Organisms and Environments.	38 40 40 41
First Grade Knowledge and Skills	Grade 1	44
Mathematical Process Standards.10Number and Operations11Algebraic Reasoning.16Geometry and Measurement.17Data Analysis.21Personal Financial Literacy.21	Scientific and Engineering Practices Recurring Themes and Concepts  Matter and Its Properties.  Force, Motion, and Energy  Earth and Space.  Organisms and Environments.	
Second Grade Knowledge and Skills 22	Grade 2	5!
Mathematical Process Standards.22Number and Operations.23Algebraic Reasoning.29Geometry and Measurement.30Data Analysis.33Personal Financial Literacy.34	Scientific and Engineering Practices Recurring Themes and Concepts  Matter and Its Properties.  Force, Motion, and Energy  Earth and Space  Organisms and Environments	
	Books and Related Activities	67
	Family Engagement Resources	68



Texas Standards	Waterford Digital Activities	Waterford Resources
Mathematics		
Kindergarten Knowledge and Sk	ills	
1. Mathematical Process Standards		
The student uses mathematical proces	ses to acquire and demonstrate mathematical understa	nding.
<b>TEKS.Math.K.1.A.</b> Apply mathematics to problems arising in everyday life, society, and the workplace.	<ul><li>Song: Problem Solving</li><li>Book: Milton's Mittens</li></ul>	
<b>TEKS.Math.K.1.B.</b> Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution.	<ul><li>Song: Problem Solving</li><li>Book: Milton's Mittens</li></ul>	
<b>TEKS.Math.K.1.C.</b> Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems.	<ul> <li>Song: Problem Solving</li> <li>Book: Milton's Mittens</li> <li>Number Instruction</li> <li>Measurement Tools</li> </ul>	
<b>TEKS.Math.K.1.D.</b> Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate.	<ul> <li>Book: Milton's Mittens</li> <li>Calendar/Graph Weather</li> <li>Science Observation: From Egg to Chick</li> </ul>	
<b>TEKS.Math.K.1.E.</b> Create and use representations to organize, record, and communicate mathematical ideas.	<ul><li>Book: Milton's Mittens</li><li>Calendar/Graph Weather</li><li>Science Observation: From Egg to Chick</li></ul>	
<b>TEKS.Math.K.1.F.</b> Analyze mathematical relationships to connect and communicate mathematical ideas.	<ul><li>Math Books</li><li>Act Out Addition</li><li>Act Out Subtraction</li></ul>	



Texas Standards	Waterford Digital Activities	Waterford Resources
The student uses mathematical process	ses to acquire and demonstrate mathematical understa	nding continued.
<b>TEKS.Math.K.1.G.</b> Display, explain and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.	<ul><li>Math Books</li><li>Act Out Addition</li><li>Act Out Subtraction</li></ul>	
2. Number and Operations.		
	ess standards to represent and compare whole number numeration system related to place value.	s, the relative position and magnitude of whole
<b>TEKS.Math.K.2.A.</b> Count forward and backward to at least 20 with and without objects.	<ul> <li>Number Songs</li> <li>Counting Songs</li> <li>Math Books</li> <li>Number Instruction</li> <li>Number Counting</li> <li>Classroom Playlists</li> <li>TEKS: K: Number and Operations: Count Forward</li> <li>TEKS: K: Number and Operations: Count Backward</li> </ul>	• Count Forward
<b>TEKS.Math.K.2.B.</b> Read, write, and represent whole numbers from 0 to at least 20 with and without objects or pictures.	<ul> <li>Math Books</li> <li>Number Songs</li> <li>Counting Songs</li> <li>Number Counting</li> <li>Number Instruction</li> <li>Moving Target</li> <li>Number Review</li> </ul> Classroom Playlists	Write Numbers 0-20
	TEKS: K: Number and Operations: Numbers and Counting:	



Texas Standards	Waterford Digital Activities	Waterford Resources
The student applies mathematical process standards to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value <i>continued</i> .		
<b>TEKS.Math.K.2.C.</b> Count a set of objects up to at least 20 and demonstrate that the last number said tells the number of objects in the set regardless of their arrangement or order.	<ul> <li>Math Books</li> <li>Counting Songs</li> <li>Number Instruction</li> <li>Make and Count Groups</li> <li>One-to-one Correspondence</li> <li>Number Counting</li> </ul>	Object Counting Grouping
	<ul> <li>Classroom Playlists</li> <li>TEKS: K: Number and Operations: Count Objects</li> <li>TEKS: K: Number and Operations: Numbers and Counting:</li> </ul>	
<b>TEKS.Math.K.2.D.</b> Recognize instantly the quantity of a small group of objects in organized and random arrangements.	<ul> <li>Make and Count Groups</li> <li>Moving Target (Dots)</li> <li>Classroom Playlists</li> <li>TEKS: K: Number and Operations: Recognize Quantities</li> </ul>	
<b>TEKS.Math.K.2.E.</b> Generate a set using concrete and pictorial models that represents a number that is more than, less than, and equal to a given number up to 20.	<ul> <li>Song: Greater Than, Less Than</li> <li>Book: For the Birds</li> <li>Make and Count Groups</li> <li>Greater Than, Less Than</li> <li>More Than, Fewer Than</li> <li>More Than</li> <li>Fewer Than</li> </ul>	Greater, Less, or Equal
	• TEKS: K: Number and Operations: More Than, Less Than, Equal	



Texas Standards	Waterford Digital Activities	Waterford Resources
	cess standards to represent and compare whole number numeration system related to place value continued.	s, the relative position and magnitude of whole
<b>TEKS.Math.K.2.F.</b> Generate a number that is one more than or one less than another number up to at least 20.	<ul> <li>Songs: Counting Backward; Counting Songs</li> <li>Make and Count Groups</li> <li>One-to-one Correspondence</li> <li>Number Counting</li> <li>Count On</li> <li>Count Down</li> </ul> Classroom Playlists	Object Counting Succession
	<ul> <li>TEKS: K: Number and Operations: Count Down</li> <li>TEKS: K: Number and Operations: Count On</li> </ul>	
<b>TEKS.Math.K.2.G.</b> Compare sets of objects up to at least 20 in each set using comparative language.	<ul> <li>Song: Greater Than, Less Than</li> <li>Book: 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>	Greater, Less, or equal
	Classroom Playlists     TEKS: K: Number and Operations: More Than, Less Than, Equal	
<b>TEKS.Math.K.2.H.</b> Use comparative language to describe two numbers up to 20 presented as written numerals.	<ul> <li>Song: Greater Than, Less Than</li> <li>Book: 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>	Compare Two Numbers
	Classroom Playlists	
	TEKS: K: Number and Operations: More Than, Less Than, Equal	



Texas Standards	Waterford Digital Activities	Waterford Resources
The student applies mathematical process standards to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value continued.		
<b>TEKS.Math.K.2.I.</b> Compose and decompose numbers up to 10 with objects and pictures.	<ul> <li>Make and Count Groups</li> <li>Make 10</li> <li>Add Groups</li> <li>Subtract Groups</li> <li>Sums</li> <li>Act Out Addition</li> <li>Act Out Subtraction</li> </ul> Classroom Playlists <ul> <li>TEKS: K: Number and Operations: Compose Up to 10</li> </ul>	Decompose Numbers
3. Number and Operations.	TEKS: K: Number and Operations: Decompose Up to 10	
	cess standards to develop an understanding of addition	and subtraction situations in order to solve problems
TEKS.Math.K.3.A. Model the action of joining	Songs: Addition; Bee Happy Addition; On the Bayou; Bakery	Represent Addition and Subtraction with Objects
to represent addition and the action of separating to represent subtraction.	Subtraction; Circus Subtraction; Subtract Those Cars  Book: Five Delicious Muffins  Add Groups  Subtract Groups  Add With Manipulatives  Add With Beads  Minuends  Act Out Addition  Act Out Subtraction	TOP SSOLE Addition and Substitution with Subjects
	Classroom Playlists	
	<ul><li>TEKS: K: Number and Operations: Addition</li><li>TEKS: K: Number and Operations: Subtraction</li></ul>	



Texas Standards	Waterford Digital Activities	Waterford Resources
The student applies mathematical proc	eess standards to develop an understanding of addition a	and subtraction situations in order to solve problems
<b>TEKS.MATH.K.3.B.</b> Solve word problems using objects and drawings to find sums up to 10 and differences within 10.	<ul> <li>Songs: Addition; Bee Happy Addition; On the Bayou; Bakery Subtraction; Circus Subtraction; Subtract Those Cars</li> <li>Book: Five Delicious Muffins</li> <li>Add Groups</li> <li>Subtract Groups</li> <li>Add With Manipulatives</li> <li>Minuends</li> <li>Act Out Addition</li> <li>Act Out Subtraction</li> <li>Classroom Playlists</li> <li>TEKS: K: Number and Operations: Word Problem Sums</li> <li>TEKS: K: Number and Operations: Word Problem Differences</li> </ul>	Addition and Subtraction Word Problems
<b>TEKS.MATH.K.3.C.</b> Explain the strategies used to solve problems involving adding and subtracting within 10 using spoken words, concrete an pictorial models, and number sentences.	<ul> <li>Songs: Addition; Bee Happy Addition; On the Bayou; Bakery Subtraction; Circus Subtraction; Subtract Those Cars</li> <li>Book: Five Delicious Muffins</li> <li>Add Groups</li> <li>Subtract Groups</li> <li>Add With Manipulatives</li> <li>Add With Beads</li> <li>Minuends</li> <li>Act Out Addition</li> <li>Act Out Subtraction</li> <li>Classroom Playlists</li> <li>TEKS: K: Number and Operations: Strategies: Addition</li> </ul>	Strategies to Add and Subtract
	TEKS: K: Number and Operations: Strategies: Addition     TEKS: K: Number and Operations: Strategies: Subtraction	



Texas Standards	Waterford Digital Activities	Waterford Resources
4. Number and Operations.		
The student applies mathematical pro-	cess standards to identify coins in order to recognize the	need for monetary transactions.
<b>TEKS.Math.K.4.A</b> The student is expected to: identify U.S. coins by name, including	<ul><li>Song: Save Your Pennies</li><li>Coin Identification</li></ul>	
pennies, nickels, dimes, and quarters.	Classroom Playlists	
	TEKS: K: Number and Operations: Coins	
5. Algebraic Reasoning.		
The student applies mathematical pro-	cess standards to identify the pattern in the number wor	d list.
<b>TEKS.Math.K.5.A</b> recite numbers up to at least 100 by ones and tens beginning with any given number.	<ul> <li>Number Songs</li> <li>Counting Songs</li> <li>Math Books</li> <li>Skip Counting</li> <li>Number Instruction</li> <li>Number Counting</li> <li>Count On</li> <li>Count On by 1</li> </ul> Classroom Playlists <ul> <li>TEKS: K: Algebraic Reasoning: Count to 100</li> </ul>	• Count Forward
6. Geometry and Measurement.		
	cess standards to analyze attributes of two-dimensional	shapes and three-dimensional solids to develop
<b>TEKS.Math.K.6.A.</b> Identify two-dimensional shapes, including circles, triangles, rectangles, and squares as special rectangles;	<ul> <li>Song: Marmot Shapes; Shapes, Shapes</li> <li>Books: The Shape of Things; Imagination Shapes</li> <li>Simple Shapes</li> <li>World Shapes</li> <li>Circle, Square, Triangle, Rectangle</li> <li>Classroom Playlists</li> <li>TEKS: K: Geometry and Measurement: 2-dimensional Shapes</li> </ul>	Shape Recognition



Texas Standards	Waterford Digital Activities	Waterford Resources
The student applies mathematical prog	eess standards to analyze attributes of two-dimensional scontinued.	shapes and three-dimensional solids to develop
<b>TEKS.Math.K.6.B.</b> Identify three-dimensional solids, including cylinders, cones, spheres, and cubes, in the real world.	<ul><li>Solid Shapes</li><li>Space Shapes</li><li>World Shapes</li></ul>	Compare Shapes
	Classroom Playlists	
	TEKS: K: Geometry and Measurement: 3-dimensional Shapes	
<b>TEKS.Math.K.6.C.</b> Identify two-dimensional components of three-dimensional objects.	<ul><li>Song: Corners and Sides</li><li>Simple Shapes</li><li>Solid Shapes</li></ul>	Two-dimensional Shapes
	Classroom Playlists	
	TEKS: K: Geometry and Measurement: 3-dimensional Shapes	
<b>TEKS.Math.K.6.D.</b> Identify attributes of two-dimensional shapes using informal and formal geometric language interchangeably.	<ul> <li>Songs: Shapes, Shapes, Shapes; Corners and Sides</li> <li>Books: The Shape of Things; Imagination Shapes</li> <li>Simple Shapes</li> <li>World Shapes</li> <li>Circle, Square, Triangle, Rectangle</li> </ul>	Shape Recognition
	Classroom Playlists	
	TEKS: K: Geometry and Measurement: 2-dimensional Shapes	
<b>TEKS.MATH.K.6.E.</b> Classify and sort a variety of regular and irregular two- and threedimensional figures regardless of orientation or size.	<ul> <li>Songs: Shapes, Shapes, Corners and Sides; Kites</li> <li>Books: The Shape of Things; Imagination Shapes</li> <li>Simple Shapes</li> <li>Solid Shapes</li> <li>Circle, Square, Triangle, Rectangle</li> <li>Star, Semicircle, Octagon, Oval, Rhombus</li> <li>Sort</li> </ul>	Shape Recognition
	Classroom Playlists	
	TEKS: K: Geometry and Measurement: Sort Shapes	
<b>TEKS.MATH.K.6.F.</b> Create two-dimensional shapes using a variety of materials and drawings.	<ul><li>Geoboard</li><li>Tangrams</li></ul>	Model Shapes



Texas Standards	Waterford Digital Activities	Waterford Resources
7. Geometry and Measurement.		
The student applies mathematical proc	ess standards to directly compare measurable attribute	s.
<b>TEKS.MATH.K.7.A.</b> Give an example of a measurable attribute of a given object, including length, capacity, and weight.	<ul><li>Song: Measuring Plants</li><li>Length</li><li>Capacity</li></ul>	Measurable Attributes
	Classroom Playlists	
	TEKS: K: Geometry and Measurement: Measurable Attribute	
<b>TEKS.MATH.K.7.B.</b> Compare two objects with a common measurable attribute to see which object has more of/less of the attribute and describe the difference.	<ul> <li>Songs: Measuring Plants; Savanna Size</li> <li>Length</li> <li>Capacity</li> <li>Big and Little</li> <li>Tall and Short</li> <li>Heavy and Light</li> </ul>	• Comparing Objects
	Classroom Playlists	
	TEKS: K: Geometry and Measurement: Measurable Attribute	
8. Data Analysis.		
The student applies mathematical prod	cess standards to collect and organize data to make it us	seful for interpreting information.
<b>TEKS.MATH.K.8.A.</b> Collect, sort, and organize data into two or three categories.	<ul><li>Song: All Sorts of Laundry</li><li>Book: Buttons, Buttons</li><li>Sort</li></ul>	Classifying Objects
	Classroom Playlists	
	TEKS: K: Data Analysis: Sort	
<b>TEKS.MATH.K.8.B.</b> Use data to create real-object and picture graphs.	<ul><li>Book: Milton's Mittens</li><li>Calendar/Graph Weather</li><li>Science Observation: From Egg to Chick</li></ul>	
	Classroom Playlists	
	TEKS: K: Data Analysis: Graphs	



Texas Standards	Waterford Digital Activities	Waterford Resources
The student applies mathematical proc	cess standards to collect and organize data to make it us	eful for interpreting information continued.
<b>TEKS.MATH.K.8.C.</b> Draw conclusions from real-object and picture graphs.	Milton's Mittens     Calendar/Graph Weather     Science Observation: From Egg to Chick  Classroom Playlists  TEKCUK Data Analysis Graphs	
9. Personal Financial Literacy.	TEKS: K: Data Analysis: Graphs	
The student applies mathematical production	cess standards to manage one's financial resources effec	tively for lifetime financial security.
<b>TEKS.Math.K.9.A.</b> Identify ways to earn income.	Book: Bugs for Sale	Learning About Income
<b>TEKS.Math.K.9.</b> B. Differentiate between money received as income and money received as gifts.		Learning About Income
<b>TEKS.Math.K.9.</b> C. List simple skills required for jobs.		Learning About Income
<b>TEKS.Math.K.9.</b> D. Distinguish between wants and needs and identify income as a source to meet one's wants and needs.		Learning About Income
First Grade Knowledge and Skill	s	
1. Mathematical Process Standards	•	
The student uses mathematical processes to acquire and demonstrate mathematical understanding.		
<b>TEKS.Math.1.1.A.</b> Apply mathematics <b>to</b> problems arising in everyday life, society, and the workplace.	Song: Problem Solving	
<b>TEKS.Math.1.1.</b> B. Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution.	Song: Problem Solving	



Texas Standards	Waterford Digital Activities	Waterford Resources	
The student uses mathematical proces	The student uses mathematical processes to acquire and demonstrate mathematical understanding continued.		
<b>TEKS.Math.1.1.C.</b> Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems.	<ul><li>Song: Problem Solving</li><li>Use Manipulatives</li></ul>		
<b>TEKS.Math.1.1.D.</b> Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate.	Song: Problem Solving		
<b>TEKS.Math.1.1.E.</b> Create and use representations to organize, record, and communicate mathematical ideas.	<ul><li>Song: Problem Solving</li><li>Use Manipulatives</li></ul>		
<b>TEKS.Math.1.1.F.</b> Analyze mathematical relationships to connect and communicate mathematical ideas.	<ul><li>Addition</li><li>Subtraction</li><li>Act Out Addition</li><li>Act Out Subtraction</li></ul>		
<b>TEKS.Math.1.1.G.</b> Display, explain and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.	<ul><li>Song: Problem Solving</li><li>Math Books</li></ul>		
2. Number and Operations.			
	cess standards to represent and compare whole numb numeration system related to place value.	ers, the relative position and magnitude of whole	
<b>TEKS.Math.1.2.A.</b> Recognize instantly the quantity of structured arrangements.	Moving Target (Dots)     Bug Bits		
	Classroom Playlists     TEKS: 1st Grade: Number and Operations:     Recognize Quantities		



Texas Standards	Waterford Digital Activities	Waterford Resources
	eess standards to represent and compare whole numbers numeration system related to place value continued.	s, the relative position and magnitude of whole
<b>TEKS.Math.1.2.B.</b> Use concrete and pictorial models to compose and decompose numbers up to 120 in more than one way as so many hundreds, so many tens, and so many ones;	<ul> <li>Place Value</li> <li>Expanded Notation</li> <li>Classroom Playlists</li> <li>TEKS: 1st Grade: Number and Operations: Place Value</li> <li>TEKS: 1st Grade: Number and Operations: Expanded Form</li> </ul>	• Tens And Ones
<b>TEKS.Math.1.2.C.</b> Use objects, pictures, and expanded and standard forms to represent numbers up to 120.	<ul><li>Math Books</li><li>Place Value</li><li>Expanded Notation</li></ul>	• Count to 120
	<ul> <li>Classroom Playlists</li> <li>TEKS: 1st Grade: Number and Operations: Place Value</li> <li>TEKS: 1st Grade: Number and Operations: Expanded Form</li> </ul>	
<b>TEKS.Math.1.2.D.</b> Generate a number that is greater than or less than a given whole number up to 120.	<ul><li>Song: Greater Than, Less Than</li><li>Greater Than, Less Than</li><li>Count Down</li><li>Place Value</li></ul>	Compare Two-digit Numbers
	<ul> <li>Classroom Playlists</li> <li>TEKS: 1st Grade: Number and Operations: Compare Numbers</li> <li>TEKS: 1st Grade: Number and Operations: Place Value</li> </ul>	
<b>TEKS.Math.1.2.E.</b> Use place value to compare whole numbers up to 120 using comparative language.	<ul> <li>Place Value</li> <li>Greater Than, Less Than</li> <li>Classroom Playlists</li> </ul>	Compare Two-digit Numbers
	TEKS: 1st Grade: Number and Operations: Compare Numbers	
<b>TEKS.Math.1.2.F.</b> Order whole numbers up to 120 using place value and open number lines.	<ul><li>Place Value</li><li>Number Line</li><li>Number Chart</li><li>Order Numbers</li></ul>	• Count to 120
	TEKS: 1st Grade: Number and Operations: Order Numbers:	



Texas Standards	Waterford Digital Activities	Waterford Resources
	cess standards to represent and compare whole number numeration system related to place value continued.	s, the relative position and magnitude of whole
<b>TEKS.Math.1.2.G.</b> Represent the comparison of two numbers to 100 using the symbols >, <, or =.	<ul><li>Book: For the Birds</li><li>Place Value</li><li>Greater Than, Less Than</li></ul>	Compare Two-digit Numbers
	Classroom Playlists	
	TEKS: 1st Grade: Number and Operations: Compare Numbers	
3. Number and Operations.		
The student applies mathematical proto solve problems. The student is expe	cess standards to develop and use strategies for whole n	number addition and subtraction computations in order
<b>TEKS.Math.1.3.A.</b> Use concrete and pictorial models to determine the sum of a multiple of 10 and a one-digit number in problems up to 99.	<ul> <li>Songs: Addition; Bee Happy Addition; On the Bayou</li> <li>Act Out Addition</li> <li>Addition</li> <li>Count On</li> <li>Count On by 1</li> </ul>	Adding within 100
	Classroom Playlists	
	TEKS: 1st Grade: Number and Operations: Number Patterns	
<b>TEKS.Math.1.3.B.</b> Use objects and pictorial models to solve word problems involving joining, separating, and comparing sets within 20 and unknowns as any one of the	<ul> <li>Missing Addends</li> <li>Missing Minuends and Subtrahends</li> <li>Addition and Subtraction Relationship</li> <li>Commutative Property of Addition</li> </ul>	Word Problems Using Subtraction within 20
terms in the problem such as 2 + 4 = []; 3 + [] = 7; and 5 = [] - 3.	Classroom Playlists	
1,5.1.2.2.11	TEKS: 1st Grade: Number and Operations: Missing Numbers	
<b>TEKS.Math.1.3.C.</b> Compose 10 with two or more addends with and without concrete objects.	<ul><li>Make 10</li><li>Missing Addends</li><li>Count On</li><li>Act Out Addition</li></ul>	• Numbers that Make 10
	Classroom Playlists	
	TEKS: 1st Grade: Number and Operations: Add to 10	



Texas Standards	Waterford Digital Activities	Waterford Resources
The student applies mathematical proc to solve problems continued.	eess standards to develop and use strategies for whole n	umber addition and subtraction computations in order
<b>TEKS.Math.1.3.D.</b> Apply basic fact Strategies to Add and Subtract within 20, including making 10 and decomposing a number leading to a 10.	<ul> <li>Song: Fact Families</li> <li>Book: Facts about Families</li> <li>Make 10</li> <li>Addition and Subtraction Fact Families</li> <li>Addition Patterns</li> <li>Subtraction Patterns</li> <li>Classroom Playlists</li> <li>TEKS: 1st Grade: Number and Operations: Fact Families</li> </ul>	Strategies to Add and Subtract
<b>TEKS.Math.1.3.E.</b> Explain strategies used to solve addition and subtraction problems up to 20 using spoken words, objects, pictorial models, and number sentences.	<ul> <li>Song: Fact Families</li> <li>Book: Facts about Families</li> <li>Addition and Subtraction Fact Families</li> <li>Addition Patterns</li> <li>Subtraction Patterns</li> <li>Act Out Addition</li> <li>Act Out Subtraction</li> </ul>	Strategies to Add and Subtract
	<ul> <li>Classroom Playlists</li> <li>TEKS: 1st Grade: Number and Operations: Strategies: Addition</li> <li>TEKS: 1st Grade: Number and Operations: Strategies: Subtraction</li> </ul>	
<b>TEKS.Math.1.3.F.</b> Generate and solve problem situations when given a number sentence involving addition or subtraction of numbers within 20.	<ul> <li>Song: Fact Families</li> <li>Book: Facts about Families</li> <li>Addition and Subtraction Fact Families</li> <li>Addition Patterns</li> <li>Subtraction Patterns</li> <li>Act Out Addition</li> <li>Act Out Subtraction</li> </ul>	Word Problems Using Subtraction within 20
	<ul> <li>Classroom Playlists</li> <li>TEKS: 1st Grade: Number and Operations: Strategies: Addition</li> <li>TEKS: 1st Grade: Number and Operations: Strategies: Subtraction</li> </ul>	



Texas Standards	Waterford Digital Activities	Waterford Resources
4. Number and Operations.		
The student applies mathematical proc for monetary transactions.	ess standards to identify coins, their values, and the rela	ationships among them in order to recognize the need
<b>TEKS.Math.1.4.A.</b> Identify U.S. coins, including pennies, nickels, dimes, and quarters, by value and describe the relationships among them.	<ul> <li>Song: Money</li> <li>Book: Bugs For Sale</li> <li>Count Nickels and Pennies or Dimes and Pennies</li> <li>Count Dimes, Nickels, and Pennies</li> <li>Count Quarters, Dimes, Nickels, and Pennies</li> <li>Quarters</li> <li>Equivalent Sums of Money</li> </ul>	• Coin Identification
	Classroom Playlists	
	TEKS: 1st Grade: Number and Operations: Coin Identification	
<b>TEKS.Math.1.4.B.</b> Write a number with the cent symbol to describe the value of a coin.	<ul> <li>Song: Money</li> <li>Book: Bugs For Sale</li> <li>Count Nickels and Pennies or Dimes and Pennies</li> <li>Count Dimes, Nickels, and Pennies</li> <li>Count Quarters, Dimes, Nickels, and Pennies</li> <li>Quarters</li> <li>Equivalent Sums of Money</li> </ul>	• Coin Identification
	Classroom Playlists	
	• TEKS: 1st Grade: Number and Operations: Coin Value	
<b>TEKS.Math.1.4.C.</b> Use relationships to count by twos, fives, and tens to determine the value of a collection of pennies, nickels, and/ or dimes.	<ul> <li>Songs: Money; Skip Counting</li> <li>Book: Bugs For Sale</li> <li>Skip Count</li> <li>Count Nickels and Pennies or Dimes and Pennies</li> <li>Count Dimes, Nickels, and Pennies</li> </ul>	Coin Identification
	Classroom Playlists	
	<ul><li>TEKS: 1st Grade: Number and Operations: Coin Value</li><li>TEKS: 1st Grade: Algebraic Reasoning: Skip Count</li></ul>	



Texas Standards	Waterford Digital Activities	Waterford Resources
5. Algebraic Reasoning.		
The student applies mathematical production describe relationships.	cess standards to identify and apply number patterns w	thin properties of numbers and operations in order to
<b>TEKS.Math.1.5.A.</b> Recite numbers forward and backward from any given number between 1 and 120.	<ul> <li>Songs: Counting On; Counting Backward</li> <li>Book: A Space Adventure</li> </ul> Classroom Playlists	• Count to 120
	TEKS: 1st Grade: Algebraic Reasoning: Count to 120	
<b>TEKS.Math.1.5.B.</b> Skip count by twos, fives, and tens to determine the total number of objects up to 120 in a set.	<ul> <li>Song: Counting On</li> <li>Books: Circus 20; Jump Rope Rhymes; Navajo Beads</li> <li>Skip Count by 2</li> <li>Skip Count by 5</li> <li>Skip Count by 10</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
	Classroom Playlists	
<b>TEKS.Math.1.5.C.</b> Use relationships to determine the number that is 10 more and 10 less than a given number up to 120.	<ul> <li>TEKS: 1st Grade: Algebraic Reasoning: Skip Count</li> <li>Add Tens</li> <li>Subtract Tens</li> <li>Number Chart</li> <li>Skip Count</li> </ul> Classroom Playlists	• Ten More or Less
<b>TEKS.Math.1.5.D.</b> Represent word problems involving addition and subtraction of whole numbers up to 20 using concrete and pictorial models and number sentences.	<ul> <li>TEKS: 1st Grade: Algebraic Reasoning: Add or Subtract 10s</li> <li>Song: Fact Families</li> <li>Book: Facts about Families</li> <li>Addition and Subtraction Fact Families</li> <li>Addition Patterns</li> <li>Subtraction Patterns</li> <li>Act Out Addition</li> <li>Act Out Subtraction</li> <li>Classroom Playlists</li> <li>TEKS: 1st Grade: Algebraic Reasoning: Word Problems</li> </ul>	Word problems Using Subtraction within 20



Texas Standards	Waterford Digital Activities	Waterford Resources
The student applies mathematical production describe relationships continued.	eess standards to identify and apply number patterns wit	thin properties of numbers and operations in order to
TEKS.Math.1.5.E. Understand that the	Greater Than, Less Than	• Equal Sign
equal sign represents a relationship where expressions on each side of the equal sign	Classroom Playlists	
represent the same value(s).	TEKS: 1st Grade: Algebraic Reasoning: Greater Than, Less Than	
<b>TEKS.Math.1.5.F.</b> Determine the unknown whole number in an addition or subtraction equation when the unknown may be any one of the three or four terms in the equation.	<ul> <li>Missing Addends</li> <li>Missing Minuends and Subtrahends</li> <li>Addition and Subtraction Relationship</li> <li>Commutative Property of Addition</li> </ul>	Word Problems Using Subtraction within 20
	Classroom Playlists	
	TEKS: 1st Grade: Algebraic Reasoning: Missing Number	
<b>TEKS.Math.1.5.G.</b> Apply properties of operations to add and subtract two or three numbers.	<ul> <li>Addition</li> <li>Add Without Regrouping</li> <li>Subtraction</li> <li>Subtract Without Regrouping</li> <li>Add 3 One-digit Numbers</li> </ul>	Add and Subtract within 100
	Classroom Playlists	
	<ul> <li>TEKS: 1st Grade: Algebraic Reasoning: Add 3 Whole Numbers</li> <li>TEKS: 1st Grade: Algebraic Reasoning: Missing Number</li> </ul>	
6. Geometry and Measurement.		
The student applies mathematical proc generalizations about their properties.	ess standards to analyze attributes of two-dimensional s The student is expected to:	shapes and three-dimensional solids to develop
<b>TEKS.Math.1.6.A.</b> Classify and sort regular and irregular two-dimensional shapes based on attributes using informal geometric language.	<ul> <li>Songs: Shapes, Shapes, Shapes; All Sorts of Laundry; Kites; Corners and Sides</li> <li>Book: Buttons, Buttons</li> <li>Circle, Square, Triangle, Rectangle</li> <li>Simple Shapes</li> <li>Sort</li> </ul>	Classifying Objects
	Classroom Playlists	
	TEKS: 1st Grade: Geometry and Measurement: Sort     Two-dimentional Shapes	



Texas Standards	Waterford Digital Activities	Waterford Resources
The student applies mathematical proggeneralizations about their properties of	eess standards to analyze attributes of two-dimensional continued.	shapes and three-dimensional solids to develop
<b>TEKS.Math.1.6.B.</b> Distinguish between attributes that define a two-dimensional or three-dimensional figure and attributes that do not define the shape.	<ul> <li>Songs: Corners and Sides; Kites</li> <li>Space Shapes</li> <li>Simple Shapes</li> <li>Classroom Playlists</li> <li>TEKS: 1st Grade: Geometry and Measurement: Three-Dimensional Shapes</li> </ul>	• Attributes
<b>TEKS.Math.1.6.C.</b> Create two-dimensional figures, including circles, triangles, rectangles, and squares, as special rectangles, rhombuses, and hexagons.	Geoboard     Tangrams	Form Larger Shapes     Pattern Block Puzzle
<b>TEKS.Math.1.6.D.</b> Identify two-dimensional shapes, including circles, triangles, rectangles, and squares, as special rectangles, rhombuses, and hexagons and describe their attributes using formal geometric language.	<ul> <li>Songs: Shapes, Shapes, Shapes; Kites; Corners and Sides</li> <li>Book: The Shape of Things</li> <li>Circle, Square, Triangle, Rectangle</li> <li>Star, Semicircle, Octagon, Oval, Rhombus</li> <li>Simple Shapes</li> </ul>	Shape Recognition
	Classroom Playlists     TEKS: 1st Grade: Geometry and Measurement: Identify Two-dimensional Shapes	
<b>TEKS.Math.1.6.E.</b> Identify three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes), and triangular prisms, and describe their attributes using formal geometric language.	<ul> <li>Song: Corners and Sides</li> <li>Space Shapes</li> <li>Classroom Playlists</li> <li>TEKS: 1st Grade: Geometry and Measurement: Three-Dimensional Shapes</li> </ul>	Shape Recognition
<b>TEKS.Math.1.6.F.</b> Compose two-dimensional shapes by joining two, three, or four figures to produce a target shape in more than one way if possible.	Geoboard     Tangrams	Form Larger Shapes     Pattern Block Puzzle



Texas Standards	Waterford Digital Activities	Waterford Resources
The student applies mathematical prog	ess standards to analyze attributes of two-dimensional continued.	shapes and three-dimensional solids to develop
<b>TEKS.Math.1.6.G.</b> Partition two-dimensional figures into two and four fair shares or equal parts and describe the parts using words.	<ul> <li>Books: Half For You and Half For Me; Halves and Fourths and Thirds</li> <li>Geoboard</li> <li>Tangrams</li> <li>Equal Part Fractions</li> </ul>	• Equal Shares
	• TEKS: 1st Grade: Geometry and Measurement: Fractions	
<b>TEKS.Math.1.6.H.</b> Identify examples and non-examples of halves and fourths.	<ul> <li>Song: Fractions</li> <li>Book: Halves and Fourths and Thirds</li> <li>Equal-part Fractions</li> </ul>	• Equal Shares
	Classroom Playlists	
	• TEKS: 1st Grade: Geometry and Measurement: Fractions	
7. Geometry and Measurement.		
The student applies mathematical proc	ess standards to select and use units to describe length	and time. The student is expected to:
<b>TEKS.Math.1.7.A.</b> Use measuring tools to measure the length of objects to reinforce the continuous nature of linear measurement.	<ul> <li>Song: Measuring Plants</li> <li>Length</li> <li>Measurement Tools</li> <li>Nonstandard Units of Length</li> </ul>	Length Measurement
	Classroom Playlists	
	• TEKS: 1st Grade: Geometry and Measurement: Tools	
<b>TEKS.Math.1.7.B.</b> Illustrate that the length of an object is the number of same-size units of length that, when laid end-to-end with no	<ul><li>Song: Measuring Plants</li><li>Length</li><li>Nonstandard Units of Length</li></ul>	Length Measurement
gaps or overlaps, reach from one end of the	Classroom Playlists	
object to the other.	<ul> <li>TEKS: 1st Grade: Geometry and Measurement: Length Standard</li> </ul>	



Texas Standards	Waterford Digital Activities	Waterford Resources
The student applies mathematical proc	The student applies mathematical process standards to select and use units to describe length a	
<b>TEKS.Math.1.7.C.</b> Measure the same object/distance with units of two different lengths and describe how and why the measurements differ.	<ul> <li>Song: Measuring Plants</li> <li>Length</li> <li>Nonstandard Units of Length</li> </ul>	Measuring the Same Object Two Ways
	TEKS: 1st Grade: Geometry and Measurement:     Length Standard     TEKS: 1st Grade: Geometry and Measurement:     Length Nonstandard	
<b>TEKS.Math.1.7.D.</b> Describe a length to the nearest whole unit using a number and a unit.	<ul> <li>Song: Measuring Plants</li> <li>Length</li> <li>Measurement Tools</li> <li>Nonstandard Units of Length</li> <li>Classroom Playlists</li> <li>TEKS: 1st Grade: Geometry and Measurement: Length Standard</li> <li>TEKS: 1st Grade: Geometry and Measurement: Tools</li> </ul>	Measurement Tools
<b>TEKS.Math.1.7.E.</b> Tell time to the hour and half hour using analog and digital clocks.	<ul> <li>Song: 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>	Hours and Half Hours
	<ul> <li>Classroom Playlists</li> <li>TEKS: 1st Grade: Geometry and Measurement: Time: Hours</li> <li>TEKS: 1st Grade: Geometry and Measurement: Time: Half-hour</li> </ul>	



Texas Standards	Waterford Digital Activities	Waterford Resources
8. Data Analysis.		
The student applies mathematical prod	cess standards to organize data to make it useful for inte	erpreting information and solving problems.
<b>TEKS.Math.1.8.A.</b> Collect, sort, and organize data in up to three categories using models/ representations such as tally marks or T-charts.	<ul><li>Song: Tallying; Graphing</li><li>Book: One More Cat</li><li>Tally Marks</li><li>Graphs</li></ul>	Data Categorization
	Classroom Playlists	
	TEKS: 1st Grade: Data Analysis: Tally Marks	
<b>TEKS.Math.1.8.B.</b> Use data to create picture and bar-type graphs.	<ul> <li>Song: Graphing</li> <li>Graphs</li> <li>Picture Graphs</li> <li>Bar Graphs</li> </ul> Classroom Playlists	• <u>Graphs</u>
	TEKS: 1st Grade: Data Analysis: Graphs	
<b>TEKS.Math.1.8.C.</b> Draw conclusions and generate and answer questions using information from picture and bar-type graphs.	<ul><li>Song: Graphing</li><li>Graphs</li><li>Picture Graphs</li><li>Bar Graphs</li></ul>	• <u>Graphs</u>
	Classroom Playlists	
	TEKS: 1st Grade: Data Analysis: Graphs	
9. Personal Financial Literacy.		
The student applies mathematical prod	cess standards to manage one's financial resources effe	ctively for lifetime financial security.
<b>TEKS.Math.1.9.A.</b> Define money earned as income.		Learning About Income
<b>TEKS.Math.1.9.B.</b> Identify income as a means of obtaining goods and services, oftentimes making choices between wants and needs.		Learning About Income
<b>TEKS.Math.1.9.C.</b> Distinguish between spending and saving.		Learning About Income
TEKS.Math.1.9.D. Consider charitable giving.		



Texas Standards	Waterford Digital Activities	Waterford Resources
Second Grade Knowledge and S	kills	
1. Mathematical Process Standards	•	
The student uses mathematical process	ses to acquire and demonstrate mathematical understar	nding. The student is expected to:
<b>TEKS.Math.2.1.A.</b> Apply mathematics to problems arising in everyday life, society, and the workplace.	<ul> <li>Song: Problem Solving</li> <li>Books: The Boonville Nine; Red Rock, River Rock; Painting By Number; Fudge For Sale</li> </ul>	
<b>TEKS.Math.2.1.B.</b> Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution.	<ul> <li>Song: Problem Solving</li> <li>Books: The Boonville Nine; Red Rock, River Rock; Painting By Number; Fudge For Sale</li> </ul>	
<b>TEKS.Math.2.1.C.</b> Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems.	<ul> <li>Song: Problem Solving</li> <li>Books: The Boonville Nine; Red Rock, River Rock</li> <li>Use Manipulatives</li> <li>Number Recognition and Sense</li> </ul>	
TEKS.Math.2.1.D. Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate.	<ul> <li>Songs: Problem Solving; Graphing</li> <li>Books: The Boonville Nine; Red Rock, River Rock; Painting By Number; Fudge For Sale</li> <li>Picture Graphs</li> <li>Bar Graphs</li> </ul>	
<b>TEKS.Math.2.1.E.</b> Create and use representations to organize, record, and communicate mathematical ideas.	<ul> <li>Song: Problem Solving</li> <li>Books: The Boonville Nine; Red Rock, River Rock; Painting By Number</li> <li>Picture Graphs</li> <li>Bar Graphs</li> <li>Greater Than, Less Than</li> </ul>	



Texas Standards	Waterford Digital Activities	Waterford Resources
<b>TEKS.Math.2.1.F.</b> Analyze mathematical relationships to connect and communicate mathematical ideas.	<ul> <li>Song: Problem Solving</li> <li>Books: The Boonville Nine; Red Rock, River Rock; Painting By Number</li> <li>Addition</li> <li>Subtraction</li> <li>Act Out Addition</li> <li>Act Out Subtraction</li> </ul>	Explaining Addition and Subtraction Strategies
<b>TEKS.Math.2.1.G.</b> Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.	<ul> <li>Song: Problem Solving</li> <li>Books: The Boonville Nine; Red Rock, River Rock; Painting By Number</li> <li>Addition</li> <li>Subtraction</li> <li>Act Out Addition</li> <li>Act Out Subtraction</li> </ul>	Explaining Addition and Subtraction Strategies

#### 2. Number and Operations.

The student applies mathematical process standards to understand how to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value.

TEKS.Math.2.2.A. Use concrete and pictorial	Place Value	Add and Subtract within 1000
models to compose and decompose	Expanded Notation	
numbers up to 1,200 in more than one way as	Classroom Playlists	
a sum of so many thousands, hundreds, tens,		
and ones.	TEKS: 2nd Grade: Number and Operations: Place Value	
TEKS.Math.2.2.B. Use standard, word, and	Place Value	Read and Write Numbers to 1000
expanded forms to represent numbers up to	Expanded Notation	
1,200.	Classroom Playlists	
	TEKS: 2nd Grade: Number and Operations: Expanded Form	

The student applies mathematical process standards to understand how to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value *continued*.



Texas Standards	Waterford Digital Activities	Waterford Resources
<b>TEKS.Math.2.2.C.</b> Generate a number that is greater than or less than a given whole number up to 1,200.	<ul> <li>Song: Greater Than, Less Than</li> <li>Greater Than, Less Than</li> <li>Number Line</li> <li>Place Value</li> <li>Number Patterns</li> <li>Number Chart</li> </ul>	Less Than, Equal To, or Greater Than
	Classroom Playlists	
	<ul> <li>TEKS: 2nd Grade: Number and Operations: Place Value</li> <li>TEKS: 2nd Grade: Number and Operations: Compare Numbers to 1,200</li> </ul>	
<b>TEKS.Math.2.2.D.</b> Use place value to compare and order whole numbers up to 1,200 using comparative language, numbers, and symbols (>, <, or =).	<ul> <li>Song: Greater Than, Less Than</li> <li>Greater Than, Less Than</li> <li>Number Line</li> <li>Place Value</li> <li>Number Patterns</li> </ul> Classroom Playlists	Less Than, Equal To, or Greater Than
	TEKS: 2nd Grade: Number and Operations: Compare Numbers Up to 1,200	
<b>TEKS.Math.2.2.E.</b> Locate the position of a given whole number on an open number line; and	Number Line	
<b>TEKS.Math.2.2.F.</b> Name the whole number that corresponds to a specific point on a number line.	Number Line	

#### 3. Number and Operations.



Texas Standards	Waterford Digital Activities	Waterford Resources
The student applies mathematical prod of a whole.	cess standards to recognize and represent fractional uni	ts and communicates how they are used to name parts
<b>TEKS.Math.TEKS.Math.2.3.A.</b> Partition objects into equal parts and name the parts, including halves, fourths, and eighths, using words.	<ul> <li>Songs: Fractions; Fractions of Regions</li> <li>Books: The Fraction Twins; Halves and Fourths and Thirds</li> <li>Fractions</li> <li>Fractions of Regions</li> <li>Fractions of Groups</li> <li>Label Parts of Fractions</li> <li>Classroom Playlists</li> <li>TEKS: 2nd Grade: Number and Operations: Fractions</li> </ul>	• Fractions
<b>TEKS.Math.2.3.B.</b> Explain that the more fractional parts used to make a whole, the smaller the part; and the fewer the fractional parts, the larger the part.	<ul> <li>Songs: Fractions; Fractions of Regions</li> <li>Books: The Fraction Twins; Halves and Fourths and Thirds</li> <li>Fractions</li> <li>Fractions of Regions</li> <li>Fractions of Groups</li> <li>Label Parts of Fractions</li> <li>Classroom Playlists</li> </ul>	• Fractions
<b>TEKS.Math.2.3.C.</b> Use concrete models to count fractional parts beyond one whole using words and recognize how many parts it takes to equal one whole.	<ul> <li>TEKS: 2nd Grade: Number and Operations: Fractions</li> <li>Songs: Fractions; Fractions of Regions</li> <li>Books: The Fraction Twins; Halves and Fourths and Thirds</li> <li>Fractions</li> <li>Fractions of Regions</li> <li>Fractions of Groups</li> <li>Label Parts of Fractions</li> <li>Classroom Playlists</li> </ul>	• Fractions
	TEKS: 2nd Grade: Number and Operations: Fractions	

of a whole continued.



Texas Standards	Waterford Digital Activities	Waterford Resources
<b>TEKS.Math.2.3.D.</b> Identify examples and non-examples of halves, fourths, and eighths.	<ul> <li>Songs: Fractions; Fractions of Regions</li> <li>Books: The Fraction Twins; Halves and Fourths and Thirds</li> <li>Fractions</li> <li>Fractions of Regions</li> <li>Fractions of Groups</li> <li>Label Parts of Fractions</li> </ul>	• Fractions
	Classroom Playlists     TEKS: 2nd Grade: Number and Operations: Fractions	
4. Number and Operations.		
The student applies mathematical prod addition and subtraction problems with	cess standards to develop and use strategies and method h efficiency and accuracy.	ds for whole number computations in order to solve
<b>TEKS.Math.2.4.A.</b> Recall basic facts to add and subtract within 20 with automaticity;	<ul> <li>Songs: Fact Families; On the Bayou; Bee Happy Addition; A Nice Addition; Bakery Subtraction; Circus Subtraction</li> <li>Addition Patterns</li> <li>Subtraction Patterns</li> <li>Mental Math</li> <li>Speed Games</li> <li>Classroom Playlists</li> <li>TEKS: 2nd Grade: Number and Operations: Add and Subtract</li> </ul>	Add and Subtract within 20

The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy *continued*.



Texas Standards	Waterford Digital Activities	Waterford Resources
<b>TEKS.Math.2.4.B.</b> Add up to four two-digit numbers and subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations.	<ul> <li>Songs: Fact Families; On the Bayou; Bee Happy Addition; A Nice Addition; Bakery Subtraction; Circus Subtraction; Finding the Difference; Doubles</li> <li>Subtraction Patterns</li> <li>Mental Math</li> <li>Place Value</li> </ul> Classroom Playlists	Adding Four 2-Digit Numbers
	<ul> <li>TEKS: 2nd Grade: Number and Operations: Place Value</li> <li>TEKS: 2nd Grade: Number and Operations: Add with Regrouping</li> <li>TEKS: 2nd Grade: Number and Operations: Subtract with Regrouping</li> </ul>	
<b>TEKS.Math.2.4.C.</b> Solve one-step and multistep word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms.	<ul> <li>Songs: Fact Families; On the Bayou; Bee Happy Addition; A Nice Addition; Bakery Subtraction; Circus Subtraction; Finding the Difference; Doubles</li> <li>Subtraction Patterns</li> <li>Mental Math Games</li> <li>Place Value</li> </ul>	One- And Two-step Word Problems within 100
	Classroom Playlists	
	TEKS: 2nd Grade: Number and Operations: Story     Problem Strategies	
<b>TEKS.Math.2.4.D.</b> Generate and solve problem situations for a given mathematical number sentence involving addition and subtraction of whole numbers within 1,000.	<ul> <li>Book: Chloe's Cracker Caper</li> <li>Missing Addends</li> <li>Missing Minuends and Subtrahends</li> <li>Mental Math Games</li> <li>Addition and Subtraction Relationship</li> </ul>	Add and Subtract within 1000
	Classroom Playlists	
	<ul> <li>TEKS: 2nd Grade: Number and Operations: Add 2- and 3-digit Numbers</li> <li>TEKS: 2nd Grade: Number and Operations: Subtract 2- and 3-digit Numbers</li> <li>TEKS: 2nd Grade: Number and Operations: Regrouping</li> </ul>	

### **5. Number and Operations.**

The student applies mathematical process standards to determine the value of coins in order to solve monetary transactions.



Texas Standards	Waterford Digital Activities	Waterford Resources
<b>TEKS.Math.2.5.A.</b> Determine the value of a collection of coins up to one dollar; and	<ul> <li>Songs: Money; Save Your Pennies</li> <li>Money</li> <li>Coin Identification</li> <li>Quarters</li> <li>Count Coins</li> <li>Count Dimes, Nickels, and Pennies</li> <li>Count Nickels and Pennies or Dimes and Pennies</li> <li>Count Quarters, Dimes, Nickels, and Pennies</li> <li>Coin Value</li> <li>Equivalent Sums of Money</li> </ul> Classroom Playlists	
<b>TEKS.Math.2.5.B.</b> Use the cent symbol, dollar sign, and the decimal point to name the value of a collection of coins.	<ul> <li>TEKS: 2nd Grade: Number and Operations: Money</li> <li>Songs: Money; Save Your Pennies</li> <li>Money</li> <li>Coin Identification</li> <li>Count Bills and Coins</li> <li>Quarters</li> <li>Count Coins</li> <li>Count Dimes, Nickels, and Pennies</li> <li>Count Nickels and Pennies or Dimes and Pennies</li> <li>Count Quarters, Dimes, Nickels, and Pennies</li> <li>Coin Value</li> <li>Equivalent Sums of Money</li> <li>Classroom Playlists</li> <li>TEKS: 2nd Grade: Number and Operations: Money</li> </ul>	Solve Money Word Problems



Texas Standards	Waterford Digital Activities	Waterford Resources
The student applies mathematical process standards to connect repeated addition and subtraction to multiplication and division situations that involve equal groupings and shares. The student is expected to:		
<b>FEKS.Math.2.6.A.</b> Model, create, and describe contextual multiplication situations in which equivalent sets of concrete objects are joined; and	<ul> <li>Song: Multiplication</li> <li>Book: Tyrannosaurus X 1</li> <li>Multiplication</li> <li>Multiply Using Arrays</li> <li>Multiply Using Repeated Addition</li> <li>Multiplication Fact Families</li> <li>Mental Math Games</li> <li>Speed Games</li> <li>Classroom Playlists</li> <li>TEKS: 2nd Grade: Number and Operations: Multiplication</li> </ul>	• Multiplication
<b>TEKS.Math.2.6.B.</b> Model, create and describe contextual division situations in which a set of concrete objects is separated into equivalent sets.	<ul> <li>Books: The Snow Project; Half for You and Half for Me</li> <li>Division</li> <li>Divide Using Repeated Subtraction</li> <li>Divide Using Equal Sharing</li> <li>Multiplication and Division Fact Families</li> </ul> Classroom Playlists	• <u>Division</u>
	TEKS: 2nd Grade: Number and Operations: Division	
7. Algebraic Reasoning.		
The student applies mathematical production describe relationships.	ess standards to identify and apply number patterns wi	thin properties of numbers and operations in order to
<b>EKS.Math.2.7.A.</b> Determine whether number up to 40 is even or odd using pairings of objects to represent the number.	<ul><li>Song: Odd Todd and Even Steven</li><li>Skip Count by 2</li><li>Addition Facts</li></ul>	Odd and Even Recognition
	Classroom Playlists     TEKS: 2nd Grade: Algebraic Reasoning: Even or Odd	

describe relationships continued.



Texas Standards	Waterford Digital Activities	Waterford Resources
TEKS.Math.2.7.B. Use an understanding of	Place Value	Mentally Adding or Subtracting 10 or 100
place value to determine the number that is	Number Patterns	
10 or 100 more or less than a given number	Number Chart	
up to 1,200.	Skip Count	
	Classroom Playlists	
	• TEKS: 2nd Grade: Algebraic Reasoning: 10 or 100 More or Less	
<b>TEKS.Math.2.7.C.</b> Represent and solve addition and subtraction word problems	<ul> <li>Songs: A Nice Addition; On the Bayou; Bee Happy Addition;</li> <li>Fact Families; Bakery Subtraction; Circus Subtraction</li> </ul>	One- and Two-step Word Problems within 100
where unknowns may be any one of the	Addition	
terms in the problem.	• Subtraction	
·	Act Out Addition	
	Act Out Subtraction	
	Subtraction Patterns	
	Missing Addends	
	Missing Subtrahends	
	Missing Minuends	
	Classroom Playlists	
	TEKS: 2nd Grade: Algebraic Reasoning: Missing Numbers	

#### 8. Geometry and Measurement.

The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties.

TEKS.Math.2.8.A. Create two-dimensional	Songs: Shapes, Shapes, Shapes; Corners and Sides	• Draw Shapes
shapes based on given attributes, including	Geoboard	
number of sides and vertices.	Tangrams	

The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties *continued*.



<ul> <li>Song: Corners and Sides</li> <li>Geoboard</li> <li>Space Shapes</li> <li>Tangrams</li> </ul> Classroom Playlists	Classifying Objects
<ul> <li>TEKS: 2nd Grade: Geometry and Measurement: Three-dimensional Shapes</li> </ul>	
<ul> <li>Song: Corners and Sides</li> <li>Classroom Playlists</li> <li>TEKS: 2nd Grade: Geometry and Measurement: Shape Attributes</li> </ul>	Classifying Objects
<ul> <li>Geoboard</li> <li>Tangrams</li> <li>Classroom Playlists</li> <li>TEKS: 2nd Grade: Geometry and Measurement:</li> </ul>	Draw Shapes
Shape Attributes  Song: Symmetry; Fractions Fractions Geoboard  Classroom Playlists TEKS: 2nd Grade: Geometry and Measurement:	
	Three-dimensional Shapes  Song: Corners and Sides  Classroom Playlists  TEKS: 2nd Grade: Geometry and Measurement: Shape Attributes  Geoboard Tangrams  Classroom Playlists  TEKS: 2nd Grade: Geometry and Measurement: Shape Attributes  Song: Symmetry; Fractions Fractions Geoboard  Classroom Playlists

#### 9. Geometry and Measurement

The student applies mathematical process standards to select and use units to describe length, area, and time.



Texas Standards	Waterford Digital Activities	Waterford Resources
<b>TEKS.Math.2.9.A.</b> Find the length of objects using concrete models for standard units of length.	<ul> <li>Book: Birds at My House</li> <li>Length</li> <li>Standard Units of Length</li> <li>Measurement Tools</li> </ul>	Measurement Tools
	TEKS: 2nd Grade: Geometry and Measurement:     Measure Length	
<b>TEKS.Math.2.9.B.</b> Describe the inverse relationship between the size of the unit and the number of units needed to equal the length of an object.	<ul><li>Length</li><li>Standard Units of Length</li><li>Measurement Tools</li><li>Nonstandard Units of Length</li></ul>	Measuring the Same Object Two Ways
	Classroom Playlists     TEKS: 2nd Grade: Geometry and Measurement:     Measure Length	
<b>TEKS.Math.2.9.C.</b> Represent whole numbers as distances from any given location on a number line.	<ul><li>Number Line</li><li>Addition</li><li>Subtraction</li></ul>	Generating Measurement Data
	• TEKS: 2nd Grade: Geometry and Measurement: Number Line	
<b>TEKS.Math.2.9.D.</b> Determine the length of an object to the nearest marked unit using rulers, yardsticks, meter sticks, or measuring	<ul><li>Length</li><li>Standard Units of Length</li><li>Measurement Tools</li></ul>	Measurement Tools
tapes.	Classroom Playlists     TEKS: 2nd Grade: Geometry and Measurement:     Measure Length	

The student applies mathematical process standards to select and use units to describe length, area, and time continued.



Texas Standards	Waterford Digital Activities	Waterford Resources
<b>TEKS.Math.2.9.E.</b> Determine a solution to a problem involving length, including estimating lengths.	<ul><li>Length</li><li>Standard Units of Length</li><li>Measurement Tools</li></ul>	Estimating Lengths
	<ul><li>Classroom Playlists</li><li>TEKS: 2nd Grade: Geometry and Measurement: Measure Length</li></ul>	
<b>TEKS.Math.2.9.F.</b> Use concrete models of square units to find the area of a rectangle by covering it with no gaps or overlaps, counting to find the total number of square units, and describing the measurement using a number and the unit.	• TEKS: 2nd Grade: Geometry and Measurement: Perimeter	Measurement: Length, Width & Height
<b>TEKS.Math.2.9.G.</b> Read and write time to the nearest one-minute increment using analog and digital clocks and distinguish between 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> <li>Tell Time to the Half-hour</li> </ul>	Tell and Write Time
	Classroom Playlists TEKS: 2nd Grade: Geometry and Measurement: Time	
10. Data Analysis.	TERO. 21th Grade. Geometry and Measurement. Time	
The student applies mathematical prod	ess standards to organize data to make it useful for inte	rpreting information and solving problems.
<b>TEKS.Math.2.10.A.</b> Explain that the length of a bar in a bar graph or the number of pictures in a pictograph represents the number of data points for a given category.	<ul> <li>Song: Graphing</li> <li>Bar Graphs</li> <li>Picture Graphs</li> <li>Graphing</li> </ul> Classroom Playlists	• Graphs
	TEKS: 2nd Grade: Data Analysis: Graphs	

The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems continued.



Texas Standards	Waterford Digital Activities	Waterford Resources
<b>TEKS.Math.2.10.B.</b> Organize a collection of data with up to four categories using pictographs and bar graphs with intervals of one or more.	<ul><li>Song: Graphing</li><li>Bar Graphs</li><li>Picture Graphs</li><li>Graphing</li></ul>	• <u>Graphs</u>
	<u>Classroom Playlists</u>	
	TEKS: 2nd Grade: Data Analysis: Graphs	
<b>TEKS.Math.2.10.C.</b> Write and solve onestep word problems involving addition or subtraction using data represented within pictographs and bar graphs with intervals of one.	<ul><li>Song: Graphing</li><li>Bar Graphs</li><li>Picture Graphs</li><li>Graphing</li><li>Addition</li><li>Subtraction</li></ul>	• <u>Graphs</u>
	Classroom Playlists	
	TEKS: 2nd Grade: Data Analysis: Graphs	
<b>TEKS.Math.2.10.D.</b> Draw conclusions and make predictions from information in a graph.	<ul><li>Song: Graphing</li><li>Bar Graphs</li><li>Picture Graphs</li><li>Graphing</li></ul>	• Graphs
	Classroom Playlists	
	TEKS: 2nd Grade: Data Analysis: Graphs	
11. Personal Financial Literacy.		
The student applies mathematical pro-	cess standards to manage one's financial resources e	effectively for lifetime financial security.
<b>TEKS.Math.2.11.A.</b> Calculate how money saved can accumulate into a larger amount over time.	Song: Save Your Pennies	
<b>TEKS.Math.2.11.B.</b> Explain that saving is an alternative to spending.	Song: Save Your Pennies	
<b>TEKS.Math.2.11.C.</b> Distinguish between a deposit and a withdrawal.		
The student applies mathematical pro-	cess standards to manage one's financial resources e	effectively for lifetime financial security continued.



Texas Standards	Waterford Digital Activities	Waterford Resources
<b>TEKS.Math.2.11.D.</b> Identify examples of borrowing and distinguish between responsible and irresponsible borrowing.		
<b>TEKS.Math.2.11.E.</b> Identify examples of lending and use concepts of benefits and costs to evaluate lending decisions.		
<b>TEKS.Math.2.11.F.</b> Differentiate between producers and consumers and calculate the cost to produce a simple item.		

### **SCIENCE**

### Kindergarten

### **Knowledge and Skills**

(1) Scientific and engineering practices. The student asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to:

<b>TEKS.Science.K.1.A</b> ask questions and define problems based on observations or information from text, phenomena, models, or investigations.	<ul> <li>Song: Inventing</li> <li>Books: Inventions All Around; I Want to Be a Scientist Like Wilbur and Orville Wright</li> <li>Inventions</li> </ul>	Simple Machines
<b>TEKS.Science.K.1.B</b> use scientific practices to plan and conduct simple descriptive investigations and use engineering practices to design solutions to problems.	<ul> <li>Song: Inventing</li> <li>Books: Inventions All Around; I Want to Be a Scientist Like Wilbur and Orville Wright</li> <li>Inventions</li> </ul>	Simple Machines
<b>TEKS.Science.K.1.C</b> identify, describe, and demonstrate safe practices during classroom and field investigations as outlined in Texas Education Agency-approved safety standards.	<ul><li>Songs: Storms; Sun Blues</li><li>Lightning Safety</li><li>Science Investigation</li></ul>	<ul> <li>Emergency Preparedness for Kids</li> <li>Fire Safety Activity for Kids</li> <li>Thunder and Lightning</li> <li>Smell Labels (Safe Smelling)</li> <li>Good Playing Rules Rebus</li> </ul>



Texas Standards	Waterford Digital Activities	Waterford Resources
	The student asks questions, identifies problems, and places, explain phenomena, or design solutions using appropr	
TEKS.Science.K.1.D use tools, including hand lenses, goggles, trays, cups, bowls, sieves or sifters, notebooks, terrariums, aquariums, samples (rocks, sand, soil, loam, gravel, clay, seeds, and plants), windsock, demonstration thermometer, rain gauge, straws, ribbons, non-standard measuring items, blocks or cubes, tuning fork, various flashlights, small paper cups, items that roll, noise makers, hot plate, opaque objects, transparent objects, foil pie pans, foil muffin cups, wax paper, Sun-Moon-Earth model, and plant life cycle model to observe, measure, test, and compare.	<ul> <li>Songs: The Scientific Method; Precipitation</li> <li>Science Investigation</li> <li>Science Tools</li> <li>Measurement Tools</li> <li>Weather Tools</li> <li>Sun, Moon, and Stars</li> <li>Plant Life Cycle and Growth</li> <li>Animal Life Cycle and Growth</li> <li>Science Observation: From Egg to Chick</li> </ul>	<ul> <li>Water for Plants</li> <li>The Moon</li> <li>Light for Plants</li> <li>Rocks</li> <li>Evaporation</li> <li>Our Earth</li> <li>The Sky Above Us</li> <li>Places on Earth</li> <li>Butterfly Life Cycle</li> <li>Frog Life Cycle</li> <li>Amphibians</li> <li>Metamorphosis</li> </ul>
<b>TEKS.Science.K.1.E</b> collect observations and measurements as evidence.	<ul><li>Water</li><li>Fossils</li><li>Science Observation: From Egg to Chick</li><li>Calendar/Graph Weather</li></ul>	
<b>TEKS.Science.K.1.F</b> record and organize data using pictures, numbers, words, symbols, and simple graphs.	<ul> <li>Song: Graphing</li> <li>Graphs</li> <li>Picture Graphs</li> <li>Bar Graphs</li> <li>Calendar/Graph Weather</li> <li>Science Observation: From Egg to Chick</li> </ul>	
<b>TEKS.Science.K.1.G</b> develop and use models to represent phenomena, objects, and processes or design a prototype for a solution to a problem.	<ul> <li>Song: Inventing</li> <li>Books: I Want to Be a Scientist Like Wilbur and Orville Wright; Inventions All Around</li> <li>Water Cycle</li> <li>Experiments: Air; Density; Sound; Buoyancy; Pollution</li> <li>Inventions</li> </ul>	



Texas Standards	Waterford Digital Activities	Waterford Resources
	s. The student analyzes and interprets data to derive mea evidence-based arguments or evaluate designs. The stu	
<b>TEKS.Science.K.2.A</b> identify basic advantages and limitations of models such as their size, properties, and materials.	<ul> <li>Song: Inventing</li> <li>Books: I Want to Be a Scientist Like Wilbur and Orville Wright; Inventions All Around</li> <li>Inventions</li> </ul>	
<b>TEKS.Science.K.2.B</b> analyze data by identifying significant features and patterns.	<ul> <li>Book: Moon Song</li> <li>Moon Patterns</li> <li>Calendar/Graph Weather</li> <li>Weather Patterns</li> <li>Sun, Moon, and Earth</li> </ul>	
<b>TEKS.Science.K.2.C</b> use mathematical concepts to compare two objects with common attributes.	<ul> <li>Song: Big Small</li> <li>Water Sources</li> <li>Big and Little</li> <li>Tall and Short</li> <li>Heavy and Light</li> <li>Large Small Toys</li> <li>Big Little Animals</li> </ul>	
<b>TEKS.Science.K.2.D</b> evaluate a design or object using criteria to determine if it works as intended.	<ul> <li>Song: Inventing</li> <li>Books: I Want to Be a Scientist Like Wilbur and Orville Wright; Inventions All Around</li> <li>Inventions</li> </ul>	
(3) Scientific and enlgineering practice solutions. The student is expected to:	s. The student develops evidence-based explanations an	d communicates findings, conclusions, and proposed
<b>TEKS.Science.K.3.A</b> develop explanations and propose solutions supported by data and models.	<ul> <li>Books: How Did the Chicken Cross the Road?; Inventions All Around</li> <li>Simple Machines</li> </ul>	Simple Machines     How It Works
<b>TEKS.Science.K.3.B</b> communicate explanations and solutions individually and collaboratively in a variety of settings and formats.	<ul><li>Song: The Scientific Method</li><li>Science Investigation</li></ul>	Speaking to Express Ideas
<b>TEKS.Science.K.3.C</b> listen actively to others' explanations to identify important evidence and engage respectfully in scientific discussion.	<ul><li>Song: The Scientific Method</li><li>Science Investigation</li></ul>	Speaking and Listening



Texas Standards	Waterford Digital Activities	Waterford Resources
(4) Scientific and engineering practices innovation on society. The student is ex	s. The student knows the contributions of scientists and repected to:	recognizes the importance of scientific research and
<b>TEKS.Science.K.4.A</b> explain how science or an innovation can help others.	Book: Inventions All Around     Simple Machines	• Simple Machines • How It Works
<b>TEKS.Science.K.4.B</b> identify scientists and engineers such as Isaac Newton, Mae Jemison, and Ynes Mexia and explore what different scientists and engineers do.	<ul> <li>Books: I Want to Be a Scientist Like: Jane Goodall; George Washington Carver; Wilbur and Orville Wright; Antoni van Leeuwenhoek; Alexander von Humboldt; Joanne Simpson; Thomas Edison; Louis Pasteur; Marie Curie; Stephen Hawking; Isaac Newton</li> </ul>	Defying Gravity: The Story of Mae Jemison
(5) Recurring themes and concepts. The expected to:	e student uses recurring themes and concepts to make o	connections across disciplines. The student is
<b>TEKS.Science.K.5.A</b> identify and use patterns to describe phenomena or design solutions.	<ul> <li>Song: Seasons</li> <li>Books: Moon Song; The Four Seasons; That's What I Like: A Book About Seasons</li> <li>Moon Patterns</li> <li>Calendar/Graph Weather</li> <li>Weather Patterns</li> <li>Sun, Moon, and Earth</li> </ul>	
<b>TEKS.Science.K.5.B</b> investigate and predict cause-and-effect relationships in science.	<ul> <li>Song: Seasons</li> <li>Books: The Four Seasons; That's What I Like: A Book About Seasons</li> <li>Calendar/Graph Weather</li> <li>Sun, Moon, and Earth</li> <li>Plants Need Water</li> <li>Healthy Plants' Needs</li> <li>Food Chains</li> <li>Care of Earth</li> </ul>	<ul> <li>Evaporation</li> <li>Light for Plants</li> <li>Water for Plants</li> </ul>
<b>TEKS.Science.K.5.C</b> describe the properties of objects in terms of relative size (scale) and relative quantity.	<ul> <li>Song: Savanna Size</li> <li>Big and Little</li> <li>Large Small Toys</li> <li>Tall and Short</li> <li>Heavy and Light</li> <li>More than, Fewer than</li> </ul>	• <u>Dinosaur Size</u>



Texas Standards	Waterford Digital Activities	Waterford Resources	
(5) Recurring themes and concepts. The expected to continued:	(5) Recurring themes and concepts. The student uses recurring themes and concepts to make connections across disciplines. The student is expected to continued:		
<b>TEKS.Science.K.5.D</b> examine the parts of a whole to define or model a system.	<ul><li>Edible Plant Parts</li><li>Food Chains</li><li>Functions of Plant Parts</li></ul>	<ul> <li>Plant Parts</li> <li>Body Part Cards</li> <li>Insect Parts Poster</li> </ul>	
<b>TEKS.Science.K.5.E</b> identify forms of energy and properties of matter.	<ul> <li>Songs: Matter; Precipitation; Solid or Liquid</li> <li>Book: Pancakes Matter</li> <li>Sun</li> <li>Matter</li> <li>Solid and Liquid</li> <li>Solid, Liquid, Gas</li> <li>States of Water</li> <li>Heat Changes Water</li> </ul>	<ul> <li>Temperature and Melting</li> <li>Solids, Liquids, and Gases</li> <li>Solid and Liquid</li> <li>States of Water</li> <li>How It Works</li> </ul>	
<b>TEKS.Science.K.5.F</b> describe the relationship between the structure and function of objects, organisms, and systems.	<ul><li>Animal Groups</li><li>Teeth</li><li>Functions of Plant Parts</li></ul>		
<b>TEKS.Science.K.5.G</b> describe how factors or conditions can cause objects, organisms, and systems to either change or stay the same.	<ul> <li>Song: Seasons</li> <li>Book: That's What I Like: A Book About Seasons</li> <li>Weather</li> <li>Spring</li> <li>Summer</li> <li>Fall</li> <li>Winter</li> <li>Animal Behavior</li> <li>Animal Bodies</li> <li>Animal Adaptations and Human Tools</li> </ul>	Animals     How Animals Survive	



Texas Standards	Waterford Digital Activities	Waterford Resources
(6)Matter and It's properties. The student knows that objects hae physical properties and determine how they are described and classified. The student is expected to:		
<b>TEKS.Science.K.6.identify</b> and record observable physical properties of objects, including shape, color, texture, and material, and generate ways to classify objects.	<ul> <li>Songs: Marmot Shapes; Shapes, Shapes, Shapes; All Sorts of Laundry; Squirrel's Zoo Colors</li> <li>Book: Buttons, Buttons</li> <li>Sort</li> <li>Touch</li> <li>Sight</li> <li>Materials</li> </ul>	• Texture Sort
(7) Force, motion, and energy The stude	ent knows that forces cause changes in motion and posi	ition in everyday life.
<b>TEKS.Science.K.7</b> describe and predict how a magnet interacts with various materials and how magnets can be used to push or pull.	Magnets     Materials	How It Works
(8) Force, motion, and energy. The stud	ent knows that energy is everywhere and can be observ	ved in everyday life. The student is expected to:
<b>TEKS.Science.K.8.A</b> communicate the idea that objects can only be seen when a light source is present and compare the effects of different amounts of light on the appearance of objects; and	<ul> <li>Books: My Family Campout; Lightning Bugs</li> <li>Light Properties</li> <li>Properties of Light</li> <li>Classroom Playlists</li> <li>TEKS: K: Force, Motion, and Energy: Light</li> </ul>	• Light Sources
<b>TEKS.Science.K.8.B</b> demonstrate and explain that light travels through some objects and is blocked by other objects, creating shadows.	<ul><li>Books: My Family Campout; Lightning Bugs</li><li>Light Properties</li><li>Properties of Light</li></ul>	
	Classroom Playlists	
	TEKS: K: Force, Motion, and Energy: Light	



Texas Standards	Waterford Digital Activities	Waterford Resources
(9) Earth and space. The student know expected to:	s that there are recognizable patterns in the natural wor	ld and among objects in the sky. The student is
TEKS.Science.K.9.A identify, describe, and predict the patterns of day and night and their observable characteristics; and  TEKS.Science.K.9.B observe, describe, and illustrate the Sun, Moon, stars, and objects in the sky such as clouds.	<ul> <li>Sun, Moon, and Earth</li> <li>Classroom Playlists</li> <li>TEKS: K: Earth and Space: Day and Night</li> <li>Songs: The Moon; Sun Blues</li> <li>Books: Star Pictures; What Is a Cloud?; Moon Song</li> <li>Sun</li> <li>Moon</li> <li>Constellations</li> </ul>	<ul> <li>The Sky Above Us</li> <li>The Moon</li> <li>Sun, Moon, and Earth</li> </ul>
(10) Earth and space. The student know to:	<ul> <li>Clouds</li> <li>Astronomy</li> <li>Classroom Playlists</li> <li>TEKS: K: Earth and Space: Sun, Moon, Stars</li> </ul> vs that the natural world includes earth materials and sy	stems that can be observed. The student is expected
<b>TEKS.Science.K.10.A</b> describe and classify rocks by the observable properties of size, shape, color, and texture;	<ul> <li>Song: Rock Cycle</li> <li>Book: Red Rock, River Rock</li> <li>Rock Cycle</li> <li>Classroom Playlists</li> <li>TEKS: K: Earth and Space: Rocks</li> </ul>	• Rocks
<b>TEKS.Science.K.10.B</b> observe and describe weather changes from day to day and over seasons; and	<ul> <li>Songs: The Four Seasons; Precipitation</li> <li>Books: That's What I Like: A Book About Seasons; Whatever the Weather</li> <li>Weather Patterns</li> <li>Calendar/Graph Weather</li> <li>Spring</li> <li>Summer</li> <li>Fall</li> <li>Winter</li> </ul>	<ul> <li>Weather</li> <li>The Weather Around Us</li> <li>Weather Cards</li> </ul>



Texas Standards	Waterford Digital Activities	Waterford Resources
(10) Earth and space. The student know to continued:	s that the natural world includes earth materials and sy	stems that can be observed. The student is expected
<b>TEKS.Science.K.10.C</b> identify evidence that supports the idea that air is all around us and demonstrate that wind is moving air using items such as a windsock, pinwheel, or	<ul> <li>Book: Can You Guess? A Story for Two Voices</li> <li>Air</li> <li>Air Uses</li> <li>Air Experiment</li> </ul>	Taking Care of Our Air     Air Movement
ribbon.	Classroom Playlists	
	TEKS: K: Earth and Space: Air Everywhere	
(11) Earth and space. The student know	s that earth materials are important to everyday life.	
<b>TEKS.Science.K.11</b> observe and generate examples of practical uses for rocks, soil, and water.	<ul> <li>Songs: Rock Cycle; Water Cycle</li> <li>Book: Red Rock, River Rock</li> <li>Natural Resources</li> <li>Rocks</li> <li>Rock Cycle</li> <li>Soil</li> <li>Care of Water</li> <li>States of Water</li> <li>Water Uses</li> </ul>	<ul> <li>Rocks</li> <li>Cleaning Solution</li> <li>Where Does Soil Come From?</li> </ul>
	Classroom Playlists	
	TEKS: K: Earth and Space: Cycles	
(12) Organisms and environments. The student is expected to:	student knows that plants and animals depend on the e	nvironment to meet their basic needs for survival. The
<b>TEKS.Science.K.12.Aobserve</b> and identify the dependence of plants on air, sunlight, water, nutrients in the soil, and space to grow; and	<ul> <li>Books: A Seed Grows; The Watermelon Seed</li> <li>Plants</li> <li>Plants Need Water</li> <li>Healthy Plants' Needs</li> <li>Plants and Animals Need Air</li> <li>Sun</li> <li>Plants and Animals</li> </ul>	Water for Plants
	Classroom Playlists	
	TEKS: K: Organisms and Environments: Plants	



Texas Standards	Waterford Digital Activities	Waterford Resources
	student knows that organisms resemble their parents arenvironments. The student is expected to continued:	nd have structures and undergo processes that help
<b>TEKS.Science.K.12.B</b> observe and identify the dependence of animals on air, water, food, space, and shelter.	<ul> <li>Book: Everybody Needs to Eat</li> <li>Food From Plants</li> <li>Animals Need Water</li> <li>Plants and Animals Need Air</li> <li>Herbivores, Carnivores, and Omnivores</li> <li>Plants and Animals</li> </ul>	Animals Need Water
	Classroom Playlists	
	TEKS: K: Organisms and Environments: Animal Survival	
<b>TEKS.Science.K.13.A</b> identify the structures of plants, including roots, stems, leaves, flowers, and fruits;	<ul> <li>Song: Plants Are Growing</li> <li>Books: Follow the Apples; A Seed Grows; The Old Maple Tree</li> <li>Plants</li> <li>Functions of Plant Parts</li> </ul>	
	Classroom Playlists	
	TEKS: K: Organisms and Environments: Plant Structure	
<b>TEKS.Science.K.13.B</b> identify the different structures that animals have that allow them to interact with their environment such as seeing, hearing, moving, and grasping objects;	<ul> <li>Book: Animal Bodies</li> <li>Animal Bodies</li> <li>Animal Tracks</li> <li>Animal Behavior</li> <li>Animal Adaptations and Human Tools</li> </ul>	
	Classroom Playlists	
	TEKS: K: Organisms and Environments: Animal Bodies	



Texas Standards	Waterford Digital Activities	Waterford Resources
	student knows that organisms resemble their parents a environments. The student is expected to continued:	nd have structures and undergo processes that help
<b>TEKS.Science.K.13.C</b> identify and record the changes from seed, seedling, plant, flower, and fruit in a simple plant life cycle.	<ul> <li>Song: Plants Are Growing</li> <li>Books: A Seed Grows; The Old Maple Tree</li> <li>Plants</li> <li>Plant Life Cycle and Growth</li> <li>Plant Experiment</li> </ul>	<ul> <li>The Plant Life Cycle</li> <li>Water for Plants</li> <li>Light for Plants</li> </ul>
	Classroom Playlists	
<b>TEKS.Science.K.13.D</b> identify ways that young plants resemble the parent plant.	<ul> <li>TEKS: K: Organisms and Environments: Plant Life Cycle</li> <li>Book: A Seed Grows</li> <li>Plant Life Cycle and Growth</li> </ul>	The Plant Life Cycle
	Classroom Playlists	
	TEKS: K: Organisms and Environments: Plant Life Cycle	
Grade 1		
Knowledge and Skills		
	. The student asks questions, identifies problems, and p s, explain phenomena, or design solutions using approp	
<b>TEKS.Science.1.1.A</b> ask questions and define problems based on observations or information from text, phenomena, models, or investigations.	<ul> <li>Song: Inventing</li> <li>Books: Inventions All Around; I Want to Be a Scientist Like Wilbur and Orville Wright</li> <li>Inventions</li> </ul>	Recycling     Simple Machines
<b>TEKS.Science.1.1.B</b> use scientific practices to plan and conduct simple descriptive investigations and use engineering practices to design solutions to problems.	<ul> <li>Song: Inventing</li> <li>Books: Inventions All Around; How Did the Chicken Cross the Road?</li> <li>Inventions</li> <li>Simple Machines</li> </ul>	<ul> <li>Water for Plants</li> <li>Sound</li> <li>Recycling</li> <li>Traits</li> <li>Light for Plants</li> <li>Evaporation</li> </ul>



Texas Standards	Waterford Digital Activities	Waterford Resources
(1) Scientific and engineering practices. The student asks questions, identifies problems, and plans and safely conducts classroom, laboratory, and field investigations to answer questions, explain phenomena, or design solutions using appropriate tools and models. The student is expected to continued:		
<b>TEKS.Science.1.1.C</b> identify, describe, and demonstrate safe practices during classroom and field investigations as outlined in Texas Education Agency-approved safety standards.	<ul><li>Songs: Storms; Sun Blues</li><li>Lightning Safety</li><li>Science Investigation</li></ul>	<ul> <li>Emergency Preparedness for Kids</li> <li>Fire Safety Activity for Kids</li> <li>Thunder and Lightning</li> <li>Smell Labels (Safe Smelling)</li> <li>Good Playing Rules Rebus</li> </ul>
TEKS.Science.1.1.D use tools, including hand lenses, goggles, heat-resistant gloves, trays, cups, bowls, beakers, sieves/sifters, tweezers, primary balance, notebooks, terrariums, aquariums, stream tables, soil samples (loam, sand, gravel, rocks, and clay), seeds, plants, windsock, pinwheel, student thermometer, demonstration thermometer, rain gauge, straws, ribbons, non-standard measuring items, flashlights, sandpaper, wax paper, items that are magnetic, non-magnetic items, a variety of magnets, hot plate, aluminum foil, Sun-Moon-Earth model, and plant and animal life cycle models to observe, measure, test, and compare.	<ul> <li>Songs: The Scientific Method; Precipitation</li> <li>Science Investigation</li> <li>Science Tools</li> <li>Measurement Tools</li> <li>Weather Tools</li> <li>Sun, Moon, and Stars</li> <li>Plant Life Cycle and Growth</li> <li>Animal Life Cycle and Growth</li> <li>Science Observation: From Egg to Chick</li> </ul>	<ul> <li>Water for Plants</li> <li>The Moon</li> <li>Light for Plants</li> <li>Rocks</li> <li>Simple Machines</li> <li>Evaporation</li> <li>Weather</li> <li>The Weather Around Us</li> <li>How It Works</li> <li>Our Earth</li> <li>The Sky Above Us</li> <li>Places on Earth</li> <li>Butterfly Life Cycle</li> <li>Frog Life Cycle</li> </ul>
<b>TEKS.Science.1.1.E</b> collect observations and measurements as evidence.	<ul><li>Fossils</li><li>Science Observation: From Egg to Chick</li><li>Calendar/Graph Weather</li></ul>	
<b>TEKS.Science.1.1.F</b> record and organize data using pictures, numbers, words, symbols, and simple graphs.	<ul> <li>Song: Graphing</li> <li>Graphs</li> <li>Picture Graphs</li> <li>Bar Graphs</li> <li>Calendar/Graph Weather</li> <li>Science Observation: From Egg to Chick</li> </ul>	



Texas Standards	Waterford Digital Activities	Waterford Resources
	. The student asks questions, identifies problems, and pl s, explain phenomena, or design solutions using appropr	
<b>TEKS.Science.1.1.G</b> develop and use models to represent phenomena, objects, and processes or design a prototype for a solution to a problem.	<ul> <li>Song: Inventing</li> <li>Books: I Want to Be a Scientist Like Wilbur and Orville Wright; Inventions All Around</li> <li>Water Cycle</li> <li>Experiments: Air; Density; Sound; Buoyancy; Pollution</li> <li>Inventions</li> </ul>	
	to the student analyzes and interprets data to derive meas evidence-based arguments or evaluate designs. The stu	
<b>TEKS.Science.1.2.A</b> identify basic advantages and limitations of models such as their size, properties, and materials.	<ul> <li>Song: Inventing</li> <li>Books: I Want to Be a Scientist Like Wilbur and Orville Wright; Inventions All Around</li> <li>Inventions</li> </ul>	
<b>TEKS.Science.1.2.B</b> analyze data by identifying significant features and patterns.	<ul> <li>Moon Patterns</li> <li>Calendar/Graph Weather</li> <li>Weather Patterns</li> <li>Sun, Moon, and Earth</li> </ul>	
<b>TEKS.Science.1.2.C</b> use mathematical concepts to compare two objects with common attributes.	<ul> <li>Song: Big Small</li> <li>Big and Little</li> <li>Tall and Short</li> <li>Heavy and Light</li> <li>Large Small Toys</li> <li>Big Little Animals</li> </ul>	
<b>TEKS.Science.1.2.D</b> evaluate a design or object using criteria to determine if it works as intended.	<ul> <li>Song: Inventing</li> <li>Books: I Want to Be a Scientist Like Wilbur and Orville Wright; Inventions All Around</li> <li>Inventions</li> </ul>	



Texas Standards	Waterford Digital Activities	Waterford Resources
(3) Scientific and engineering practices solutions. The student is expected to:	s. The student develops evidence-based explanations and	d communicates findings, conclusions, and proposed
<b>TEKS.Science.1.3.A</b> develop explanations and propose solutions supported by data and models.	<ul> <li>Books: How Did the Chicken Cross the Road?; Inventions         All Around</li> <li>Simple Machines</li> </ul>	Simple Machines     How It Works
<b>TEKS.Science.1.3.B</b> communicate explanations and solutions individually and collaboratively in a variety of settings and formats.	<ul><li>Song: The Scientific Method</li><li>Science Investigation</li></ul>	
<b>TEKS.Science.1.3.C</b> listen actively to others' explanations to identify important evidence and engage respectfully in scientific discussion.	<ul><li>Song: The Scientific Method</li><li>Science Investigation</li></ul>	Speaking and Listening
(4) Scientific and engineering practices innovation for society. The student is ex	s. The student knows the contributions of scientists and expected to:	recognizes the importance of scientific research and
<b>TEKS.Science.1.4.A</b> explain how science or an innovation can help others.	Book: Inventions All Around     Simple Machines	• Simple Machines • How It Works
<b>TEKS.Science.1.4.B</b> identify scientists and engineers such as Katherine Johnson, Sally Ride, and Ernest Just and explore what different scientists and engineers do.	Books: I Want to Be a Scientist Like: Jane Goodall; George Washington Carver; Wilbur and Orville Wright; Antoni van Leeuwenhoek; Alexander von Humboldt; Joanne Simpson; Thomas Edison; Louis Pasteur; Marie Curie; Stephen Hawking; Isaac Newton	
(5) Recurring themes and concepts. The expected to:	e student uses recurring themes and concepts to make o	connections across disciplines. The student is
<b>TEKS.Science.1.5.A</b> identify and use patterns to describe phenomena or design solutions.	<ul> <li>Song: Seasons</li> <li>Books: Moon Song; The Four Seasons; That's What I Like: A Book About Seasons</li> <li>Moon Patterns</li> <li>Calendar/Graph Weather</li> <li>Weather Patterns</li> </ul>	
	Sun, Moon, and Earth	



Texas Standards	Waterford Digital Activities	Waterford Resources
(5) Recurring themes and concepts. The expected to continued:	e student uses recurring themes and concepts to make	connections across disciplines. The student is
<b>TEKS.Science.1.5.B</b> investigate and predict cause-and-effect relationships in science;	<ul> <li>Song: Seasons</li> <li>Books: The Four Seasons; That's What I Like: A Book About Seasons</li> <li>Calendar/Graph Weather</li> <li>Sun, Moon, and Earth</li> <li>Plants Need Water</li> <li>Healthy Plants' Needs</li> <li>Food Chains</li> </ul>	<ul> <li>Evaporation</li> <li>Light for Plants</li> <li>Water for Plants</li> </ul>
<b>TEKS.Science.1.5.C</b> describe the properties of objects in terms of relative size (scale) and relative quantity;	<ul> <li>Song: Savanna Size</li> <li>Big and Little</li> <li>Large Small Toys</li> <li>Tall and Short</li> <li>Heavy and Light</li> <li>More than, Fewer than</li> </ul>	Dinosaur Size
<b>TEKS.Science.1.5.D</b> examine the parts of a whole to define or model a system.	<ul><li>Edible Plant Parts</li><li>Food Chains</li><li>Functions of Plant Parts</li></ul>	Plant Parts     Body Part Cards     Insect Parts Poster
<b>TEKS.Science.1.5.E</b> identify forms of energy and properties of matter.	<ul> <li>Songs: Matter; Precipitation; Solid or Liquid</li> <li>Book: Pancakes Matter</li> <li>Sun</li> <li>Matter</li> <li>Solid and Liquid</li> <li>Solid, Liquid, Gas</li> <li>States of Water</li> <li>Heat Changes Water</li> </ul>	<ul> <li>Temperature and Melting</li> <li>Solids, Liquids, and Gases</li> <li>Solid and Liquid</li> <li>States of Water</li> </ul>
<b>TEKS.Science.1.5.F</b> describe the relationship between structure and function of objects, organisms, and systems.	<ul><li>Animal Groups</li><li>Teeth</li><li>Functions of Plant Parts</li></ul>	



Texas Standards	Waterford Digital Activities	Waterford Resources
(5) Recurring themes and concepts. The expected to continued:	e student uses recurring themes and concepts to make	connections across disciplines. The student is
<b>TEKS.Science.1.5.G</b> describe how factors or conditions can cause objects, organisms, and systems to either change or stay the same.	<ul> <li>Song: Seasons</li> <li>Book: That's What I Like: A Book About Seasons</li> <li>Weather</li> <li>Spring</li> <li>Summer</li> <li>Fall</li> <li>Winter</li> <li>Animal Behavior</li> <li>Animal Bodies</li> <li>Animal Adaptations and Human Tools</li> </ul>	Animals     How Animals Survive
(6) Matter and its properties. The stude student is expected to:	nt knows that objects have physical properties that dete	ermine how they are described and classified. The
<b>TEKS.Science.1.6.A</b> classify objects by observable physical properties, including, shape, color, and texture, and attributes such as larger and smaller and heavier and lighter.	<ul> <li>Songs: Marmot Shapes; Shapes, Shapes; All Sorts of Laundry; Squirrel's Zoo Colors</li> <li>Book: Buttons, Buttons</li> <li>Sort</li> <li>Touch</li> <li>Sight</li> <li>Materials</li> </ul>	• Texture Sort
	TEKS: 1st Grade: Matter: Classify	
<b>TEKS.Science.1.6.B</b> explain and predict changes in materials caused by heating and cooling.	<ul><li>Books: Warm Soup for Dedushka; Pancakes Matter</li><li>Changes in Matter</li><li>Movement of Heat</li></ul>	
	Classroom Playlists  TEKS: 1st Grade: Matter: Changes in Matter	
<b>TEKS.Science.1.6.C</b> demonstrate and explain that a whole object is a system made of organized parts such as a toy that can be taken apart and put back together.	<ul> <li>Books: I Want to Be a Scientist Like Wilbur and Orville Wright; Inventions All Around</li> <li>Geoboard</li> <li>Tangrams</li> </ul>	



Texas Standards	Waterford Digital Activities	Waterford Resources
(7) Force, motion, and energy. The stud	ent knows that forces cause changes in motion and pos	ition in everyday life. The student is expected to:
<b>TEKS.Science.1.7.A</b> explain how pushes and pulls can start, stop, or change the speed or direction of an object's motion.	<ul><li>Song: Push and Pull</li><li>Book: Mr. Mario's Neighborhood</li><li>Push and Pull</li></ul>	How It Works
	Classroom Playlists	
	TEKS: Force, Motion, and Energy: Push and Pull	
TEKS.Science.1.7.B plan and conduct a descriptive investigation that predicts how pushes and pulls can start, stop, or change the speed or direction of an object's motion.	<ul> <li>Song: Push and Pull</li> <li>Book: Mr. Mario's Neighborhood</li> <li>Push and Pull</li> </ul>	How It Works
	Classroom Playlists	
	TEKS: Force, Motion, and Energy: Push and Pull	
(8) Force, motion, and energy. The stud	ent knows that energy is everywhere and can be observ	ed in everyday life. The student is expected to:
<b>TEKS.Science.1.8.A</b> investigate and describe applications of heat in everyday life such as cooking food or using a clothes dryer.	<ul> <li>Book: Warm Soup for Dedushka</li> <li>Heat Sources and Uses</li> <li>Heat Movement</li> <li>Movement of Heat</li> <li>Heat Experiment</li> </ul>	
	Classroom Playlists	
	TEKS: 1st Grade: Force, Motion, and Energy: Heat	
<b>TEKS.Science.1.8.B</b> describe how some changes caused by heat may be reversed such as melting butter and other changes cannot be reversed such as cooking an egg or baking a cake.	<ul> <li>Songs: Matter; Precipitation</li> <li>Book: Pancakes Matter</li> <li>Heat</li> <li>Heat Changes Water</li> <li>Changes in Matter</li> </ul>	Temperature and Melting
	Classroom Playlists	
	<ul> <li>TEKS: 1st Grade: Force, Motion, and Energy: Heat Changes Matter</li> </ul>	



Texas Standards	Waterford Digital Activities	Waterford Resources
(9) Earth and Space. The student knows	s that the natural world has recognizable patterns. The s	tudent is expected to:
<b>TEKS.Science.1.9</b> describe and predict the patterns of seasons of the year such as order of occurrence and changes in nature.	<ul> <li>Song: Seasons</li> <li>Book: That's What I Like: A Book About Seasons</li> <li>Spring</li> <li>Summer</li> <li>Fall</li> <li>Winter</li> </ul>	Weather Patterns
	Classroom Playlists	
	TEKS: 1st Grade: Force, Motion, and Energy: Seasons	
(10) Earth and space. The student know is expected to:	s that the natural world includes earth materials that ca	n be observed in systems and processes. The student
TEKS.Science.1.10.A investigate and	• Soil	Where Does Soil Come From?
document the properties of particle size,	Classroom Playlists	
shape, texture, and color and the components of different types of soils such as topsoil, clay, and sand.	TEKS: 1st Grade: Earth and Space: Soil	
TEKS.Science.1.10.B investigate and describe	Song: Rock Cycle	
how water can move rock and soil particles	Rock Cycle	
from one place to another.	Classroom Playlists	
	TEKS: 1st Grade: Earth and Space: Erosion	
<b>TEKS.Science.1.10.C</b> compare the properties of puddles, ponds, streams, rivers, lakes, and oceans, including color, clarity, size, shape, and whether it is freshwater or saltwater.	<ul><li>Song: Water</li><li>Book: Water Is All Around</li><li>Water Sources</li><li>Natural Resources</li></ul>	
	Classroom Playlists	
	TEKS: 1st Grade: Earth and Space: Water	



Texas Standards	Waterford Digital Activities	Waterford Resources
(10) Earth and space. The student know is expected to continued:	rs that the natural world includes earth materials that ca	an be observed in systems and processes. The student
<b>TEKS.Science.1.10.D</b> describe and record observable characteristics of weather, including hot or cold, clear or cloudy, calm or windy, and rainy or icy, and explain the impact of weather on daily choices.	<ul> <li>Book: Whatever the Weather</li> <li>Weather</li> <li>Calendar/Graph Weather</li> <li>Weather Patterns</li> <li>Clouds</li> </ul> Classroom Playlists	<ul> <li>Weather</li> <li>The Weather Around Us</li> <li>Weather Cards</li> </ul>
(11) Earth and space. The student know expected to:	TEKS: 1st Grade: Earth and Space: Weather s that earth materials and products made from these made	aterials are important to everyday life. The student is
<b>TEKS.Science.1.11.A</b> identify and describe how plants, animals, and humans use rocks, soil, and water;	<ul> <li>Songs: Conservation; Water</li> <li>Books: Mela's Water Pot; Water Is All Around; A Seed Grows</li> <li>Rocks</li> <li>Care of Water</li> <li>Animals Need Water</li> <li>Plants Need Water</li> <li>Natural Resources</li> <li>Water Uses</li> </ul> Classroom Playlists	<ul> <li>Rocks</li> <li>Water</li> <li>Animals Need Water</li> </ul>
	TEKS: 1st Grade: Earth and Space: Water as a Resource TEKS: 1st Grade: Earth and Space: Rocks as a Resource	



Texas Standards	Waterford Digital Activities	Waterford Resources
(11) Earth and space. The student knows is expected to <i>continued</i> :	s that the natural world includes earth materials that ca	n be observed in systems and processes. The student
<b>TEKS.Science.1.11.B</b> explain why water conservation is important.	<ul> <li>Song: Conservation</li> <li>Book: Water Is All Around</li> <li>Care of Water</li> <li>Animals Need Water</li> <li>Plants Need Water</li> <li>Natural Resources</li> </ul>	Taking Care of Our Water
	Classroom Playlists     TEKS: 1st Grade: Earth and Space: Conserve Water	
<b>TEKS.Science.1.11.C</b> describe ways to conserve water such as turning off the faucet when brushing teeth and protect natural sources of water such as keeping trash out of bodies of water.	<ul> <li>Songs: Conservation; Pollution Rap</li> <li>Pollution and Recycling</li> <li>Care of Water</li> <li>Care of Earth</li> </ul>	• Recycling • Earth
	Classroom Playlists  TEKS: 1st Grade: Earth and Space: Conserve Water	
(12) Organisms and environments. The scomponents. The student is expected t	student knows that the environment is composed of rel	ationships between living organisms and nonliving
<b>TEKS.Science.1.12.A</b> classify living and nonliving things based upon whether they have basic needs and produce young.	<ul> <li>Song: Living and Nonliving</li> <li>Living or Nonliving</li> <li>Mammals</li> <li>Rocks</li> <li>Classroom Playlists</li> <li>TEKS: 1st Grade: Organisms and Environments: Living or Nonliving</li> </ul>	• Living or Nonliving
<b>TEKS.Science.1.12.B</b> describe and record examples of interactions and dependence between living and nonliving components in terrariums or aquariums.	Ecosystems  Classroom Playlists  TEKS: 1st Grade: Organisms and Environments: Living or Nonliving	



Texas Standards	Waterford Digital Activities	Waterford Resources
(12) Organisms and environments. The components. The student is expected	student knows that the environment is composed of relate continued:	ationships between living organisms and nonliving
TEKS.Science.1.12.C identify and illustrate how living organisms depend on each other through food chains.	<ul> <li>Book: Everybody Needs to Eat</li> <li>Food Chains</li> <li>Prairies Food Chain</li> <li>Polar Lands Food Chain</li> <li>Wetlands Food Chain</li> <li>Herbivores, Carnivores, and Omnivores</li> </ul>	
	Classroom Playlists	
	TEKS: 1st Grade: Organisms and Environments: Food Chains	
	student knows that organisms resemble their parents ar environments. The student is expected to:	nd have structures and undergo processes that help
<b>TEKS.Science.1.13.A</b> identify the external structures of different animals and compare how those structures help different animals live, move, and meet basic needs for survival.	<ul> <li>Books: Animal Teeth; Animal Bodies; Animal Tracks; Everybody Needs to Eat</li> <li>Animal Behavior</li> <li>Animal Bodies</li> <li>Herbivores, Carnivores, and Omnivores</li> <li>Animals Need Water</li> <li>Plants and Animals Need Air</li> </ul> Classroom Playlists	Animals Need Water
TEKS.Science.1.13.B record observations of and describe basic life cycles of animals, including a bird, a mammal, and a fish.	<ul> <li>TEKS: 1st Grade: Organisms and Environments: Animal Bodies</li> <li>Song: Fish</li> <li>Birds</li> <li>Mammals</li> <li>Fish</li> <li>Animal Life Cycles and Growth</li> <li>Classroom Playlists</li> </ul>	<ul> <li>Butterfly Life Cycle</li> <li>Frog Life Cycle</li> <li>Amphibians</li> <li>Metamorphosis</li> </ul>
TEKS.Science.1.13.C compare ways that young animals resemble their parents.	<ul> <li>TEKS: 1st Grade: Organisms and Environments: Life Cycles</li> <li>Books: George and Jack; A Seed Grows; Mine</li> <li>Mammals</li> <li>Science Observation: From Egg to Chick</li> </ul> Classroom Playlists	• <u>Traits</u>



Texas Standards	Waterford Digital Activities	Waterford Resources
Grade 2		
Knowledge and Skills		
	The student asks questions, identifies problems, and places, explain phenomena, or design solutions using approp	
<b>TEKS.Science.2.1.A</b> ask questions and define problems based on observations or information from text, phenomena, models, or investigations;	<ul> <li>Song: Inventing</li> <li>Books: Inventions All Around; I Want to Be a Scientist Like Wilbur and Orville Wright</li> <li>Inventions</li> </ul>	Recycling     Simple Machines     How It Works
<b>TEKS.Science.2.1.B</b> use scientific practices to plan and conduct simple descriptive investigations and use engineering practices to design solutions to problems;	<ul> <li>Song: Inventing</li> <li>Books: Inventions All Around; I Want to Be a Scientist Like Wilbur and Orville Wright</li> <li>Inventions</li> </ul>	<ul><li>Recycling</li><li>Simple Machines</li><li>How It Works</li></ul>
<b>TEKS.Science.2.1.C</b> identify, describe, and demonstrate safe practices during classroom and field investigations as outlined in Texas Education Agency-approved safety standards;	<ul><li>Songs: Storms; Sun Blues</li><li>Lightning Safety</li><li>Science Investigation</li></ul>	<ul> <li>Emergency Preparedness for Kids</li> <li>Fire Safety Activity for Kids</li> <li>Thunder and Lightning</li> <li>Smell Labels (Safe Smelling)</li> <li>Good Playing Rules Rebus</li> </ul>
TEKS.Science.2.1.D use tools, including hand lenses, goggles, heat-resistant gloves, trays, cups, bowls, beakers, notebooks, stream tables, soil, sand, gravel, flowering plants, student thermometer, demonstration thermometer, rain gauge, flashlights, ramps, balls, spinning tops, drums, tuning forks, sandpaper, wax paper, items that are flexible, non-flexible items, magnets, hot plate, aluminum foil, Sun-Moon-Earth model, and frog and butterfly life cycle models to observe, measure, test, and compare;	<ul> <li>Songs: The Scientific Method; Precipitation</li> <li>Science Investigation</li> <li>Science Tools</li> <li>Measurement Tools</li> <li>Weather Tools</li> <li>Sun, Moon, and Stars</li> <li>Plant Life Cycle and Growth</li> <li>Animal Life Cycle and Growth</li> <li>Science Observation: From Egg to Chick</li> </ul>	



Texas Standards	Waterford Digital Activities	Waterford Resources
	. The student asks questions, identifies problems, and pl s, explain phenomena, or design solutions using approp	
<b>TEKS.Science.2.1.E</b> collect observations and measurements as evidence.	<ul><li>Water</li><li>Fossils</li><li>Science Observation: From Egg to Chick</li><li>Calendar/Graph Weather</li></ul>	
<b>TEKS.Science.2.1.F</b> record and organize data using pictures, numbers, words, symbols, and simple graphs.	<ul> <li>Song: Graphing</li> <li>Graphs</li> <li>Picture Graphs</li> <li>Bar Graphs</li> <li>Calendar/Graph Weather</li> <li>Science Observation: From Egg to Chick</li> </ul>	
<b>TEKS.Science.2.1.G</b> develop and use models to represent phenomena, objects, and processes or design a prototype for a solution to a problem.	<ul> <li>Song: Inventing</li> <li>Books: I Want to Be a Scientist Like Wilbur and Orville Wright; Inventions All Around</li> <li>Water Cycle</li> <li>Experiments: Air; Density; Sound; Buoyancy; Pollution</li> <li>Inventions</li> </ul>	
(2) Scientific and engineering practices	The student analyzes and interprets data to derive mea	nning, identify features and patterns, and discover
relationships or correlations to develop	evidence-based arguments or evaluate designs. The stu	dent is expected to:
<b>TEKS.Science.2.2.A</b> identify basic advantages and limitations of models such as their size, properties, and materials.	<ul> <li>Song: Inventing</li> <li>Books: I Want to Be a Scientist Like Wilbur and Orville Wright; Inventions All Around</li> <li>Inventions</li> </ul>	
<b>TEKS.Science.2.2.B</b> analyze data by identifying significant features and patterns.	<ul> <li>Book: Moon Song</li> <li>Moon Patterns</li> <li>Calendar/Graph Weather</li> <li>Weather Patterns</li> <li>Sun, Moon, and Earth</li> </ul>	



Texas Standards	Waterford Digital Activities	Waterford Resources	
	(2) Scientific and engineering practices. The student analyzes and interprets data to derive meaning, identify features and patterns, and discover relationships or correlations to develop evidence-based arguments or evaluate designs. The student is expected to continued:		
<b>TEKS.Science.2.2.C</b> use mathematical concepts to compare two objects with common attributes; and	<ul> <li>Song: Big Small</li> <li>Water Sources</li> <li>Big and Little</li> <li>Tall and Short</li> <li>Heavy and Light</li> <li>Large Small Toys</li> <li>Big Little Animals</li> </ul>		
<b>TEKS.Science.2.2.D</b> evaluate a design or object using criteria to determine if it works as intended.	<ul> <li>Song: Inventing</li> <li>Books: I Want to Be a Scientist Like Wilbur and Orville Wright; Inventions All Around</li> <li>Inventions</li> </ul>		
(3) Scientific and engineering practices solutions. The student is expected to:	. The student develops evidence-based explanations and	d communicates findings, conclusions, and proposed	
<b>TEKS.Science.2.3.A</b> develop explanations and propose solutions supported by data and models;	<ul> <li>Books: How Did the Chicken Cross the Road?; Inventions         All Around</li> <li>Simple Machines</li> </ul>	• Simple Machines • How It Works	
<b>TEKS.Science.2.3.B</b> communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and	<ul><li>Song: The Scientific Method</li><li>Science Investigation</li></ul>		
<b>TEKS.Science.2.3.C</b> listen actively to others' explanations to identify important evidence and engage respectfully in scientific discussion.	<ul><li>Song: The Scientific Method</li><li>Science Investigation</li></ul>	Speaking and Listening	



Texas Standards	Waterford Digital Activities	Waterford Resources
(4) Scientific and engineering practices innovation for society. The student is ex	s. The student knows the contributions of scientists and expected to:	recognizes the importance of scientific research and
<b>TEKS.Science.2.4.A</b> explain how science or an innovation can help others; and	Book: Inventions All Around     Simple Machines	• Simple Machines • How It Works
<b>TEKS.Science.2.4.B</b> identify scientists and engineers such as Alexander Graham Bell, Marie Daly, Mario Molina, and Jane Goodall and explore what different scientists and engineers do.	Books: I Want to Be a Scientist Like: Jane Goodall; George Washington Carver; Wilbur and Orville Wright; Antoni van Leeuwenhoek; Alexander von Humboldt; Joanne Simpson; Thomas Edison; Louis Pasteur; Marie Curie; Stephen Hawking; Isaac Newton	
(5) Recurring themes and concepts. The expected to:	e student uses recurring themes and concepts to make o	connections across disciplines. The student is
<b>TEKS.Science.2.5.A</b> identify and use patterns to describe phenomena or design solutions.	<ul> <li>Song: Seasons</li> <li>Books: Moon Song; The Four Seasons; That's What I Like: A Book About Seasons</li> <li>Moon Patterns</li> <li>Calendar/Graph Weather</li> <li>Weather Patterns</li> <li>Sun, Moon, and Earth</li> </ul>	
<b>TEKS.Science.2.5.B</b> investigate and predict cause-and-effect relationships in science.	<ul> <li>Song: Seasons</li> <li>Books: The Four Seasons; That's What I Like: A Book About Seasons</li> <li>Calendar/Graph Weather</li> <li>Sun, Moon, and Earth</li> <li>Plants Need Water</li> <li>Healthy Plants' Needs</li> <li>Food Chains</li> <li>Care of Earth</li> </ul>	<ul> <li>Evaporation</li> <li>Light for Plants</li> <li>Water for Plants</li> </ul>
<b>TEKS.Science.2.5.C</b> measure and describe the properties of objects in terms of size and quantity.	<ul> <li>Song: Savanna Size</li> <li>Big and Little</li> <li>Large Small Toys</li> <li>Tall and Short</li> <li>Heavy and Light</li> <li>More than, Fewer than</li> </ul>	• <u>Dinosaur Size</u>



Texas Standards	Waterford Digital Activities	Waterford Resources	
(5) Recurring themes and concepts. The expected to continued:	(5) Recurring themes and concepts. The student uses recurring themes and concepts to make connections across disciplines. The student is expected to continued:		
<b>TEKS.Science.2.5.D</b> examine the parts of a whole to define or model a system.	<ul><li>Edible Plant Parts</li><li>Food Chains</li><li>Functions of Plant Parts</li></ul>	Plant Parts     Body Part Cards     Insect Parts Poster	
<b>TEKS.Science.2.5.E</b> identify forms of energy and properties of matter.	<ul> <li>Songs: Matter; Precipitation; Solid or Liquid</li> <li>Book: Pancakes Matter</li> <li>Sun</li> <li>Matter</li> <li>Solid and Liquid</li> <li>Solid, Liquid, Gas</li> <li>States of Water</li> <li>Heat Changes Water</li> </ul>	<ul> <li>Temperature and Melting</li> <li>Solids, Liquids, and Gases</li> <li>Solid and Liquid</li> <li>States of Water</li> </ul>	
<b>TEKS.Science.2.5.F</b> describe the relationship between structure and function of objects, organisms, and systems.	<ul><li>Animal Groups</li><li>Teeth</li><li>Functions of Plant Parts</li></ul>		
<b>TEKS.Science.2.5.G</b> describe how factors or conditions can cause objects, organisms, and systems to either change or stay the same.	<ul> <li>Song: Seasons</li> <li>Book: That's What I Like: A Book About Seasons</li> <li>Weather</li> <li>Spring</li> <li>Summer</li> <li>Fall</li> <li>Winter</li> <li>Animal Behavior</li> <li>Animal Bodies</li> <li>Animal Adaptations and Human Tools</li> </ul>	Animals     How Animals Survive	



Texas Standards	Waterford Digital Activities	Waterford Resources
(6) Matter and its properties. The stude student is expected to:	nt knows that matter has physical properties that detern	nine how it is described, classified, and used. The
<b>TEKS.Science.2.6.A</b> classify matter by observable physical properties, including texture, flexibility, and relative temperature, and identify whether a material is a solid or liquid.	<ul> <li>Songs: Marmot Shapes; Shapes, Shapes, Shapes; All Sorts of Laundry; Squirrel's Zoo Colors; Matter, Solid or Liquid</li> <li>Book: Buttons, Buttons</li> <li>Sort</li> <li>Touch</li> <li>Sight</li> <li>Materials</li> <li>Sun</li> <li>Matter</li> <li>Solid and Liquid</li> <li>Solid, Liquid, Gas</li> </ul>	• Texture Sort
	<ul> <li>Classroom Playlists</li> <li>TEKS: 2nd Grade: Matter: Solid or Liquid</li> <li>TEKS: 2nd Grade: Matter: Properties</li> </ul>	
<b>TEKS.Science.2.6.B</b> conduct a descriptive investigation to explain how physical properties can be changed through processes such as cutting, folding, sanding, melting, or freezing.	<ul> <li>Book: Warm Soup for Dedushka</li> <li>Changes in Matter</li> <li>Movement of Heat</li> <li>States of Water</li> <li>Materials</li> <li>Classroom Playlists</li> <li>TEKS: 2nd Grade: Matter: Changes in Matter</li> </ul>	
<b>TEKS.Science.2.6.C</b> demonstrate that small units such as building blocks can be combined or reassembled to form new objects for different purposes and explain the materials chosen based on their physical properties.	<ul> <li>Books: I Want to Be a Scientist Like Wilbur and Orville Wright; Inventions All Around</li> <li>Geoboard</li> <li>Tangrams</li> </ul>	



Texas Standards	Waterford Digital Activities	Waterford Resources
(7) Force, motion, and energy. The student knows that forces cause changes in motion and position in everyday life. The student is expected to:		
<b>TEKS.Science.2.7.A</b> explain how objects push on each other and may change shape when they touch or collide; and	<ul><li>Song: Push and Pull</li><li>Book: Mr. Mario's Neighborhood</li><li>Push and Pull</li></ul>	How It Works
	Classroom Playlists	
	TEKS: Force, Motion, and Energy: Push and Pull	
<b>TEKS.Science.2.7.B</b> plan and conduct a descriptive investigation to demonstrate how the strength of a push and pull changes an	<ul><li>Song: Push and Pull</li><li>Book: Mr. Mario's Neighborhood</li><li>Push and Pull</li></ul>	How It Works
object's motion.	Classroom Playlists	
	TEKS: Force, Motion, and Energy: Push and Pull	
(8) Force, motion, and energy. The stud	ent knows that energy is everywhere and can be observ	ed in everyday life. The student is expected to:
<b>TEKS.Science.2.8.A</b> demonstrate and explain that sound is made by vibrating matter and that vibrations can be caused by a variety of means, including sound;	<ul> <li>Song: Sound</li> <li>Book: What Sounds Say</li> <li>Sound Waves</li> <li>Classroom Playlists</li> <li>TEKS: 2nd Grade: Force, Motion, and Energy: Sound Waves</li> </ul>	• <u>Sound</u>
<b>TEKS.Science.2.8.B</b> explain how different levels of sound are used in everyday life such as a whisper in a classroom or a fire alarm; and	<ul> <li>Book: Movin' to the Music Time</li> <li>Classroom Playlists</li> <li>TEKS: 2nd Grade: Force, Motion, and Energy: Pitch and Volume</li> </ul>	• Sound
<b>TEKS.Science.2.8.C</b> design and build a device using tools and materials that uses sound to solve the problem of communicating over a distance.	<ul> <li>Song: Inventing</li> <li>Books: I Want to Be a Scientist Like Thomas Edison; Inventions All Around</li> <li>Sound Experiment</li> </ul>	



Texas Standards	Waterford Digital Activities	Waterford Resources
(9) Earth and space. The student knows expected to:	that there are recognizable patterns in the natural worl	d and among objects in the sky. The student is
<b>TEKS.Science.2.9.A</b> describe the Sun as a star that provides light and heat and explain that the Moon reflects the Sun's light; and	<ul> <li>Songs: The Moon; Sun Blues</li> <li>Books: Star Pictures; Moon Song</li> <li>Sun</li> <li>Moon</li> <li>Constellations</li> <li>Astronomy</li> </ul>	<ul> <li>The Sky Above Us</li> <li>The Moon</li> <li>Sun, Moon, and Earth</li> </ul>
	TEKS: 2nd Grade: Earth and Space: Sun and Moon	
<b>TEKS.Science.2.9.B</b> observe objects in the sky using tools such as a telescope and compare how objects in the sky are more visible and can appear different with a tool than with an unaided eye.	<ul> <li>Songs: The Moon; Sun Blues</li> <li>Books: Star Pictures; Moon Song</li> <li>Sun</li> <li>Moon</li> <li>Constellations</li> <li>Astronomy</li> </ul>	• The Sky Above Us • The Moon • Sun, Moon, and Earth
	TEKS: 2nd Grade: Earth and Space: Constellations	
(10) Earth and space. The student know is expected to:	s that the natural world includes earth materials that ca	n be observed in systems and processes. The student
<b>TEKS.Science.2.10.A</b> investigate and describe how wind and water move soil and rock particles across the Earth's surface such as wind blowing sand into dunes on a beach or a river carrying rocks as it flows.	<ul> <li>Book: Can You Guess?</li> <li>Air</li> <li>Care of Air</li> <li>Air Experiment</li> <li>Rock Cycle</li> </ul> Classroom Playlists	Air Movement
	TEKS: 2nd Grade: Earth and Space: Rock Cycle	



Texas Standards	Waterford Digital Activities	Waterford Resources
(10) Earth and space. The student known is expected to continued:	vs that the natural world includes earth materials that ca	an be observed in systems and processes. The student
<b>TEKS.Science.2.10.B</b> measure, record, and graph weather information, including temperature and precipitation.	<ul> <li>Song: Seasons</li> <li>Book: 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>TEKS: 2nd Grade: Earth and Space: Weather</li> <li>TEKS: 2nd Grade: Earth and Space: Weather Tools</li> </ul>	Weather     The Weather Around Us     Weather Cards
<b>TEKS.Science.2.10.C</b> investigate different types of severe weather events such as a hurricane, tornado, or flood and explain that some events are more likely than others in a given region.	<ul><li>Books: Tornado</li><li>Ecosystems: Prairie</li></ul>	• Tornado



Texas Standards	Waterford Digital Activities	Waterford Resources
(11) Earth and space. The student know expected to:	s that earth materials and products made from these ma	aterials are important to everyday life. The student is
<b>TEKS.Science.2.11.A</b> distinguish between natural and manmade resources; and	<ul> <li>Natural Resources</li> <li>Classroom Playlists</li> <li>TEKS: 2nd Grade: Earth and Space: Natural Resources</li> </ul>	<ul> <li>By Nature or By Man?</li> <li>Is It a Natural Resources?</li> <li>Natural Resources</li> </ul>
<b>TEKS.Science.2.11.B</b> describe how human impact can be limited by making choices to conserve and properly dispose of materials such as reducing use of, reusing, or Recycling paper, plastic, and metal.	<ul> <li>Songs: Conservation; Pollution Rap</li> <li>Pollution and Recycling</li> <li>Care of Water</li> <li>Care of Earth</li> </ul> Classroom Playlists	Recycling     Our Earth
(12) Organisms and environments. The environment. The student is expected to	<ul> <li>TEKS: 2nd Grade: Earth and Space: Pollution and Recycling</li> <li>student knows that living organisms have basic needs the</li> <li>co:</li> </ul>	nat must be met through interactions within their
<b>TEKS.Science.2.12.A</b> describe how the physical characteristics of environments, including the amount of rainfall, support plants and animals within an ecosystem.	<ul> <li>Books: Where in the World Would You Go Today?;         Your Backyard</li> <li>Ecosystems</li> <li>Ecosystems Experiment</li> <li>Deserts</li> <li>Mountains</li> <li>Oceans</li> <li>Rainforests</li> </ul> Classroom Playlists	
	<ul> <li>TEKS: 2nd Grade: Organisms and Environments: Environments</li> </ul>	



Texas Standards	Waterford Digital Activities	Waterford Resources
(12) Organisms and environments. The environment. The student is expected t	student knows that living organisms have basic needs the continued:	nat must be met through interactions within their
<b>TEKS.Science.2.12.B</b> create and describe food chains identifying producers and consumers to demonstrate how animals depend on other living things.	<ul> <li>Book: Everybody Needs to Eat</li> <li>Food Chains</li> <li>Prairies Food Chain</li> <li>Polar Lands Food Chain</li> <li>Wetlands Food Chain</li> <li>Herbivores, Carnivores, and Omnivores</li> </ul>	
	<ul> <li>TEKS: 2nd Grade: Organisms and Environments: Food Chains</li> </ul>	
<b>TEKS.Science.2.12.C</b> explain and demonstrate how some plants depend on other living things, wind, or water for pollination and to move their seeds around.	<ul> <li>Song: Plants Are Growing</li> <li>Books: The Bee's Secret; A Seed Grows; The Old Maple Tree</li> </ul>	
(13) Organisms and environments. The swithin their environments. The student	student knows that organisms have structures and unde is expected to:	ergo processes that help them interact and survive
<b>TEKS.Science.2.13.A</b> identify the roots, stems, leaves, flowers, fruits, and seeds of plants and compare how those structures help different plants meet their basic needs for survival.	<ul> <li>Song: Plants Are Growing</li> <li>Book: A Seed Grows</li> <li>Plants</li> <li>Edible Plant Parts</li> <li>Functions of Plant Parts</li> <li>Plant Experiment</li> <li>Healthy Plants' Needs</li> <li>Classroom Playlists</li> <li>TEKS: 2nd Grade: Organisms and Environments: Plants: Identify Parts</li> <li>TEKS: 2nd Grade: Organisms and Environments: Plants: Function of Parts</li> </ul>	• Light for Plants • Plant Parts



Waterford Digital Activities	Waterford Resources	
(13) Organisms and environments. The student knows that organisms have structures and undergo processes that help them interact and survive within their environments. The student is expected to <i>continued</i> :		
Books: Animal Teeth; Animal Bodies; Animal Tracks; Everybody Needs to Eat     Animal Behavior     Animal Bodies     Herbivores, Carnivores, and Omnivores     Animals Need Water     Plants and Animals Need Air  Classroom Playlists     TEKS: 2nd Grade: Organisms and Environments:	Animals Need Water	
<ul><li>Book: Animal Bodies</li><li>Animal Behavior</li><li>Animal Bodies</li></ul>		
<ul> <li>Animal Life Cycle and Growth</li> <li>Science Observation: From Egg to Chick</li> <li>Amphibians</li> <li>Classroom Playlists</li> <li>TEKS: 2nd Grade: Organisms and Environments: Animal</li> </ul>	<ul> <li>Butterfly Life Cycle</li> <li>Frog Life Cycle</li> <li>Amphibians</li> <li>Metamorphosis</li> </ul>	
	student knows that organisms have structures and unce is expected to continued:  Books: Animal Teeth; Animal Bodies; Animal Tracks; Everybody Needs to Eat Animal Behavior Animal Bodies Herbivores, Carnivores, and Omnivores Animals Need Water Plants and Animals Need Air  Classroom Playlists TEKS: 2nd Grade: Organisms and Environments: Animal Bodies Book: Animal Bodies Book: Animal Bodies Animal Behavior Animal Bodies Animal Life Cycle and Growth Science Observation: From Egg to Chick Amphibians  Classroom Playlists	









## **Books and Related Activities**



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

#### **Math Books**

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

#### **Science Books**

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

### **Counting Songs**

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

#### **Number Songs**

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

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

#### Math and Science Books

One More Cat / Can You Guess? A Story for Two Voices / I Want to Be a Scientist Like Antoni van Leeuwenhoek / Whatever the Weather / I Want to Be a Mathematician Like Sophie Germain / Water Is All Around / Mr. Romano's Secret: A Time Story / A Seed Grows | How Long is a Minute? | Marty's Mixed-up Mom / I Want to Be a Scientist Like Louis Pasteur / Pancakes Matter / Jump Rope Rhymes / Facts About Families / Fifteen Bayou Band / Hooray, Hooray for the One Hundredth Day! / Symmetry and Me / Animal Bodies / Everybody Needs to Eat / The Circus Came to Town / I Want to Be a Mathematician Like Thales Bugs for Sale | Heads or Tails | Your Backyard | The Birds, the Beasts and the Bat / Halves and Fourths and Thirds / We All Exercise / Circus 20 / Red Rock, River Rock / Painting by Number / Navajo Beads / Where in the World Would You Go Today? / I Want to Be a Scientist Like Wilbur and Orville Wright

### Fluent Math and Science

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

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



### **Support**

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

### **Research-Driven Development**

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

# **Family Engagement Resources**



### Spanish Family Engagement Resources

All Waterford books and many of the resources available to families at →mentor.

waterford.org can be found in Spanish or with Spanish support.

### Songs

#### **Beginning Math Songs**

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

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

Rhyming Words / A: The Apple Tree / B: Bluebird, Bluebird / C: Pat-a-Cake / D: Hey Diddle, Diddle / E: One Elephant Went Out to Play / F: The Farmer in the Dell / G: Ten Little Goldfish / H: All the Pretty Little Horses / I: Mother, Mother, I Am III / J: Jack and Jill / K: Three Little Kittens / L: Mary Had a Little Lamb / M: Little Miss Muffett / O: Polly, Put the Kettle On / P: This Little Pig / Q: Quack, Quack, Quack / R: Little Rabbit / S: Eensy, Weensy Spider / U: The Bus / V: My Valentine / W: Wee Willie Winkie / X: A-hunting We Will Go / Y: Yankee Doodle

### **Beginning Reading Songs**

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

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

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

### **Weekly Homelink Newsletters**

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

#### **Math Homelink Newsletters**

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

#### **Science Homelink Newsletters**

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

## **Reading Homelink Newsletters**

# Alphabet Knowledge Comprehension and Vocabulary

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

#### **Readiness Skills Letters**

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

#### **Phonological Awareness Letters**

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



### **Waterford Mentor**

Waterford Mentor 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).