

CURRICULUM *Correlation*

*Waterford Reading
Academy:
Math & Science*

100%

*Nevada
Mathematics
Standards 2021
& Science 2014*

**Correlation content includes both Waterford Digital Resources and Waterford Teacher Resources.*

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NEVADA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
MATHEMATICS		
KINDERGARTEN		
Numbers, Number Sense, and Computation 1.0		
To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will accurately calculate and use estimation techniques, number relationships, operation rules, and algorithms; they will determine the reasonableness of answers and the accuracy of solutions.		
1.K.1 Use concrete objects to model simple sums and differences.	<ul style="list-style-type: none"> • Add with Manipulatives • Use Manipulatives • Add Groups • Subtract Groups 	
1.K.5 Count to 20.	<ul style="list-style-type: none"> • Counting Songs (See titles at end of document.) • Number __ Counting (e.g., Number 2 Counting) • Finger Counting • Object Counting • Count with 5-Frames • Count with Scale 	
1.K.6 Recognize, read, and write numerals from 0-10; recognize number words from 0-10.	<ul style="list-style-type: none"> • Counting Songs • Number Songs • Math Books (See titles at end of document.) • Number Tracing • Object Counting • Count with 5-Frames 	
1.K.7 Estimate the number of objects in a set to 10 and verify by counting; use ordinal positions first to third.	<ul style="list-style-type: none"> • Song: Ordinals • Books: The Circus Came to Town; Prince Cedrick’s Birthday • Counting Songs (See titles at end of document.) • Moving Target (Dots) • Ordinal Numbers 	
1.K.8 Match the number of objects to the correct numeral, 0-10.	<ul style="list-style-type: none"> • Match Numbers • Object Counting • Number __ Counting (e.g., Number 2 Counting) 	

NEVADA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Patterns, Functions, and Algebra 2.0		
To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will use various algebraic methods to analyze, illustrate, extend, and create numerous representations (words, numbers, tables, and graphs) of patterns, functions, and algebraic relations as modeled in practical situations.		
2.K.1 Sort and describe objects by similar attributes; recognize and replicate a pattern.	<ul style="list-style-type: none"> • Songs: Same and Different; All Sorts of Laundry; Train Station Patterns • Book: Buttons, Buttons • Sort • Patterns • Pattern: AB; ABB; ABC • Make and Count Groups 	
2.K.4 Identify and create sets of objects with unequal amounts, describing them as having more or less.	<ul style="list-style-type: none"> • Song: Greater Than, Less Than • Book: For the Birds • Make and Count Groups • Greater Than, Less Than • More Than, Fewer Than • More Than • Fewer Than 	<ul style="list-style-type: none"> • Greater, less, or equal.pdf: Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group. <ul style="list-style-type: none"> - Beans and More - More Than Buttons - Short Names, Long Names - Noodle Necklaces - Groups Do Count! - More Than, Fewer Than, Equal - Which Has More? - Fewer Than

NEVADA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Measurement 3.0		
To solve problems, communicate, reason and make connections within and beyond the field of mathematics, students will use appropriate tools and techniques of measurement to determine, estimate, record, and verify direct and indirect measurements.		
3.K.1 Compare and order objects by size communicating their similarities and differences.	<ul style="list-style-type: none"> • Songs: Savanna Size, Measuring Plants; Same and Different • Capacity • Length • Big and Little • Tall and Short • Heavy and Light • Size • Order Size 	<ul style="list-style-type: none"> • Comparing objects.pdf: Directly compare two objects with a measurable attribute in common, to see which object has “more of”/”less of” the attribute, and describe the difference. <ul style="list-style-type: none"> - Filling Table - Order It Up - Straw Rulers - Measuring Walk - Heavy or Light - Make A Balance - Size Scavenger Hunt - Big and Little Sort - Boxes in a Line - Teddy Bear Line-Up - Magazine Sorting - Tall and Short
3.K.4 Identify and sort pennies, nickels, and dimes.	<ul style="list-style-type: none"> • Song: Save Your Pennies • Coin Identification • Count Dimes, Nickels, and Pennies • Count Nickels and Pennies or Dimes and Pennies • Count Coins • Sort 	<ul style="list-style-type: none"> • Coin Identification: Identify U.S. coins, including pennies, nickels, dimes, and quarters, and understand their relative values. Determine the value of a collection of U.S. coins up to one dollar. <ul style="list-style-type: none"> - Coin Hopscotch - Counting Money - Coin Corners—Review
3.K.6 Recite, in order, the days of the week.	<ul style="list-style-type: none"> • Song: Days of the Week 	
Spatial Relationships and Geometry 4.0		
To solve problems, communicate, and make connections within and beyond the field of mathematics, students will identify, represent, verify, and apply spatial relationships and geometric properties.		
4.K.1 Identify two-dimensional shapes (circles, triangles, rectangles including squares) regardless of position.	<ul style="list-style-type: none"> • Songs: Marmot Shapes; Shapes, Shapes, Shapes • Circle, Square, Triangle, Rectangle • Simple Shapes 	<ul style="list-style-type: none"> • Shape recognition.pdf: Correctly name shapes regardless of their orientations or overall size. <ul style="list-style-type: none"> - Shapes Scavenger Hunt - Shapes and Positioning

NEVADA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>To solve problems, communicate, and make connections within and beyond the field of mathematics, students will identify, represent, verify, and apply spatial relationships and geometric properties <i>continued</i>.</p>		
<p>4.K.2 Use position words (e.g., middle, before, down) to place objects.</p>	<ul style="list-style-type: none"> • Songs: Position Cat; Get Over the Bugs; Monster Trucks • Book: Up In the Air • Position • Over, Under, Above, Below • Inside, Outside, Between • Above, Below, Next to, On 	<ul style="list-style-type: none"> • Describing objects.pdf: Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to. <ul style="list-style-type: none"> - Shapes Scavenger Hunt
<p>4.K.3 Identify two-dimensional figures (e.g., windows are shaped like rectangles) as they appear in the environment.</p>	<ul style="list-style-type: none"> • Songs: Marmot Shapes; Shapes, Shapes, Shapes; Kites • Books: The Shape of Things; Imagination Shapes • Circle, Square, Triangle, Rectangle • Simple Shapes 	
<p>Data Analysis 5.0</p>		
<p>To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will collect, organize, display, interpret, and analyze data to determine statistical relationships and probability projections.</p>		
<p>5.K.1 Collect and describe data.</p>	<ul style="list-style-type: none"> • Songs: Tallying; Graphing • Book: One More Cat • Tally Marks • Graphs • Calendar/Graph Weather 	

NEVADA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
GRADE 1		
Numbers, Number Sense, and Computation 1.0		
To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will accurately calculate and use estimation techniques, number relationships, operation rules, and algorithms; they will determine the reasonableness of answers and the accuracy of solutions.		
1.1.1 Identify and model basic addition facts (sums through 10) and the corresponding subtraction facts.	<ul style="list-style-type: none"> • Song: Fact Families • Book: Facts about Families • Addition and Subtraction Fact Families • Addition Sentences • Subtraction Sentences • Commutative Property of Addition • Addition and Subtraction Relationship • Missing Addends • Missing Minuends and Subtrahends • Subtraction Patterns 	<ul style="list-style-type: none"> • Addition and subtraction word problems.pdf: Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem. <ul style="list-style-type: none"> - Addition Stories - Act It Out Stories - Manipulative Stories - Edible Stories - One, Two, Three, Show - Circus Subtraction - Partner Subtraction - Farmer’s Market - Green and Speckled Frogs - Cars and Trucks Subtraction - Yummy Subtraction - Act Out Addition - Act Out Subtraction
1.1.3 Write, model, and describe one-step addition and subtraction problems.	<ul style="list-style-type: none"> • Songs: Pirates Can Add; On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction • Book: Five Delicious Muffins • Make and Count Groups • Add Groups • Subtract Groups • Act Out Addition • Act Out Subtraction 	<ul style="list-style-type: none"> • Represent addition and subtraction with objects. pdf: Represent addition and subtraction with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations. <ul style="list-style-type: none"> - Addition Cubes - Addition Stories - Going Fishing - Let’s Count On - Act it out Stories - Manipulative Stories
1.1.4 Use decimals to show money amounts.	<ul style="list-style-type: none"> • Count Bills and Coins 	

NEVADA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will accurately calculate and use estimation techniques, number relationships, operation rules, and algorithms; they will determine the reasonableness of answers and the accuracy of solutions <i>continued</i>.</p>		
<p>1.1.5 Use the inherent patterns in numbers to count by 1's, 2's, 5's, and 10's to 100.</p>	<ul style="list-style-type: none"> • Song: Skip Counting • Books: Navajo Beads; Jump Rope Rhymes • Skip Count by 2 • Skip Count by 5 • Skip Count by 10 • Number Patterns • Number Sequences and Patterns • Number Chart • Counting Songs (See titles at end of document.) 	<ul style="list-style-type: none"> • Count to 100 by ones and tens.pdf: Count to 100 by ones and tens. <ul style="list-style-type: none"> - Missing Numbers - Count On By 1 - Numbers 1-5 - Numbers 6-10 - Math Newsletters - Count By 10s - Numbers 60-69 - I Can Count to 100
<p>1.1.6 Read, write, order, and compare numerals from 0-100.</p>	<ul style="list-style-type: none"> • Counting Songs • Number Songs (See titles at end of document.) • Song: Greater Than, Less Than • Book: For the Birds • Number _ Counting (e.g., Number 2 Counting) • Object Counting • Number Tracing • Order Numbers • Greater Than, Less Than • Counting Puzzle • Dot-to-Dot 	<ul style="list-style-type: none"> • Count to 120.pdf: Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral. <ul style="list-style-type: none"> - Mystery Numbers - I Can Write Numbers to 99 - Numbers - Counting Charts • Compare two-digit numbers.pdf: Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$. <ul style="list-style-type: none"> - Catch Me if You Can! - What Are You Looking For? - Two-Pile Sort
<p>1.1.7 Estimate the number of objects in a set to 10; read and write number words to 10 and use ordinal positions first to tenth.</p>	<ul style="list-style-type: none"> • Song: Ordinals • Books: The Circus Came to Town; Prince Cedrick's Birthday • Moving Target (Dots) • Ordinal Numbers 	
<p>1.1.8 Use, model, and identify place value positions of 1's and 10's.</p>	<ul style="list-style-type: none"> • Song: Place Value • Place Value • Place Value Counting • Place Value of 2-digit Numbers 	

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<p>To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will accurately calculate and use estimation techniques, number relationships, operation rules, and algorithms; they will determine the reasonableness of answers and the accuracy of solutions <i>continued</i>.</p>		
<p>1.1.9 Identify and model a whole; identify and model $\frac{1}{2}$.</p>	<ul style="list-style-type: none"> • Song: Fractions • Books: Half for You and Half for Me; Halves and Fourths, and Thirds • Fractions • Label Parts of Fractions 	<ul style="list-style-type: none"> • Fractions.pdf: Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape. <ul style="list-style-type: none"> - Frenzied Fraction Fun - Fabulous Fractions
<p>Patterns, Functions, and Algebra 2.0</p>		
<p>To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will use various algebraic methods to analyze, illustrate, extend, and create numerous representations (words, numbers, tables, and graphs) of patterns, functions, and algebraic relations as modeled in practical situations.</p>		
<p>2.1.1 Recognize, describe, extend, and create simple repeating patterns using symbols, objects, and manipulatives.</p>	<ul style="list-style-type: none"> • Song: Train Station Patterns • Book: How King Snake Got His Pattern • Patterns • Pattern: AB; ABB; ABC • Label Patterns • Extend Patterns 	
<p>2.1.4 Create, compare, and describe sets of objects as having more, less, or equal amounts.</p>	<ul style="list-style-type: none"> • Song: Greater Than, Less Than • Book: For the Birds • Make and Count Groups • Greater Than, Less Than • More Than, Fewer Than • More Than • Fewer Than 	<ul style="list-style-type: none"> • Greater, less, or equal.pdf: Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group. <ul style="list-style-type: none"> - Beans and More - More Than Buttons - Short Names, Long Names - Noodle Necklaces - Groups Do Count! - More Than, Fewer Than, Equal - Which Has More? - Fewer Than

NEVADA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Measurement 3.0		
To solve problems, communicate, reason and make connections within and beyond the field of mathematics, students will use appropriate tools and techniques of measurement to determine, estimate, record, and verify direct and indirect measurements.		
3.1.1 Compare and order objects by length and weight, communicating their similarities and differences.	<ul style="list-style-type: none"> • Song: Large, Larger, Largest • Measurement Tools • Size • Length • Nonstandard Units of Length • Order Size • Weight • Make Comparisons 	
3.1.2 Compare and measure length and weight, using non-standard measurement.	<ul style="list-style-type: none"> • Song: Measuring Plants • Measurement Tools • Length • Nonstandard Units of Length • Weight 	
3.1.4 Determine the value of any set of pennies, nickels, and dimes.	<ul style="list-style-type: none"> • Songs: Money; Save Your Pennies • Coin Identification • Coin Value • Count Dimes, Nickels, and Pennies • Count Nickels and Pennies or Dimes and Pennies • Count Coins 	<ul style="list-style-type: none"> • Coin Identification and Value: Identify U.S. coins, including pennies, nickels, dimes, and quarters, and understand their relative values. Determine the value of a collection of U.S. coins up to one dollar. <ul style="list-style-type: none"> - Coin Hopscotch - Counting Money - Coin Corners—Review
3.1.6 Use a calendar to identify days, weeks, and months; read time to the nearest hour and half hour; distinguish between day and night, i.e., between A.M. and P.M.	<ul style="list-style-type: none"> • Songs: Clock Hands; Telling Time; Months in a Year; Days of the Week • Book: Mr. Romano’s Secret: A Time Story • Calendar • Tell Time • Tell Time to the Hour • Tell Time to the Half-Hour 	<ul style="list-style-type: none"> • Hours and half-hours.pdf: Tell and write time in hours and half-hours using analog and digital clocks. <ul style="list-style-type: none"> - What Comes After, Before, Or Between? - Make Your Own Clock - Learning to Tell Time - Matching Time - What Numbers Are Missing? - What Time Is It? - Time of Day - Clock flashcards

NEVADA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Spatial Relationships and Geometry 4.0		
To solve problems, communicate, and make connections within and beyond the field of mathematics, students will identify, represent, verify, and apply spatial relationships and geometric properties.		
4.1.1 Identify, name, sort, and sketch two-dimensional shapes (circles, triangles, rectangles including squares) regardless of position.	<ul style="list-style-type: none"> • Songs: Kites; Marmot Shapes; Corners and Sides • Books: The Shape of Things; Imagination Shapes • Circle, Square, Triangle, Rectangle • Simple Shapes 	<ul style="list-style-type: none"> • Shape recognition.pdf: Correctly name shapes regardless of their orientations or overall size. <ul style="list-style-type: none"> - Shapes Scavenger Hunt - Shapes and Positioning - Shapes Flashcards
4.1.2 Use position words (e.g., between, left, near) to describe location of objects.	<ul style="list-style-type: none"> • Songs: Position Cat; Get Over the Bugs; Monster Trucks • Book: Up In the Air • Position • Over, Under, Above, Below • Inside, Outside, Between • Above, Below, Next to, On • Over, Under, and Through • First, Middle, Last • Top, Beside, and Bottom 	<ul style="list-style-type: none"> • Describing objects.pdf: Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to. <ul style="list-style-type: none"> - Shapes Scavenger Hunt
4.1.3 Identify and replicate two-dimensional designs that contain a line of symmetry.	<ul style="list-style-type: none"> • Song: Symmetry • Book: Symmetry and Me • Symmetry 	

NEVADA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Data Analysis 5.0		
To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will collect, organize, display, interpret, and analyze data to determine statistical relationships and probability projections.		
5.1.1 Collect, organize, and describe data.	<ul style="list-style-type: none"> • Songs: Tallying; Graphing • Books: Painting by Number; One More Cat; The Booneville Nine • Tally Marks • Graphs • Make a Table 	<ul style="list-style-type: none"> • Data Categorization.pdf: Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another. <ul style="list-style-type: none"> - Ice-Cream Sundae - Make a Real Object Graph - Make a Weather Bar Graph - Weather Flashcards - Our Favorite Foods - Make a Graph - Make a Table - How Many? - Bugs! - Use Graphs and Tables - How Big Is Your Family?
GRADE 2		
Numbers, Number Sense, and Computation 1.0		
To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will accurately calculate and use estimation techniques, number relationships, operation rules, and algorithms; they will determine the reasonableness of answers and the accuracy of solutions.		
1.2.1 Identify and model basic addition facts (sums to 18) and the corresponding subtraction facts; immediately recall basic addition facts (sums through 10) and the corresponding subtraction facts.	<ul style="list-style-type: none"> • Songs: Fact Families; Counting On • Books: Facts about Families; Circus 20; Painting by Number • Addition and Subtraction Fact Families • Addition Sentences • Subtraction Sentences • Commutative Property of Addition • Addition and Subtraction Relationship • Missing Addends • Missing Minuends and Subtrahends • Subtraction Patterns 	<ul style="list-style-type: none"> • Add and subtract within 20.pdf: Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. <ul style="list-style-type: none"> - The Three Little Bears - Fact Family Bingo - A Graph of Fact Families - Bean Facts - Draw a Picture - Addition - Number Pyramid - Subtraction Sentences - Model the Story - Fact Families

NEVADA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will accurately calculate and use estimation techniques, number relationships, operation rules, and algorithms; they will determine the reasonableness of answers and the accuracy of solutions <i>continued</i>.</p>		
<p>1.2.2 Add and subtract multi-digit numbers without regrouping.</p>	<ul style="list-style-type: none"> • Place Value • Addition and Subtraction Relationship • Commutative Properties of Addition • Addition • Subtraction • Add without Regrouping • Subtract without regrouping 	
<p>1.2.3 Generate and solve one-step addition and subtraction problems based on practical situations.</p>	<ul style="list-style-type: none"> • Songs: Pirates Can Add; On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction • Book: Five Delicious Muffins • Add Groups • Subtract Groups • Minuends • Sums • Act Out Addition • Act Out Subtraction 	<ul style="list-style-type: none"> • Addition and subtraction word problems.pdf: Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem. <ul style="list-style-type: none"> - Addition Stories - Act It Out Stories - Manipulative Stories - Edible Stories - One, Two, Three, Show - Circus Subtraction - Partner Subtraction - Farmer’s Market - Green and Speckled Frogs - Cars and Trucks Subtraction - Yummy Subtraction - Act Out Addition - Act Out Subtraction
<p>1.2.4 Use decimals to show money amounts.</p>	<ul style="list-style-type: none"> • Count Bills and Coins 	

NEVADA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will accurately calculate and use estimation techniques, number relationships, operation rules, and algorithms; they will determine the reasonableness of answers and the accuracy of solutions <i>continued</i>.</p>		
<p>1.2.5 Use the inherent patterns in numbers to skip count by 2's, 3's, 5's, and 10's to 100 and beyond.</p>	<ul style="list-style-type: none"> • Song: Skip Counting • Books: Navajo Beads; Jump Rope Rhymes • Skip Count • Skip Count by 2 • Skip Count by 5 • Skip Count by 10 • Number Patterns • Number Sequences and Patterns • Number Chart 	<ul style="list-style-type: none"> • Count to 100 by ones and tens.pdf: Count to 100 by ones and tens. <ul style="list-style-type: none"> - Missing Numbers - Count On By 1 - Numbers 1-5 - Numbers 6-10 - Math Newsletters - Count By 10s - Numbers 60-69 - I Can Count to 100
<p>1.2.6 Read, write, order, and compare numbers from 0-999.</p>	<ul style="list-style-type: none"> • Song: Greater Than, Less Than • Book: For the Birds • Order Numbers • Greater Than, Less Than (3-digit Numbers) • Number Chart • Place Value of 3-digit Numbers 	<ul style="list-style-type: none"> • Less than, equal to, or greater than.pdf: Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons. <ul style="list-style-type: none"> - More or Less - The Hands Have It! - Larger or Smaller? - Comparing Number Cards - Number Cards - $<$, $>$, $=$ Cards - Greater Than, Less Than, Equal To
<p>1.2.7 Estimate the number of objects in a set to 20; read and write number words to 20 and use ordinal positions first to twentieth.</p>	<ul style="list-style-type: none"> • Songs: Ordinals; At the Market • Books: The Circus Came to Town; Prince Cedrick's Birthday • Moving Target (Dots) • Ordinal Numbers 	
<p>1.2.8 Use, model, and identify place value positions of 1's, 10's, and 100's.</p>	<ul style="list-style-type: none"> • Song: Place Value • Place Value • Place Value Counting • Place Value of 2-digit Numbers • Place Value of 3-digit Numbers 	

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<p>To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will accurately calculate and use estimation techniques, number relationships, operation rules, and algorithms; they will determine the reasonableness of answers and the accuracy of solutions <i>continued</i>.</p>		
<p>1.2.9 Identify, model, and label $\frac{1}{2}$ and $\frac{1}{4}$ as parts of a whole.</p>	<ul style="list-style-type: none"> • Song: Fractions • Books: Half for You and Half for Me; Halves and Fourths, and Thirds • Fractions • Label Parts of Fractions 	<ul style="list-style-type: none"> • Fractions.pdf: Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape. <ul style="list-style-type: none"> - Frenzied Fraction Fun - Fabulous Fractions
<p>Patterns, Functions, and Algebra 2.0</p>		
<p>To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will use various algebraic methods to analyze, illustrate, extend, and create numerous representations (words, numbers, tables, and graphs) of patterns, functions, and algebraic relations as modeled in practical situations.</p>		
<p>2.2.1 Recognize, describe, extend, and create repeating and increasing patterns using symbols, objects, and manipulatives; use patterns and their extensions to solve problems.</p>	<ul style="list-style-type: none"> • Song: Train Station Patterns • Book: How King Snake Got His Pattern • Patterns • Pattern: AB; ABB; ABC • Label Patterns • Extend Patterns • Logic Game 	
<p>2.2.3 Use variables and open sentences to express relationships.</p>	<ul style="list-style-type: none"> • Addition Sentences • Subtraction Sentences • Commutative Property of Addition • Addition and Subtraction Relationship 	
<p>2.2.4 Generate and solve problems based on various numerical sentences.</p>	<ul style="list-style-type: none"> • Addition Sentences • Subtraction Sentences • Commutative Property of Addition • Addition and Subtraction Relationship • Missing Addends • Missing Subtrahends • Missing Minuends and Subtrahends 	



NEVADA MATHEMATICS STANDARDS 2021 & SCIENCE 2014

NEVADA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will use various algebraic methods to analyze, illustrate, extend, and create numerous representations (words, numbers, tables, and graphs) of patterns, functions, and algebraic relations as modeled in practical situations <i>continued</i>.</p>		
<p>2.2.7 Model, explain and solve a number sentence involving addition and subtraction.</p>	<ul style="list-style-type: none"> • Addition Sentences • Subtraction Sentences • Commutative Property of Addition • Addition and Subtraction Relationship • Missing Addends • Missing Subtrahends • Missing Minuends and Subtrahends 	
<p>Measurement 3.0</p>		
<p>To solve problems, communicate, reason and make connections within and beyond the field of mathematics, students will use appropriate tools and techniques of measurement to determine, estimate, record, and verify direct and indirect measurements.</p>		
<p>3.2.1 Compare and order objects by various measurable attributes (e.g., time, temperature, length, weight, capacity, volume, and area) communicating their similarities and differences.</p>	<ul style="list-style-type: none"> • Measurement Tools • Science Tools • Tell Time • Length • Weight • Make Comparisons • Size • Big and Little • Tall and Short • Heavy and Light • Big Little Animals 	<ul style="list-style-type: none"> • Measurable attributes.pdf: Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. <ul style="list-style-type: none"> - Filling Table - Order It Up - Straw Rulers - Measuring Walk - Heavy or Light - Make A Balance - Measurable Attributes • Order by length.pdf: Order three objects by length; compare the lengths of two objects indirectly by using a third object. <ul style="list-style-type: none"> - Estimating Length - A Fruit and Vegetable Measure
<p>3.2.2 Compare objects to standard whole units to find objects that are greater than, less than, and/or equal to a given unit (e.g., inch, yard, centimeter, meter).</p>	<ul style="list-style-type: none"> • Song: Greater Than, Less Than • Book: Birds At My House • Measurement Tools • Length • Standard Units of Length 	<ul style="list-style-type: none"> • Measure length.pdf: Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit. <ul style="list-style-type: none"> - Ready, Set, Measure - Treasure Hunt



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NEVADA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>To solve problems, communicate, reason and make connections within and beyond the field of mathematics, students will use appropriate tools and techniques of measurement to determine, estimate, record, and verify direct and indirect measurements <i>continued</i>.</p>		
<p>3.2.4 Determine the value of any given set of coins and bills.</p>	<ul style="list-style-type: none"> • Book: Bugs For Sale • Coin Identification • Coin Value • Quarters • Count Dimes, Nickels, and Pennies • Count Quarters, Dimes, Nickels, and Pennies • Count Nickels and Pennies or Dimes and Pennies • Count Coins • Count Bills and Coins • Equivalent Sums of Money 	<ul style="list-style-type: none"> • Coin Identification and Value: Identify U.S. coins, including pennies, nickels, dimes, and quarters, and understand their relative values. Determine the value of a collection of U.S. coins up to one dollar. <ul style="list-style-type: none"> - Coin Hopscotch - Counting Money - Coin Corners—Review
<p>3.2.6 Recite and use the months of the year in order; use a calendar to identify days, weeks, months, and year; read time to the nearest quarter hour; distinguish between day and night, i.e., between A.M. and P.M.</p>	<ul style="list-style-type: none"> • Songs: Clock Hands; Telling Time; Months in a Year; Days of the Week • Book: Mr. Romano’s Secret: A Time Story • Calendar • Tell Time • Tell Time to the Quarter Hour • Tell Time to the Half-Hour • Tell Time to the Hour 	
<p>Spatial Relationships and Geometry 4.0</p>		
<p>To solve problems, communicate, and make connections within and beyond the field of mathematics, students will identify, represent, verify, and apply spatial relationships and geometric properties.</p>		
<p>4.2.1 Identify, name, sort, sketch, describe, and compare two dimensional shapes (circles, triangles, rectangles including squares) regardless of position.</p>	<ul style="list-style-type: none"> • Songs: Kites; Corners and Sides • Books: The Shape of Things; Imagination Shapes • Circle, Square, Triangle, Rectangle • Simple Shapes 	<ul style="list-style-type: none"> • Shape recognition.pdf: Correctly name shapes regardless of their orientations or overall size. <ul style="list-style-type: none"> - Shapes Scavenger Hunt - Shapes and Positioning - Shapes Flashcards

NEVADA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>To solve problems, communicate, and make connections within and beyond the field of mathematics, students will identify, represent, verify, and apply spatial relationships and geometric properties <i>continued</i>.</p>		
<p>4.2.2 Use position words (e.g., before, far, below, left) to describe location of objects and to place objects; compare the size (larger and smaller) of similar two-dimensional figures (e.g., circles, triangles); identify congruent shapes.</p>	<ul style="list-style-type: none"> • Songs: Position Cat; Get Over the Bugs; Monster Trucks; Savanna Size; Congruent Parts • Book: Up In the Air • Position • Over, Under, Above, Below • Inside, Outside, Between • Above, Below, Next to, On • Over, Under, and Through • First, Middle, Last • Top, Beside, and Bottom • Capacity • Length • Big and Little • Tall and Short • Circle, Square, Triangle, Rectangle • Size • Congruence 	<ul style="list-style-type: none"> • Describing objects.pdf: Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to. <ul style="list-style-type: none"> - Shapes Scavenger Hunt
<p>4.2.3 Identify figures with symmetry as they appear in the environment; create two-dimensional designs that contain a line of symmetry.</p>	<ul style="list-style-type: none"> • Song: Symmetry • Book: Symmetry and Me • Symmetry 	
<p>4.2.4 Identify, name, sort, describe, compare, and contrast two- and three-dimensional geometric figures (e.g., circle/sphere, square/cube, triangle/pyramid).</p>	<ul style="list-style-type: none"> • Songs: Kites; Shapes, Shapes, Shapes; Corners and Sides • Books: The Shape of Things; Imagination Shapes • Circle, Square, Triangle, Rectangle • Star, Semicircle, Octagon, Oval, Rhombus • Simple Shapes • Solid Shapes • World Shapes 	<ul style="list-style-type: none"> • Draw shapes.pdf: Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. <ul style="list-style-type: none"> - Making Shapes - Shapes Review

NEVADA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Data Analysis 5.0		
To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will collect, organize, display, interpret, and analyze data to determine statistical relationships and probability projections.		
5.2.1 Collect, organize, record, and explain classification of data using concrete materials.	<ul style="list-style-type: none"> • Song: Graphing • Books: The Booneville Nine; One More Cat; Painting by Number • Graphing • Bar Graphs • Picture Graphs • Use Graphs and Tables 	<ul style="list-style-type: none"> • Graphs.pdf: Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph. <ul style="list-style-type: none"> - Questions and Answers - Library Book Survey - Playground Survey - Rock Collections - Use Graphs and Tables
Problem Solving 6.0 (K- 2)		
Students will develop their ability to solve problems by engaging in developmentally appropriate problem solving opportunities in which there is a need to use various approaches to investigate and understand mathematical concepts in order to: formulate their own problems; find solutions to problems from everyday situations; develop and apply strategies to solve a wide variety of problems; and integrate mathematical reasoning, communication and connections.		
6.1 Select, modify, develop, and apply strategies to solve a variety of mathematical and practical problems and to investigate and understand mathematical concepts.	<ul style="list-style-type: none"> • Songs: Problem Solving • Books: Milton’s Mittens; The Booneville Nine; Painting by Number; Birds At My House; Bugs for Sale; Half for You and Half for Me; Heads or Tails; How Did the Chicken Cross the Road?; How Long is a Minute?; The Fable Fair; Yangshi’s Perimeter • Act Out Addition • Act Out Subtraction • Problem Solving Strategies • Story Problem Strategies • You Be the Teacher 	
6.2 Apply previous experience and knowledge to new problem-solving situations.	<ul style="list-style-type: none"> • Songs: Problem Solving; Graphing • Books: Milton’s Mittens; The Booneville Nine; Painting by Number • Problem Solving Strategies • Story Problem Strategies 	



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<p>Students will develop their ability to solve problems by engaging in developmentally appropriate problem solving opportunities in which there is a need to use various approaches to investigate and understand mathematical concepts in order to: formulate their own problems; find solutions to problems from everyday situations; develop and apply strategies to solve a wide variety of problems; and integrate mathematical reasoning, communication and connections <i>continued</i>.</p>		
<p>6.3 Formulate own problems; use various approaches to investigate and solve problems.</p>	<ul style="list-style-type: none"> • Songs: Problem Solving; Graphing • You Be the Teacher • Problem Solving Strategies • Story Problem Strategies 	
<p>6.4 Explain and verify results with respect to the original problem.</p>	<ul style="list-style-type: none"> • Book: Chloe’s Cracker Caper • You Be the Teacher • Problem Solving Strategies: Guess and Check 	
<p>6.6 Try more than one strategy when the first strategy proves to be unproductive.</p>	<ul style="list-style-type: none"> • Song: Problem Solving • Problem Solving Strategies • Story Problem Strategies 	
<p>6.8 Apply solutions and strategies from earlier problems to new problem situations.</p>	<ul style="list-style-type: none"> • Song: Problem Solving • Problem Solving Strategies • Story Problem Strategies 	
<p>6.12 Use technology, including calculators, to understand quantitative relationships, e.g., for skip counting and pattern exploration.</p>	<ul style="list-style-type: none"> • Songs: Skip Counting; Problem Solving • Books: Navajo Beads; How King Snake Got His Pattern; Jump Rope Rhymes • Patterns 	
<p>Mathematical Communication 7.0</p>		
<p>Students will develop their ability to communicate mathematically by solving problems in which there is a need to obtain information from the real world through reading,, listening, and observing in order to: translate this information into a mathematical language and symbols; process this information mathematically; and present results in written, oral and visual formats</p>		
<p>7.1 Discuss and exchange ideas about mathematics as a part of learning.</p>	<ul style="list-style-type: none"> • Song: Problem Solving • You Be the Teacher • Problem Solving Strategies • Story Problem Strategies 	
<p>7.2 Use inquiry techniques (e.g. discussion, questioning, research, data gathering) to solve mathematical problems.</p>	<ul style="list-style-type: none"> • Songs: Problem Solving; Graphing • Books: Milton’s Mittens; The Booneville Nine; Painting by Number • Problem Solving Strategies • Story Problem Strategies 	

NEVADA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>Students will develop their ability to communicate mathematically by solving problems in which there is a need to obtain information from the real world through reading, listening, and observing in order to: translate this information into a mathematical language and symbols; process this information mathematically; and present results in written, oral and visual formats <i>continued</i>.</p>		
<p>7.4 Use pictorial representations to identify mathematical operations and concepts.</p>	<ul style="list-style-type: none"> • Song: Problem Solving • Books: Milton’s Mittens; The Booneville Nine; Painting by Number • Problem Solving Strategies • Story Problem Strategies 	
<p>7.7 Use physical materials, models, pictures, or writing to represent and communicate mathematical ideas.</p>	<ul style="list-style-type: none"> • Song: Problem Solving • Books: Milton’s Mittens; The Booneville Nine; Painting by Number • Problem Solving Strategies • Story Problem Strategies 	
<p>7.10 Explain and justify thinking about mathematical ideas and solutions.</p>	<ul style="list-style-type: none"> • Song: Problem Solving • Books: Milton’s Mittens; The Booneville Nine; Painting by Number • Problem Solving Strategies • Story Problem Strategies 	
<p>7.16 Use everyday language to explain thinking about strategies and solutions to mathematical problems.</p>	<ul style="list-style-type: none"> • Song: Problem Solving • Books: Milton’s Mittens; The Booneville Nine; Painting by Number • Problem Solving Strategies • Story Problem Strategies 	
<p>7.17 Express mathematical ideas and use them to define, compare, and solve problems orally and in writing.</p>	<ul style="list-style-type: none"> • Song: Problem Solving • Books: Milton’s Mittens; The Booneville Nine; Painting by Number • Problem Solving Strategies • Story Problem Strategies 	
<p>7.18 Use mathematical notation to communicate and explain mathematical situations.</p>	<ul style="list-style-type: none"> • Song: Problem Solving • Books: Milton’s Mittens; The Booneville Nine; Painting by Number • Problem Solving Strategies • Story Problem Strategies 	



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NEVADA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Mathematical Reasoning 8.0		
Student will develop their ability to reason mathematically by solving problems in which there is a need to investigate significant mathematical ideas and construct their own learning in all content areas in order to justify their thinking; reinforce and extend their logical reasoning abilities; reflect on and clarify their own thinking; and ask questions to extend their thinking		
8.1 Justify and explain the solutions to problems using manipulative and physical models.	<ul style="list-style-type: none"> • Song: Problem Solving • Books: Milton’s Mittens; The Booneville Nine; Painting by Number • Problem Solving Strategies • Story Problem Strategies 	
8.4 Use patterns and relationships to analyze mathematical situations; draw logical conclusions about mathematical problems.	<ul style="list-style-type: none"> • Song: Problem Solving • Books: Milton’s Mittens; The Booneville Nine; Painting by Number • Problem Solving Strategies • Story Problem Strategies 	
8.8 Ask questions to reflect on, clarify, and extend thinking.	<ul style="list-style-type: none"> • Song: Problem Solving • Books: Milton’s Mittens; The Booneville Nine; Painting by Number • Problem Solving Strategies • Story Problem Strategies 	
8.9 Review and refine the assumptions and steps used to derive conclusions in mathematical arguments.	<ul style="list-style-type: none"> • Song: Problem Solving • Books: Milton’s Mittens; The Booneville Nine; Painting by Number • Problem Solving Strategies • Story Problem Strategies • You Be the Teacher 	
8.11 Determine relevant, irrelevant, and/or sufficient information to solve mathematical problems.	<ul style="list-style-type: none"> • Song: Problem Solving • Books: Milton’s Mittens; The Booneville Nine; Painting by Number • Problem Solving Strategies • Story Problem Strategies 	

NEVADA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Mathematical Connections 9.0		
Students will develop the ability to make mathematical connections by solving problems in which there is a need to view mathematics as an integrated whole, identifying relationships between context strands, and integrating mathematics with other disciplines, allowing the flexibility to approach problems in a variety of ways within and beyond the field of mathematics.		
9.1 Link new concepts to prior knowledge.	<ul style="list-style-type: none"> • Song: Problem Solving • Books: Milton’s Mittens; The Booneville Nine; Painting by Number • Problem Solving Strategies • Story Problem Strategies 	
9.2 Use mathematical ideas from one area of mathematics to explain an idea from another area of mathematics. (No K)	<ul style="list-style-type: none"> • Song: Problem Solving • Books: Milton’s Mittens; The Booneville Nine; Painting by Number; Circus 20; Chloe’s Cracker Caper • Problem Solving Strategies • Story Problem Strategies 	
9.5 Identify practical applications of mathematical principles that can be applied to other disciplines.	<ul style="list-style-type: none"> • Song: Problem Solving • Books: Milton’s Mittens; The Booneville Nine; Painting by Number: I Want to Be a Scientist Like Wilbur and Orville Wright • Science Investigation • Problem Solving Strategies • Story Problem Strategies 	
9.6 Apply mathematical thinking and modeling to solve problems that arise in other disciplines (e.g. rhythm in music and motion in science).	<ul style="list-style-type: none"> • Books: I Want to Be a Scientist Like: Wilbur and Orville Wright; Steven Hawking; Isaac Newton • Problem Solving Strategies • Story Problem Strategies 	
9.8 Identify, explain, and use mathematics in everyday life.	<ul style="list-style-type: none"> • Books: Birds At My House; Bugs for Sale; Half for You and Half for Me; Heads or Tails; How Did the Chicken Cross the Road?; How Long is a Minute?; I Want to Be a Mathematician Like Ada Byron Lovelace; The Fable Fair; Yangshi’s Perimeter 	

NEVADA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
SCIENCE		
KINDERGARTEN NVACSS		
K-PS2 Motion and Stability: Forces and Interactions		
K-PS2-1. Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.	<ul style="list-style-type: none"> • Song: Push and Pull • Book: Mr. Mario’s Neighborhood • Push and Pull 	<p>Engagement:</p> <ul style="list-style-type: none"> • Learning Together: How It Works
K-PS2-2. Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.	<ul style="list-style-type: none"> • Song: Push and Pull • Push and Pull 	
K-PS3 Energy		
K-PS3-1. Make observations to determine the effect of sunlight on Earth’s surface.	<ul style="list-style-type: none"> • Songs: Water; Plants Are Growing; Sun Blues • Sun • Water 	
K-PS3-2. Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area.	Waterford encourages everyone to have writing, drawing, and art materials available for children’s creations.	
K-LS1 From Molecules to Organisms: Structures and Processes		
K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive.	<ul style="list-style-type: none"> • Songs: Water; Food From Plants • Books: Mela’s Water Pot; Everybody Needs to Eat • Sun • Plants • Water • Plants and Animals Need Air 	<ul style="list-style-type: none"> • More to Explore Experiment: Water for Plants <p>Engagement:</p> <ul style="list-style-type: none"> • Learning Together: Green and Growing

NEVADA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
K-ESS2 Earth's Systems		
K-ESS2-1. Use and share observations of local weather conditions to describe patterns over time.	<ul style="list-style-type: none"> • Song: Seasons • Book: That's What I Like: A Book About Seasons • Weather • Calendar/Graph Weather • Weather Patterns • Clouds • Spring • Summer • Fall • Winter 	<p>Engagement:</p> <ul style="list-style-type: none"> • Learning Together: Weather; The Weather Around Us • Weather Cards
K-ESS2-2. Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.	<ul style="list-style-type: none"> • Books: Winter Snoozers; Birds at My House; The Old Maple Tree; Turtle's Pond 	
K-ESS3 Earth and Human Activity		
K-ESS3-1. Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.	<ul style="list-style-type: none"> • Song: Four Ecosystems • Book: Where in the World Would You Go Today? • Oceans • Mountains • Deserts • Rainforests 	<p>Engagement:</p> <ul style="list-style-type: none"> • Learning Together: Our Earth
K-ESS3-2. Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.	<ul style="list-style-type: none"> • Songs: Precipitation; Storms • Book: Whatever the Weather • Weather Tools • Lightning Safety • Calendar/Graph Weather 	
K-ESS3-3. Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.	<ul style="list-style-type: none"> • Songs: Conservation; Pollution Rap • Pollution and Recycling • Care of Water • Care of Earth 	<ul style="list-style-type: none"> • More to Explore Experiment: Recycling <p>Engagement:</p> <ul style="list-style-type: none"> • Learning Together: Our Earth

NEVADA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
FIRST GRADE NVACSS		
1-PS4 Waves and their Applications in Technologies for Information Transfer		
1-PS4-1. Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.	<ul style="list-style-type: none"> • Song: Sound • Book: What Sounds Say • Sound Waves 	<ul style="list-style-type: none"> • More to Explore Experiment: Sound
1-PS4-2. Make observations to construct an evidence-based account that objects can be seen only when illuminated.	<ul style="list-style-type: none"> • Books: My Family Campout; Lightning Bugs • Light Properties • Properties of Light 	
1-PS4-3. Plan and conduct an investigation to determine the effect of placing objects made with different materials in the path of a beam of light.	<ul style="list-style-type: none"> • Book: My Family Campout • Light Properties • Properties of Light 	
1-PS4-4. Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.	<ul style="list-style-type: none"> • Song: Inventing • Books: I Want to Be a Scientist Like Thomas Edison; Inventions All Around 	
1-LS1 From Molecules to Organisms: Structures and Processes		
1-LS1-1. Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.	<ul style="list-style-type: none"> • Books: I Wish I Had Ears Like a Bat; Animal Bodies; Fawn Eyes • Deserts 	
1-LS1-2. Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.	<ul style="list-style-type: none"> • Song: Animal Bodies • Animal Behavior • Animal Bodies 	

NEVADA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
1-LS3 Heredity: Inheritance and Variation of Traits		
1-LS3-1. Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.	<ul style="list-style-type: none"> • Books: George and Jack; A Seed Grows • Build Knowledge: Mine 	<ul style="list-style-type: none"> • More to Explore Experiment: Traits
1-ESS1 Earth's Place in the Universe		
1-ESS1-1. Use observations of the sun, moon, and stars to describe patterns that can be predicted.	<ul style="list-style-type: none"> • Songs: The Moon; Sun Blues • Books: Moon Song; Star Pictures • Sun • Moon • Constellations 	<ul style="list-style-type: none"> • More to Explore Experiment: The Moon <p>Engagement:</p> <ul style="list-style-type: none"> • Learning Together: The Sky Above Us
1-ESS1-2. Make observations at different times of year to relate the amount of daylight to the time of year.	<ul style="list-style-type: none"> • Sun • Spring • Summer • Fall • Winter 	
SECOND GRADE NVACSS		
2-PS1 Matter and its Interactions		
2-PS1-1. Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.	<ul style="list-style-type: none"> • Book: Warm Soup for Dedushka • Changes in Matter • Movement of Heat • States of Water • Materials 	
2-PS1-2. Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose.	<ul style="list-style-type: none"> • Book: Warm Soup for Dedushka • Heat Movement • Movement of Heat • Heat Experiment 	
2-PS1-3. Make observations to construct an evidence-based account of how an object made of a small set of pieces can be disassembled and made into a new object.	<ul style="list-style-type: none"> • Book: I Want to Be a Scientist Like Wilbur and Orville Wright • Geoboard • Tangrams 	



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2-PS1 Matter and its Interactions <i>continued</i>		
2-PS1-4. Construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot.	<ul style="list-style-type: none"> • Books: Warm Soup for Dedushka; Pancakes Matter • Changes in Matter • Movement of Heat 	
2-LS2 Ecosystems: Interactions, Energy, and Dynamics		
2-LS2-1. Plan and conduct an investigation to determine if plants need sunlight and water to grow.	<ul style="list-style-type: none"> • Song: Plants Are Growing • Sun • Water • Plant Experiment • Healthy Plants' Needs 	<ul style="list-style-type: none"> • More to Explore Experiment: Light for Plants
2-LS2-2. Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.	Waterford encourages everyone to have writing, drawing, and art materials available for children's creations.	
2-LS4 BIOLOGICAL EVOLUTION: UNITY AND DIVERSITY		
2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.	<ul style="list-style-type: none"> • Songs: Animal Bodies; Four Ecosystems • Books: Animal Bodies; Where in the World Would You Go Today? • Ecosystems • Animal Bodies • Animal Behavior 	<p>Engagement:</p> <ul style="list-style-type: none"> • Learning Together: Places on Earth
K-2. Engineering Design		
K-2-ETS1-1. Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.	<ul style="list-style-type: none"> • Song: Inventing • Books: Inventions All Around; I Want to Be a Scientist Like Wilbur and Orville Wright • Inventions 	<ul style="list-style-type: none"> • More to Explore Experiment: Recycling; Simple Machines <p>Engagement:</p> <ul style="list-style-type: none"> • Learning Together: Inventions
K-2-ETS1-2. Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.	<ul style="list-style-type: none"> • Books: How Did the Chicken Cross the Road?; Inventions All Around • Simple Machines 	

NEVADA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<i>K-2. Engineering Design continued</i>		
K-2-ETS1-3. Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.	<ul style="list-style-type: none"> • Books: Warm Soup for Dedushka; How Did the Chicken Cross the Road? • Heat Movement • Movement of Heat • Heat Experiment 	<ul style="list-style-type: none"> • More to Explore Experiment: Evaporation

PRE-MATH & 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; 14 Camels; Fun 15; 16 Ants; Counting to 17; 18 Carrot Stew; 19 Around the World; 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

Asian Counting, Marching Band Counting, Flower Counting, Country Counting, Dixieland 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 Camels; Fun 15; 16 Ants; Counting to 17; 18 Carrot Stew; 19 Around the World; 20 Fingers and Toes

BASIC MATH & SCIENCE

Math & Science Books

One More Cat; Can You Guess? A Story for Two Voices; I Want to Be a Scientist Like Carl Linnaeus; 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; I Want to Be a Scientist Like Joanne Simpson; Navajo Beads; Where in the World Would You Go Today?; I Want to Be a Scientist Like Wilbur and Orville Wright

FLUENT MATH & SCIENCE

Math & 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; Navajo Beads; Red Rock, River Rock; I Want to Be a Mathematician Like Srinivasa Ramanujan; The Fraction Twins; Yangshi's Perimeter; I Want to Be a Mathematician Like Archimedes; Birds at My House; Painting by Number; The Fable Fair



SUPPORT

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

CONTINUAL DEVELOPMENT

As a nonprofit research institute, Waterford.org is continually developing resources with the latest research findings. Please note that this correlation is accurate as of the date on the cover.

SPANISH FAMILY ENGAGEMENT RESOURCES

All Waterford books and many of the resources available to families at 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 Ill; J: Jack and Jill; K: Three Little Kittens; L: Mary Had a Little Lamb; M: Little Miss Muffett; N: I Touch My Nose Like This (Spanish); O: Polly, Put the Kettle On; P: This Little Pig; Q: Quack, Quack, Quack; R: Little Rabbit (Chinese); S: Eensy, Weensy Spider; T: Tortillas, Tortillas (Spanish); U: The Bus; V: My Valentine; W: Wee Willie Winkie; X: A-hunting We Will Go; Y: Yankee Doodle

Beginning Reading Songs

Comma, Comma, Comma; Homophone Monkey; Antonym Ant; Apples and Bananas; Old MacDonald's Vowels; ABC Show and Tell Sounds; ABC Tongue Twisters; ABC Picture Sounds; Sheep in the Shadows; C-K Rap; S Steals the Z; Blends; Blicky Licky Land; Apostrophe Pig; Capital Letters—Days; Charley Chick; Adjectives Describe; Lazy Letter Q; Nouns; Verbs; Adverbs; Irregular Verbs; Preposition Cat; Verbs that Link; Consonants; Pronouns, Sneaky Magic E; Silent Letters—G-H; Silent Letters—W; Drop Magic E; Bossy Mr. R; P-H and G-H Say Fff; Schwa Sound; Double the Fun; Strange Spelling; More Than One; Reading Detective—Peek at the Story

Many of these songs are available on the [Waterford.org YouTube channel](https://www.youtube.com/channel/UC...).

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

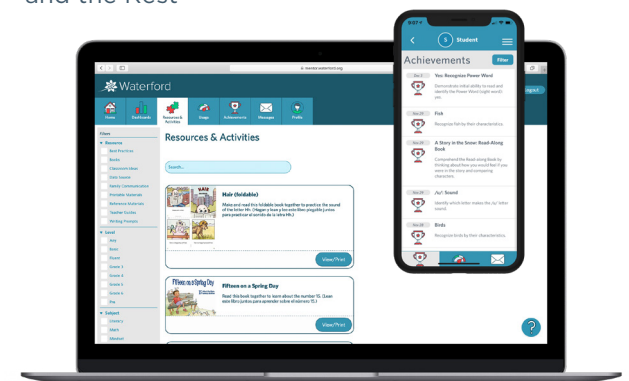
Naming Parts of the Body; First, Next, Last; One-to-One Correspondence; Opposites; Look at Details (identify same and different)

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).