

CURRICULUM *Correlation*

*Waterford Reading
Academy:
Math & Science*

95%

*Texas Essential
Knowledge and
Skills Math 2017
& Science 2022*

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

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TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
MATHEMATICS		
KINDERGARTEN KNOWLEDGE AND SKILLS		
1. Mathematical Process Standards.		
The student uses mathematical processes to acquire and demonstrate mathematical understanding.		
The student is expected to: A. Apply mathematics to problems arising in everyday life, society, and the workplace;	<ul style="list-style-type: none"> • Song: Problem Solving • Book: Milton’s Mittens 	
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 style="list-style-type: none"> • Song: Problem Solving • Book: Milton’s Mittens 	
C. 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 style="list-style-type: none"> • Song: Problem Solving • Book: Milton’s Mittens • Number Instruction • Measurement Tools 	
D. Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate;	<ul style="list-style-type: none"> • Book: Milton’s Mittens • Calendar/Graph Weather • Observe a Simple System 	
E. Create and use representations to organize, record, and communicate mathematical ideas;	<ul style="list-style-type: none"> • Book: Milton’s Mittens • Calendar/Graph Weather • Observe a Simple System 	
F. Analyze mathematical relationships to connect and communicate mathematical ideas; and	<ul style="list-style-type: none"> • Math Books • Act Out Addition • Act Out Subtraction 	

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
The student uses mathematical processes to acquire and demonstrate mathematical understanding <i>continued</i> .		
G. Display, explain and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.	<ul style="list-style-type: none"> • Math Books • Act Out Addition • Act Out Subtraction 	
2. Number and Operations.		
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.		
The student is expected to: A. Count forward and backward to at least 20 with and without objects;	<ul style="list-style-type: none"> • Number Songs • Counting Songs • Math Books • Number Instruction • Number Counting 	<ul style="list-style-type: none"> • Count forward.pdf: Count forward beginning with a given number within the known sequence. <ul style="list-style-type: none"> - Let's Count On - Toss and Count - Count On by 1
B. Read, write, and represent whole numbers from 0 to at least 20 with and without objects or pictures;	<ul style="list-style-type: none"> • Math Books • Number Songs • Counting Songs • Number Counting • Number Instruction • Moving Target • Number Review 	<ul style="list-style-type: none"> • Write numbers 0-20.pdf: Write numbers from 0 to 20. Represent a number of objects with a written numeral. <ul style="list-style-type: none"> - Numbers Practice - Numbers - Add groups - Count on by 1 - Number Writing Practice
C. 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 style="list-style-type: none"> • Math Books • Counting Songs • Number Instruction • Make and Count Groups • One-to-one Correspondence • Number Counting 	<ul style="list-style-type: none"> • Object Counting Grouping.pdf: Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted. <ul style="list-style-type: none"> - Mixed Up Counting
D. Recognize instantly the quantity of a small group of objects in organized and random arrangements;	<ul style="list-style-type: none"> • Make and Count Groups • Moving Target (Dots) 	

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>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>.</p>		
<p>E. 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;</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
<p>F. Generate a number that is one more than or one less than another number up to at least 20;</p>	<ul style="list-style-type: none"> • Songs: Counting Backward; Counting Songs • Make and Count Groups • One-to-one Correspondence • Number Counting • Count On • Count Down 	<ul style="list-style-type: none"> • Object Counting Succession.pdf: Understand that each successive number name refers to a quantity that is one larger. <ul style="list-style-type: none"> - One by One
<p>G. Compare sets of objects up to at least 20 in each set using comparative language.</p>	<ul style="list-style-type: none"> • Song: Greater Than, Less Than • Book: For the Birds • Greater Than, Less Than • More Than, Fewer Than • More Than • Fewer Than 	<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
<p>H. Use comparative language to describe two numbers up to 20 presented as written numerals; and</p>	<ul style="list-style-type: none"> • Song: Greater Than, Less Than • Book: For the Birds • Greater Than, Less Than • More Than, Fewer Than • More Than • Fewer Than 	<ul style="list-style-type: none"> • Compare two numbers.pdf: Compare two numbers between 1 and 10 presented as written numerals. <ul style="list-style-type: none"> - More or Less Spinner - Catch Me If You Can! - Greater or Less - Less or Greater

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>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>.</p>		
<p>I. Compose and decompose numbers up to 10 with objects and pictures.</p>	<ul style="list-style-type: none"> • Make and Count Groups • Make 10 • Add Groups • Subtract Groups • Sums • Act Out Addition • Act Out Subtraction 	<ul style="list-style-type: none"> • Decompose numbers.pdf: Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation. <ul style="list-style-type: none"> - Addition Cubes - Fact Families
<p>3. Number and Operations.</p>		
<p>The student applies mathematical process standards to develop an understanding of addition and subtraction situations in order to solve problems.</p>		
<p>The student is expected to: A. Model the action of joining to represent addition and the action of separating to represent subtraction;</p>	<ul style="list-style-type: none"> • Songs: Addition; Pirates Can Add; On the Bayou; Bakery 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 	<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

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
The student applies mathematical process standards to develop an understanding of addition and subtraction situations in order to solve problems <i>continued</i> .		
<p>B. Solve word problems using objects and drawings to find sums up to 10 and differences within 10; and</p>	<ul style="list-style-type: none"> • Songs: Addition; Pirates Can Add; On the Bayou; Bakery Subtraction; Circus Subtraction; Subtract Those Cars • Book: Five Delicious Muffins • Add Groups • Subtract Groups • Add With Manipulatives • Minuends • 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"> - Additions 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>C. Explain the strategies used to solve problems involving adding and subtracting within 10 using spoken words, concrete or pictorial models, and number sentences.</p>	<ul style="list-style-type: none"> • Songs: Addition; Pirates Can Add; On the Bayou; Bakery 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 	<ul style="list-style-type: none"> • Strategies to add and subtract.pdf: Apply properties of operations as strategies to add and subtract. <ul style="list-style-type: none"> - Adding and Subtracting Bugs - Concentration - Related Facts
4. Number and Operations.		
The student applies mathematical process standards to identify coins in order to recognize the need for monetary transactions.		
<p>The student is expected to: identify U.S. coins by name, including pennies, nickels, dimes, and quarters.</p>	<ul style="list-style-type: none"> • Song: Save Your Pennies • Coin Identification 	

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
5. Algebraic Reasoning.		
The student applies mathematical process standards to identify the pattern in the number word list.		
The student is expected to: recite numbers up to at least 100 by ones and tens beginning with any given number.	<ul style="list-style-type: none"> • Number Songs • Counting Songs • Math Books • Skip Counting • Number Instruction • Number Counting • Count On • Count On by 1 	<ul style="list-style-type: none"> • Counting Forward.pdf: Count forward beginning from a given number within a known sequence. <ul style="list-style-type: none"> - Let's Count On - Toss and Count - Count on by 1
6. 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.		
The student is expected to: A. Identify two-dimensional shapes, including circles, triangles, rectangles, and squares as special rectangles;	<ul style="list-style-type: none"> • Song: Marmot Shapes; Shapes, Shapes, Shapes • Books: The Shape of Things; Imagination Shapes • Simple Shapes • World Shapes • Circle, Square, Triangle, Rectangle 	<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
B. Identify three-dimensional solids, including cylinders, cones, spheres, and cubes, in the real world;	<ul style="list-style-type: none"> • Solid Shapes • Space Shapes • World Shapes 	<ul style="list-style-type: none"> • Compare shapes.pdf: Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length). <ul style="list-style-type: none"> - Comparing Shapes
C. Identify two-dimensional components of three-dimensional objects;	<ul style="list-style-type: none"> • Song: Corners and Sides • Simple Shapes • Solid Shapes 	<ul style="list-style-type: none"> • Two-dimensional shapes.pdf: Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid"). <ul style="list-style-type: none"> - Shapes and Positioning
D. Identify attributes of two-dimensional shapes using informal and formal geometric language interchangeably;	<ul style="list-style-type: none"> • Songs: Shapes, Shapes, Shapes; Corners and Sides • Books: The Shape of Things; Imagination Shapes • Simple Shapes • World Shapes • Circle, Square, Triangle, Rectangle 	<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 Flashcard

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties <i>continued</i>.</p>		
<p>E. Classify and sort a variety of regular and irregular two- and three-dimensional figures regardless of orientation or size; and</p>	<ul style="list-style-type: none"> • Songs: Shapes, Shapes, Shapes; Corners and Sides; Kites • Books: The Shape of Things; Imagination Shapes • Simple Shapes • Solid Shapes • Circle, Square, Triangle, Rectangle • Star, Semicircle, Octagon, Oval, Rhombus • Sort 	<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
<p>F. Create two-dimensional shapes using a variety of materials and drawings.</p>	<ul style="list-style-type: none"> • Geoboard • Tangrams 	<ul style="list-style-type: none"> • Model shapes.pdf: Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. <ul style="list-style-type: none"> - Building Shapes
<p>7. Geometry and Measurement.</p>		
<p>The student applies mathematical process standards to directly compare measurable attributes.</p>		
<p>The student is expected to: A. Give an example of a measurable attribute of a given object, including length, capacity, and weight; and</p>	<ul style="list-style-type: none"> • Song: Measuring Plants • Length • Capacity 	<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

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
The student applies mathematical process standards to directly compare measurable attributes <i>continued</i> .		
<p>B. Compare two objects with a common measurable attribute to see which object has more of/less of the attribute and describe the difference.</p>	<ul style="list-style-type: none"> • Songs: Measuring Plants; Savanna Size • Length • Capacity • Big and Little • Tall and Short • Heavy and Light • 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
8. Data Analysis.		
The student applies mathematical process standards to collect and organize data to make it useful for interpreting information.		
<p>The student is expected to: A. Collect, sort, and organize data into two or three categories;</p>	<ul style="list-style-type: none"> • Song: All Sorts of Laundry • Book: Buttons, Buttons • Sort 	<ul style="list-style-type: none"> • Classifying objects.pdf: Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. <ul style="list-style-type: none"> - Let’s Sort - Sort
<p>B. Use data to create real-object and picture graphs; and</p>	<ul style="list-style-type: none"> • Book: Milton’s Mittens • Calendar/Graph Weather • Observe a Simple System 	
<p>C. Draw conclusions from real-object and picture graphs.</p>	<ul style="list-style-type: none"> • Milton’s Mittens • Calendar/Graph Weather • Observe a Simple System 	

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
9. Personal Financial Literacy.		
The student applies mathematical process standards to manage one’s financial resources effectively for lifetime financial security.		
The student is expected to: A. Identify ways to earn income;		
B. Differentiate between money received as income and money received as gifts;		
C. List simple skills required for jobs; and		
D. Distinguish between wants and needs and identify income as a source to meet one’s wants and needs.		
FIRST GRADE KNOWLEDGE AND SKILLS		
1. Mathematical Process Standards.		
The student uses mathematical processes to acquire and demonstrate mathematical understanding.		
The student is expected to: A. Apply mathematics to problems arising in everyday life, society, and the workplace;	<ul style="list-style-type: none"> • Song: Problem Solving 	
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 style="list-style-type: none"> • Song: Problem Solving 	
C. 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 style="list-style-type: none"> • Song: Problem Solving • Use Manipulatives 	

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
The student uses mathematical processes to acquire and demonstrate mathematical understanding <i>continued</i> .		
D. Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate;	<ul style="list-style-type: none"> • Song: Problem Solving 	
E. Create and use representations to organize, record, and communicate mathematical ideas;	<ul style="list-style-type: none"> • Song: Problem Solving • Use Manipulatives 	
F. Analyze mathematical relationships to connect and communicate mathematical ideas; and	<ul style="list-style-type: none"> • Addition • Subtraction • Act Out Addition • Act Out Subtraction 	
G. Display, explain and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.	<ul style="list-style-type: none"> • Song: Problem Solving • Math Books 	
2. Number and Operations.		
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.		
The student is expected to: A. Recognize instantly the quantity of structured arrangements;	<ul style="list-style-type: none"> • Moving Target (Dots) 	
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 style="list-style-type: none"> • Place Value • Expanded Notation 	<ul style="list-style-type: none"> • Tens and ones.pdf: Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation; understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones. <ul style="list-style-type: none"> - Place Value 11-19

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>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>.</p>		
<p>C. Use objects, pictures, and expanded and standard forms to represent numbers up to 120;</p>	<ul style="list-style-type: none"> • Math Books • Place Value • Expanded Notation 	<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 20-29; 30-39; 40-49; 50-59; 60-69 - Counting to 89 - Counting Charts: - I Can Count to 50; 100; 99; 120
<p>D. Generate a number that is greater than or less than a given whole number up to 120;</p>	<ul style="list-style-type: none"> • Song: Greater Than, Less Than • Greater Than, Less Than • Count Down • Place Value 	<ul style="list-style-type: none"> • 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"> - More or Less Spinner - Catch Me if You Can! - What Are You Looking For? - Two-Pile Sort
<p>E. Use place value to compare whole numbers up to 120 using comparative language;</p>	<ul style="list-style-type: none"> • Place Value • Greater Than, Less Than 	<ul style="list-style-type: none"> • 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"> - More or Less Spinner - Catch Me if You Can! - What Are You Looking For? - Two-Pile Sort
<p>F. Order whole numbers up to 120 using place value and open number lines; and</p>	<ul style="list-style-type: none"> • Place Value • Number Line • Number Chart • Order Numbers 	<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 20-29; 30-39; 40-49; 50-59; 60-69 - Counting to 89 - Counting Charts: - I Can Count to 50; 100; 99; 120

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>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>.</p>		
<p>G. Represent the comparison of two numbers to 100 using the symbols $>$, $<$, or $=$.</p>	<ul style="list-style-type: none"> Place Value Greater Than, Less Than (2-digit Numbers) 	<ul style="list-style-type: none"> Compare two-digit numbers.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"> More or Less Spinner Catch Me if You Can! What Are You Looking For? Two-Pile Sort
<p>3. Number and Operations.</p>		
<p>The student applies mathematical process standards to develop and use strategies for whole number addition and subtraction computations in order to solve problems.</p>		
<p>The student is expected to: A. Use concrete and pictorial models to determine the sum of a multiple of 10 and a one-digit number in problems up to 99;</p>	<ul style="list-style-type: none"> Songs: Addition; Pirates Can Add; On the Bayou Act Out Addition Addition Count On Count On by 1 	<ul style="list-style-type: none"> Adding within 100.pdf: The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones). <ul style="list-style-type: none"> Drawing Tens Beans, Beans, and More Beans The Kingdom of Popsicle Stick-Filled Purses Straws and Macaroni Bean Addition Newsletter Adding Tens and Ones Color Adds Up Cookies and Milk! Addition of Two-Digit Numbers Addition and Subtraction of Large Numbers
<p>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 terms in the problem such as $2 + 4 = []$; $3 + [] = 7$; and $5 = [] - 3$;</p>	<ul style="list-style-type: none"> Missing Addends Missing Minuends and Subtrahends Addition and Subtraction Relationship Commutative Property of Addition 	<ul style="list-style-type: none"> Word problems using subtraction within 20.pdf: Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions. <ul style="list-style-type: none"> Guess and Check Model the Story

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>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>.</p>		
<p>C. Compose 10 with two or more addends with and without concrete objects;</p>	<ul style="list-style-type: none"> • Make 10 • Missing Addends • Count On • Act Out Addition 	<ul style="list-style-type: none"> • Numbers that make 10.pdf: For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation. <ul style="list-style-type: none"> - How Many More?
<p>D. Apply basic fact strategies to add and subtract within 20, including making 10 and decomposing a number leading to a 10;</p>	<ul style="list-style-type: none"> • Song: Fact Families • Book: Facts about Families • Make 10 • Addition and Subtraction Fact Families • Addition Patterns • Subtraction Patterns 	<ul style="list-style-type: none"> • Strategies to add and subtract.pdf: Apply properties of operations as strategies to add and subtract. <ul style="list-style-type: none"> - Adding and Subtracting Bugs - Concentration - Related Facts
<p>E. Explain strategies used to solve addition and subtraction problems up to 20 using spoken words, objects, pictorial models, and number sentences; and</p>	<ul style="list-style-type: none"> • Song: Fact Families • Book: Facts about Families • Addition and Subtraction Fact Families • Addition Patterns • Subtraction Patterns • Act Out Addition • Act Out Subtraction 	<ul style="list-style-type: none"> • Strategies to add and subtract.pdf: Apply properties of operations as strategies to add and subtract. <ul style="list-style-type: none"> - Adding and Subtracting Bugs - Concentration - Related Facts
<p>F. Generate and solve problem situations when given a number sentence involving addition or subtraction of numbers within 20.</p>	<ul style="list-style-type: none"> • Song: Fact Families • Book: Facts about Families • Addition and Subtraction Fact Families • Addition Patterns • Subtraction Patterns • Act Out Addition • Act Out Subtraction 	<ul style="list-style-type: none"> • Word problems using subtraction within 20.pdf: Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions. <ul style="list-style-type: none"> - Guess and Check - Model the Story

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
4. Number and Operations.		
The student applies mathematical process standards to identify coins, their values, and the relationships among them in order to recognize the need for monetary transactions.		
The student is expected to: A. Identify U.S. coins, including pennies, nickels, dimes, and quarters, by value and describe the relationships among them;	<ul style="list-style-type: none"> • Song: Money • Book: Bugs For Sale • Count Nickels and Pennies or Dimes and Pennies • Count Dimes, Nickels, and Pennies • Count Quarters, Dimes, Nickels, and Pennies • Quarters • Equivalent Sums of Money 	
B. Write a number with the cent symbol to describe the value of a coin; and	<ul style="list-style-type: none"> • Song: Money • Book: Bugs For Sale • Count Nickels and Pennies or Dimes and Pennies • Count Dimes, Nickels, and Pennies • Count Quarters, Dimes, Nickels, and Pennies • Quarters • Equivalent Sums of Money 	
C. Use relationships to count by twos, fives, and tens to determine the value of a collection of pennies, nickels, and/or dimes.	<ul style="list-style-type: none"> • Songs: Money; Skip Counting • Book: Bugs For Sale • Skip Count • Count Nickels and Pennies or Dimes and Pennies • Count Dimes, Nickels, and Pennies 	
5. Algebraic Reasoning.		
The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships.		
The student is expected to: A. Recite numbers forward and backward from any given number between 1 and 120;	<ul style="list-style-type: none"> • Songs: Counting On; Counting Backward • Book: A Space Adventure 	<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 20-29; 30-39; 40-49; 50-59; 60-69 - Counting to 89 - Counting Charts: - I Can Count to 50; 100; 99; 120

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships <i>continued</i>.</p>		
<p>B. Skip count by twos, fives, and tens to determine the total number of objects up to 120 in a set;</p>	<ul style="list-style-type: none"> • Song: Counting On • Books: Circus 20 • Skip Count by 2 • Count On • Make and Count Groups • Add Groups • Subtract Groups 	<ul style="list-style-type: none"> • Relate counting to addition and subtraction.pdf: Relate counting to addition and subtraction. <ul style="list-style-type: none"> - Skip Counting Chant - Jump Rope Counting - Related Facts - Count by 2s; 5s; 10s
<p>C. Use relationships to determine the number that is 10 more and 10 less than a given number up to 120;</p>	<ul style="list-style-type: none"> • Add Tens • Subtract Tens • Number Charts • Skip Count 	<ul style="list-style-type: none"> • Ten more or less.pdf: Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used. <ul style="list-style-type: none"> - Ten-O - Toss It - Make a Number - Subtract 10 - Flashcards - Bingo - Addition of Tens
<p>D. Represent word problems involving addition and subtraction of whole numbers up to 20 using concrete and pictorial models and number sentences;</p>	<ul style="list-style-type: none"> • Song: Fact Families • Book: Facts about Families • Addition and Subtraction Fact Families • Addition Patterns • Subtraction Patterns • Act Out Addition • Act Out Subtraction 	<ul style="list-style-type: none"> • Word problems using subtraction within 20.pdf: Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions. <ul style="list-style-type: none"> - Guess and Check - Model the Story
<p>E. Understand that the equal sign represents a relationship where expressions on each side of the equal sign represent the same value(s);</p>	<ul style="list-style-type: none"> • Greater Than, Less Than 	<ul style="list-style-type: none"> • Equal sign.pdf: Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. <ul style="list-style-type: none"> - Show Me! - Tricky Total - Domino Addition - Domino Subtraction - Playground Fact Snake

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships <i>continued</i>.</p>		
<p>F. 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; and</p>	<ul style="list-style-type: none"> • Missing Addends • Missing Minuends and Subtrahends • Addition and Subtraction Relationship • Commutative Property of Addition 	<ul style="list-style-type: none"> • Word problems using subtraction within 20.pdf: Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions. <ul style="list-style-type: none"> - Guess and Check - Model the Story
<p>G. Apply properties of operations to add and subtract two or three numbers.</p>	<ul style="list-style-type: none"> • Addition • Add Without Regrouping • Subtraction • Subtract Without Regrouping • Add 3 One-digit Numbers 	<ul style="list-style-type: none"> • Add and subtract within 100.pdf: Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. <ul style="list-style-type: none"> - Addition of Two-Digit Numbers - Tic Tac Toe - Subtraction of Two-Digit Numbers
<p>6. Geometry and Measurement.</p>		
<p>The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties.</p>		
<p>The student is expected to: A. Classify and sort regular and irregular two-dimensional shapes based on attributes using informal geometric language;</p>	<ul style="list-style-type: none"> • Songs: Shapes, Shapes, Shapes; All Sorts of Laundry; Kites; Corners and Sides • Book: Buttons, Buttons • Circle, Square, Triangle, Rectangle • Simple Shapes • Sort 	<ul style="list-style-type: none"> • Classifying objects.pdf: Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. <ul style="list-style-type: none"> - Let's Sort - Sort
<p>B. Distinguish between attributes that define a two-dimensional or three-dimensional figure and attributes that do not define the shape;</p>	<ul style="list-style-type: none"> • Songs: Corners and Sides; Kites • Space Shapes • Simple Shapes 	<ul style="list-style-type: none"> • Attributes.pdf: Distinguish between defining attributes versus non-defining attributes; build and draw shapes to possess defining attributes. <ul style="list-style-type: none"> - Sorting Shapes
<p>C. Create two-dimensional figures, including circles, triangles, rectangles, and squares, as special rectangles, rhombuses, and hexagons;</p>	<ul style="list-style-type: none"> • Geoboard • Tangrams 	<ul style="list-style-type: none"> • Form larger shapes.pdf: Compose simple shapes to form larger shapes. <ul style="list-style-type: none"> - Combining Shapes

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties <i>continued</i>.</p>		
<p>D. Identify two-dimensional shapes, including circles, triangles, rectangles, and squares, as special rectangles, rhombuses, and hexagons and describe their attributes using formal geometric language;</p>	<ul style="list-style-type: none"> • Songs: Shapes, Shapes, Shapes; Kites; Corners and Sides • Book: The Shape of Things • Circle, Square, Triangle, Rectangle • Star, Semicircle, Octagon, Oval, Rhombus • 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
<p>E. Identify three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes), and triangular prisms, and describe their attributes using formal geometric language;</p>	<ul style="list-style-type: none"> • Song: Corners and Sides • Space 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
<p>F. Compose two-dimensional shapes by joining two, three, or four figures to produce a target shape in more than one way if possible;</p>	<ul style="list-style-type: none"> • Geoboard • Tangrams 	<ul style="list-style-type: none"> • Form larger shapes.pdf: Compose simple shapes to form larger shapes. <ul style="list-style-type: none"> - Combining Shapes
<p>G. Partition two-dimensional figures into two and four fair shares or equal parts and describe the parts using words; and</p>	<ul style="list-style-type: none"> • Books: Half For You and Half For Me; Halves and Fourths and Thirds • Geoboard • Tangrams • Equal Part Fractions 	<ul style="list-style-type: none"> • Equal shares.pdf: Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares. <ul style="list-style-type: none"> - Make It Equal - Fraction Friends - Fraction Train - Halves, Thirds, Fourths - Equal Parts

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties <i>continued</i>.</p>		
<p>H. Identify examples and non-examples of halves and fourths.</p>	<ul style="list-style-type: none"> • Song: Fractions • Book: Halves and Fourths and Thirds • Equal-part Fractions 	<ul style="list-style-type: none"> • Equal shares.pdf: Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares. <ul style="list-style-type: none"> - Make It Equal - Fraction Friends - Fraction Train - Halves, Thirds, Fourths - Equal Parts
<p>7. Geometry and Measurement.</p>		
<p>The student applies mathematical process standards to select and use units to describe length and time.</p>		
<p>The student is expected to: A. Use measuring tools to measure the length of objects to reinforce the continuous nature of linear measurement;</p>	<ul style="list-style-type: none"> • Song: Measuring Plants • Length • Measurement Tools • Nonstandard Units of Length 	<ul style="list-style-type: none"> • Length Measurement.pdf: Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. <ul style="list-style-type: none"> - Measures of Me - Measure a Handful - Estimating Length - A Fruit and Vegetable - Measure Up! - Inches/Centimeters Rulers

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
The student applies mathematical process standards to select and use units to describe length and time <i>continued</i> .		
<p>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 gaps or overlaps, reach from one end of the object to the other;</p>	<ul style="list-style-type: none"> • Song: Measuring Plants • Length • Nonstandard Units of Length 	<ul style="list-style-type: none"> • Length Measurement.pdf: Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. <ul style="list-style-type: none"> - Measures of Me - Measure a Handful - Estimating Length - A Fruit and Vegetable - Measure Up! - Inches/Centimeters Rulers
<p>C. Measure the same object/distance with units of two different lengths and describe how and why the measurements differ;</p>	<ul style="list-style-type: none"> • Song: Measuring Plants • Length • Nonstandard Units of Length 	<ul style="list-style-type: none"> • Measuring the same object two ways.pdf: Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen. <ul style="list-style-type: none"> - Ready, Set, Measure
<p>D. Describe a length to the nearest whole unit using a number and a unit; and</p>	<ul style="list-style-type: none"> • Song: Measuring Plants • Length • Measurement Tools • Nonstandard Units of Length 	<ul style="list-style-type: none"> • Measurement tools.pdf: Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. <ul style="list-style-type: none"> - Ready, Set, Measure - Treasure Hunt - Centimeter Ruler - Inch Ruler - Let's Measure in Centimeters! - Let's Measure in Inches!
<p>E. Tell time to the hour and half hour using analog and digital clocks.</p>	<ul style="list-style-type: none"> • Song: Clock Hands • Books: Mr. Romano's Secret: A Time Story • Tell Time to the Hour • Tell Time to the Half-hour 	<ul style="list-style-type: none"> • Hours and Half Hours.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

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
8. Data Analysis.		
The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems.		
<p>The student is expected to:</p> <p>A. Collect, sort, and organize data in up to three categories using models/ representations such as tally marks or T-charts;</p>	<ul style="list-style-type: none"> • Song: Tallying; Graphing • Book: One More Cat • Tally Marks • Graphs 	<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?
<p>B. Use data to create picture and bar-type graphs; and</p>	<ul style="list-style-type: none"> • Song: Graphing • Graphs • Picture Graphs • Bar Graphs 	<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
<p>C. Draw conclusions and generate and answer questions using information from picture and bar-type graphs.</p>	<ul style="list-style-type: none"> • Song: Graphing • Graphs • Picture Graphs • Bar Graphs 	<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

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
9. Personal Financial Literacy.		
The student applies mathematical process standards to manage one’s financial resources effectively for lifetime financial security.		
The student is expected to:		
A. Define money earned as income;		
B. Identify income as a means of obtaining goods and services, oftentimes making choices between wants and needs;		
C. Distinguish between spending and saving; and		
D. Consider charitable giving.		
SECOND GRADE KNOWLEDGE AND SKILLS		
1. Mathematical Process Standards.		
The student uses mathematical processes to acquire and demonstrate mathematical understanding.		
The student is expected to:	<ul style="list-style-type: none"> • Song: Problem Solving 	
A. Apply mathematics to problems arising in everyday life, society, and the workplace;	<ul style="list-style-type: none"> • Books: The Boonville Nine; Red Rock, River Rock; Painting By Number; Fudge For Sale 	
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 style="list-style-type: none"> • Song: Problem Solving • Books: The Boonville Nine; Red Rock, River Rock; Painting By Number; Fudge For Sale 	
C. 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 style="list-style-type: none"> • Song: Problem Solving • Books: The Boonville Nine; Red Rock, River Rock • Use Manipulatives • Number Recognition and Sense 	

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
The student uses mathematical processes to acquire and demonstrate mathematical understanding <i>continued</i> .		
D. Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate;	<ul style="list-style-type: none"> • Songs: Problem Solving; Graphing • Books: The Boonville Nine; Red Rock, River Rock; Painting By Number; Fudge For Sale • Picture Graphs • Bar Graphs 	
E. Create and use representations to organize, record, and communicate mathematical ideas;	<ul style="list-style-type: none"> • Song: Problem Solving • Books: The Boonville Nine; Red Rock, River Rock; Painting By Number • Picture Graphs • Bar Graphs • Greater Than, Less Than 	
F. Analyze mathematical relationships to connect and communicate mathematical ideas; and	<ul style="list-style-type: none"> • Song: Problem Solving • Books: The Boonville Nine; Red Rock, River Rock; Painting By Number • Addition • Subtraction • Act Out Addition • Act Out Subtraction 	<ul style="list-style-type: none"> • Explaining Addition and Subtraction Strategies.pdf: Explain why addition and subtraction strategies work, using place value and the properties of operations. <ul style="list-style-type: none"> - Cube Trails - Race for a Flat - High/Low Number Cube Throw - Lucky Five - Hundreds, Tens, Ones Chart - Numbers Cards
G. Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.	<ul style="list-style-type: none"> • Song: Problem Solving • Books: The Boonville Nine; Red Rock, River Rock; Painting By Number • Addition • Subtraction • Act Out Addition • Act Out Subtraction 	<ul style="list-style-type: none"> • Explaining Addition and Subtraction Strategies.pdf: Explain why addition and subtraction strategies work, using place value and the properties of operations. <ul style="list-style-type: none"> - Cube Trails - Race for a Flat - High/Low Number Cube Throw - Lucky Five - Hundreds, Tens, Ones Chart - Numbers Cards

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
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.		
<p>The student is expected to:</p> <p>A. Use concrete and pictorial models to compose and decompose numbers up to 1,200 in more than one way as a sum of so many thousands, hundreds, tens, and ones;</p>	<ul style="list-style-type: none"> • Place Value • Expanded Notation 	<ul style="list-style-type: none"> • Add and subtract within 1000.pdf: Add and subtract within 1,000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds. <ul style="list-style-type: none"> - Choose and Add - Mix and Match Addition - Expanded Subtraction - Subtracting Repeats - 999 - Prediction - Up and Away - Regrouping Treasure Hunt - Play Ball - Squirrel Facts
<p>B. Use standard, word, and expanded forms to represent numbers up to 1,200;</p>	<ul style="list-style-type: none"> • Place Value • Expanded Notation 	<ul style="list-style-type: none"> • Read and write numbers to 1000.pdf: Read and write numbers to 1000 using base-ten numerals, number names, and expanded form. <ul style="list-style-type: none"> - Cube Trails - Race for a Flat - High/Low Number Cube Throw - Lucky Five

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>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 <i>continued</i>.</p>		
<p>C. Generate a number that is greater than or less than a given whole number up to 1,200;</p>	<ul style="list-style-type: none"> • Song: Greater Than, Less Than • Greater Than, Less Than • Number Line • Place Value • Number Patterns • Number Chart 	<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 - $<$, $>$, $=$ Cards - Greater Than, Less Than, Equal To
<p>D. Use place value to compare and order whole numbers up to 1,200 using comparative language, numbers, and symbols ($>$, $<$, or $=$);</p>	<ul style="list-style-type: none"> • Song: Greater Than, Less Than • Greater Than, Less Than • Number Line • Place Value • Number Patterns 	<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 - $<$, $>$, $=$ Cards - Greater Than, Less Than, Equal To
<p>E. Locate the position of a given whole number on an open number line; and</p>	<ul style="list-style-type: none"> • Number Line 	
<p>F. Name the whole number that corresponds to a specific point on a number line.</p>	<ul style="list-style-type: none"> • Number Line 	

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
3. Number and Operations.		
The student applies mathematical process standards to recognize and represent fractional units and communicates how they are used to name parts of a whole.		
<p>The student is expected to:</p> <p>A. Partition objects into equal parts and name the parts, including halves, fourths, and eighths, using words;</p>	<ul style="list-style-type: none"> • Songs: Fractions; Fractions of Regions • Books: The Fraction Twins; Halves and Fourths and Thirds • Fractions • Fractions of Regions • Fractions of Groups • 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>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;</p>	<ul style="list-style-type: none"> • Songs: Fractions; Fractions of Regions • Books: The Fraction Twins; Halves and Fourths and Thirds • Fractions • Fractions of Regions • Fractions of Groups • 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>C. Use concrete models to count fractional parts beyond one whole using words and recognize how many parts it takes to equal one whole; and</p>	<ul style="list-style-type: none"> • Songs: Fractions; Fractions of Regions • Books: The Fraction Twins; Halves and Fourths and Thirds • Fractions • Fractions of Regions • Fractions of Groups • 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>D. Identify examples and non-examples of halves, fourths, and eighths.</p>	<ul style="list-style-type: none"> • Songs: Fractions; Fractions of Regions • Books: The Fraction Twins; Halves and Fourths and Thirds • Fractions • Fractions of Regions • Fractions of Groups • 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

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
4. Number and Operations.		
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.		
<p>The student is expected to:</p> <p>A. Recall basic facts to add and subtract within 20 with automaticity;</p>	<ul style="list-style-type: none"> • Songs: Fact Families; On the Bayou; Pirates Can Add; A Nice Addition; Bakery Subtraction; Circus Subtraction • Addition Patterns • Subtraction Patterns • Mental Math Games • Speed Games 	<ul style="list-style-type: none"> • Adding and Subtracting Within 20.pdf: Fluently add and subtract within 20 using mental strategies. By end of grade 2, know from memory all sums of two one-digit numbers. <ul style="list-style-type: none"> - Flashcards: - Addition—horizontal and vertical - Subtraction—horizontal and vertical
<p>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;</p>	<ul style="list-style-type: none"> • Songs: Fact Families; On the Bayou; Pirates Can Add; A Nice Addition; Bakery Subtraction; Circus Subtraction; Finding the Difference; Doubles • Subtraction Patterns • Mental Math Games • Place Value 	<ul style="list-style-type: none"> • Adding four 2-digit numbers.pdf: Add up to four two-digit numbers using strategies based on place value and properties of operations. <ul style="list-style-type: none"> - Add Four Two-Digit Numbers
<p>C. Solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms; and</p>	<ul style="list-style-type: none"> • Songs: Fact Families; On the Bayou; Pirates Can Add; A Nice Addition; Bakery Subtraction; Circus Subtraction; Finding the Difference; Doubles • Subtraction Patterns • Mental Math Games • Place Value 	<ul style="list-style-type: none"> • One- and two-step word problems within 100. pdf: Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. <ul style="list-style-type: none"> - Animal Math - Picture Problems - Color the Chart - Think About it Differently

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>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 <i>continued</i>.</p>		
<p>D. Generate and solve problem situations for a given mathematical number sentence involving addition and subtraction of whole numbers within 1,000.</p>	<ul style="list-style-type: none"> • Book: Chloe’s Cracker Caper • Missing Addends • Missing Minuends and Subtrahends • Mental Math Games • Addition and Subtraction Relationship 	<ul style="list-style-type: none"> • Add and Subtract Within 1000.pdf: Add and subtract within 1,000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds. <ul style="list-style-type: none"> - Choose and Add - Mix and Match Addition - Expanded Subtraction - Subtracting Repeats - 999 - Prediction - Up and Away - Regrouping Treasure Hunt - Play Ball - Squirrel Facts - Number Cards
<p>5. Number and Operations.</p>		
<p>The student applies mathematical process standards to determine the value of coins in order to solve monetary transactions.</p>		
<p>The student is expected to: A. Determine the value of a collection of coins up to one dollar; and</p>	<ul style="list-style-type: none"> • Songs: Money; Save Your Pennies • Money • Coin Identification • Quarters • Count Coins • Count Dimes, Nickels, and Pennies • Count Nickels and Pennies or Dimes and Pennies • Count Quarters, Dimes, Nickels, and Pennies • Coin Value • Equivalent Sums of Money 	

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
The student applies mathematical process standards to determine the value of coins in order to solve monetary transactions <i>continued</i> .		
<p>B. Use the cent symbol, dollar sign, and the decimal point to name the value of a collection of coins.</p>	<ul style="list-style-type: none"> • Songs: Money; Save Your Pennies • Money • Coin Identification • Count Bills and Coins • Quarters • Count Coins • Count Dimes, Nickels, and Pennies • Count Nickels and Pennies or Dimes and Pennies • Count Quarters, Dimes, Nickels, and Pennies • Coin Value • Equivalent Sums of Money 	<ul style="list-style-type: none"> • Solve money word problems.pdf: Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. <ul style="list-style-type: none"> - Supermarket Hunt - Shopping for My Family - Money Combinations - Money Sums - Pizza Parlor - How Much Back? - Coin Count - Bills and Coins - Let's Count Coins - Money Addition - Change Is Good! - Make 45¢
6. Number and Operations.		
The student applies mathematical process standards to connect repeated addition and subtraction to multiplication and division situations that involve equal groupings and shares.		
<p>The student is expected to: A. Model, create, and describe contextual multiplication situations in which equivalent sets of concrete objects are joined; and</p>	<ul style="list-style-type: none"> • Song: Multiplication • Book: Tyrannosaurus X 1 • Multiplication • Multiply Using Arrays • Multiply Using Repeated Addition • Multiplication Fact Families • Multiplication and Division Fact Families • Mental Math Games • Speed Games 	
<p>B. Model, create and describe contextual division situations in which a set of concrete objects is separated into equivalent sets.</p>	<ul style="list-style-type: none"> • Books: The Snow Project; Half for You and Half for Me • Division • Divide Using Repeated Subtraction • Divide Using Equal Sharing • Multiplication and Division Fact Families 	

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
7. Algebraic Reasoning.		
The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships.		
<p>The student is expected to:</p> <p>A. Determine whether a number up to 40 is even or odd using pairings of objects to represent the number;</p>	<ul style="list-style-type: none"> • Song: Odd Todd and Even Steven • Skip Count by 2 • Addition Facts 	<ul style="list-style-type: none"> • Odd and even recognition.pdf: Determine whether a group of objects (up to 20) has an odd or even number of members. <ul style="list-style-type: none"> - Missing Patterns - Counting by 2s - What's My Number?
<p>B. Use an understanding of place value to determine the number that is 10 or 100 more or less than a given number up to 1,200; and</p>	<ul style="list-style-type: none"> • Place Value • Number Patterns • Number Chart • Skip Count 	<ul style="list-style-type: none"> • Mentally adding or subtracting 10 or 100.pdf: Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900. <ul style="list-style-type: none"> - Spin and Solve
<p>C. Represent and solve addition and subtraction word problems where unknowns may be any one of the terms in the problem.</p>	<ul style="list-style-type: none"> • Songs: A Nice Addition; On the Bayou; Pirates Can Add; Fact Families; Bakery Subtraction; Circus Subtraction • Addition • Subtraction • Act Out Addition • Act Out Subtraction • Subtraction Patterns • Missing Addends • Missing Subtrahends • Missing Minuends 	<ul style="list-style-type: none"> • One- and two-step word problems within 100. pdf: Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. <ul style="list-style-type: none"> - Animal Math - Picture Problems - Color the Chart - Think About it Differently - Act it Out - Guess and Check
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.		
<p>The student is expected to:</p> <p>A. Create two-dimensional shapes based on given attributes, including number of sides and vertices;</p>	<ul style="list-style-type: none"> • Songs: Shapes, Shapes, Shapes; Corners and Sides • Geoboard • Tangrams 	<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

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties <i>continued</i>.</p>		
<p>B. Classify and sort three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes as special rectangular prisms), and triangular prisms, based on attributes using formal geometric language;</p>	<ul style="list-style-type: none"> • Song: Corners and Sides • Geoboard • Space Shapes • Tangrams 	<ul style="list-style-type: none"> • Classifying objects.pdf: Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. <ul style="list-style-type: none"> - Let's Sort - Sort
<p>C. Classify and sort polygons with 12 or fewer sides according to attributes, including identifying the number of sides and number of vertices;</p>	<ul style="list-style-type: none"> • Song: Corners and Sides 	<ul style="list-style-type: none"> • Classifying objects.pdf: Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. <ul style="list-style-type: none"> - Let's Sort - Sort
<p>D. Compose two-dimensional shapes and three-dimensional solids with given properties or attributes; and</p>	<ul style="list-style-type: none"> • Geoboard • Tangrams 	<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
<p>E. Decompose two-dimensional shapes such as cutting out a square from a rectangle, dividing a shape in half, or partitioning a rectangle into identical triangles and identify the resulting geometric parts.</p>	<ul style="list-style-type: none"> • Song: Symmetry; Fractions • Fractions • Geoboard 	

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9. Geometry and Measurement		
The student applies mathematical process standards to select and use units to describe length, area, and time.		
<p>The student is expected to:</p> <p>A. Find the length of objects using concrete models for standard units of length;</p>	<ul style="list-style-type: none"> • Book: Birds at My House • Length • Standard Units of Length • Measurement Tools 	<ul style="list-style-type: none"> • Measurement Tools.pdf: Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. <ul style="list-style-type: none"> - Ready, Set, Measure - Treasure Hunt - Centimeter ruler - Inch Ruler - Let's Measure in Centimeters! - Let's Measure in Inches!
<p>B. Describe the inverse relationship between the size of the unit and the number of units needed to equal the length of an object;</p>	<ul style="list-style-type: none"> • Length • Standard Units of Length • Measurement Tools • Nonstandard Units of Length 	<ul style="list-style-type: none"> • Measuring the Same Object Two Ways.pdf: Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen. <ul style="list-style-type: none"> - Ready, Set, Measure
<p>C. Represent whole numbers as distances from any given location on a number line;</p>	<ul style="list-style-type: none"> • Number Line • Addition • Subtraction 	<ul style="list-style-type: none"> • Generating measurement data.pdf: Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units. <ul style="list-style-type: none"> - Measuring Inches - Ready, Set, Measure - Let's Measure in Centimeters! - Let's Measure in Inches!
<p>D. Determine the length of an object to the nearest marked unit using rulers, yardsticks, meter sticks, or measuring tapes;</p>	<ul style="list-style-type: none"> • Length • Standard Units of Length • Measurement Tools 	<ul style="list-style-type: none"> • Measurement Tools.pdf: Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. <ul style="list-style-type: none"> - Ready, Set, Measure - Treasure Hunt - Centimeter ruler - Inch Ruler - Let's Measure in Centimeters! - Let's Measure in Inches!

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
E. Determine a solution to a problem involving length, including estimating lengths;	<ul style="list-style-type: none"> • Length • Standard Units of Length • Measurement Tools 	<ul style="list-style-type: none"> • Estimating Lengths.pdf: Estimate lengths using units of inches, feet, centimeters, and meters. <ul style="list-style-type: none"> - Ready, Set, Measure - Treasure Hunt - Let's Measure in Centimeters! - Let's Measure in Inches! - Measuring Perimeter
F. 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; and		
G. Read and write time to the nearest one-minute increment using analog and digital clocks and distinguish between a.m. and p.m.	<ul style="list-style-type: none"> • Songs: Telling Time; Clock Hands • Tell Time • Tell Time to Five Minutes • Tell Time to the Quarter Hour • Tell Time to the Minute • Tell Time to the Hour • Tell Time to the Half-hour 	<ul style="list-style-type: none"> • Tell and write time.pdf: Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. <ul style="list-style-type: none"> - Matching Clocks - Cartoon Captions - Time to 5 Minutes
10. Data Analysis.		
The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems.		
The student is expected to: A. 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 style="list-style-type: none"> • Song: Graphing • Bar Graphs • Picture Graphs • Graphing 	<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

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems <i>continued.</i>		
B. Organize a collection of data with up to four categories using pictographs and bar graphs with intervals of one or more;	<ul style="list-style-type: none"> • Song: Graphing • Bar Graphs • Picture Graphs • Graphing 	<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
C. Write and solve one-step word problems involving addition or subtraction using data represented within pictographs and bar graphs with intervals of one; and	<ul style="list-style-type: none"> • Song: Graphing • Bar Graphs • Picture Graphs • Graphing • Addition • Subtraction 	<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
D. Draw conclusions and make predictions from information in a graph.	<ul style="list-style-type: none"> • Song: Graphing • Bar Graphs • Picture Graphs • Graphing 	<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

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11. Personal Financial Literacy.		
The student applies mathematical process standards to manage one’s financial resources effectively for lifetime financial security.		
The student is expected to: A. Calculate how money saved can accumulate into a larger amount over time;	<ul style="list-style-type: none"> Song: Save Your Pennies 	
B. Explain that saving is an alternative to spending;	<ul style="list-style-type: none"> Song: Save Your Pennies 	
C. Distinguish between a deposit and a withdrawal;		
D. Identify examples of borrowing and distinguish between responsible and irresponsible borrowing;		
E. Identify examples of lending and use concepts of benefits and costs to evaluate lending decisions; and		
F. 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:		
(A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;	<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
(B) use scientific practices to plan and conduct simple descriptive investigations and use engineering practices to design solutions to problems;	<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

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER 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 <i>continued</i> :		
(C) identify, describe, and demonstrate safe practices during classroom and field investigations as outlined in Texas Education Agency-approved safety standards;	<ul style="list-style-type: none"> • Songs: Storms; Sun Blues • Lightning Safety • Science Investigation 	<ul style="list-style-type: none"> • Emergency Preparedness for Kids • Fire Safety Activity for Kids • Thunder and Lightning • Smell Labels (Safe Smelling) • Good Playing Rules Rebus
(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 style="list-style-type: none"> • Songs: The Scientific Method; Precipitation • Science Investigation • Science Tools • Measurement Tools • Weather Tools • Sun, Moon, and Stars • Plant Life Cycle and Growth • Animal Life Cycle and Growth • Observe a Simple System 	<ul style="list-style-type: none"> • More to Explore Experiment: Water for Plants; Sound; Recycling; Traits; The Moon; Light for Plants; Rocks; Simple Machines; Evaporation • Learning Together: Weather; The Weather Around Us; Green and Growing; How It Works; Our Earth; The Sky Above Us; Places on Earth • Weather Cards • Butterfly Life Cycle • Frog Life Cycle • Amphibians • Metamorphosis
(E) collect observations and measurements as evidence;	<ul style="list-style-type: none"> • Water Unit • Fossils • Observe a Simple System • Calendar/Graph Weather 	
(F) record and organize data using pictures, numbers, words, symbols, and simple graphs; and	<ul style="list-style-type: none"> • Song: Graphing • Graphs • Picture Graphs • Bar Graphs • Calendar/Graph Weather • Observe a Simple System 	

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>(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 <i>continued</i>:</p>		
<p>(G) develop and use models to represent phenomena, objects, and processes or design a prototype for a solution to a problem.</p>	<ul style="list-style-type: none"> • Song: Inventing • Books: I Want to Be a Scientist Like Wilbur and Orville Wright; Inventions All Around • Water Cycle • Experiments: Air; Density; Sound; Buoyancy; Pollution • Inventions 	
<p>(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:</p>		
<p>(A) identify basic advantages and limitations of models such as their size, properties, and materials;</p>	<ul style="list-style-type: none"> • Song: Inventing • Books: I Want to Be a Scientist Like Wilbur and Orville Wright; Inventions All Around • Inventions 	
<p>(B) analyze data by identifying significant features and patterns;</p>	<ul style="list-style-type: none"> • Book: Moon Song • Moon Patterns • Calendar/Graph Weather • Weather Patterns • Sun, Moon, and Earth 	
<p>(C) use mathematical concepts to compare two objects with common attributes; and</p>	<ul style="list-style-type: none"> • Song: Big Small • Water Sources • Big and Little • Tall and Short • Heavy and Light • Large Small Toys • Big Little Animals 	
<p>(D) evaluate a design or object using criteria to determine if it works as intended.</p>	<ul style="list-style-type: none"> • Song: Inventing • Books: I Want to Be a Scientist Like Wilbur and Orville Wright; Inventions All Around • Inventions 	

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
(3) Scientific and engineering practices. The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:		
(A) develop explanations and propose solutions supported by data and models;	<ul style="list-style-type: none"> • Books: How Did the Chicken Cross the Road?; Inventions All Around • Simple Machines 	<ul style="list-style-type: none"> • More to Explore Experiment: Simple Machines • How It Works
(B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and	<ul style="list-style-type: none"> • Song: The Scientific Method • Science Investigation 	<ul style="list-style-type: none"> • Speaking to express ideas: Speak audibly and express thoughts, feelings, and ideas clearly. • My Favorite Things
(C) listen actively to others' explanations to identify important evidence and engage respectfully in scientific discussion.	<ul style="list-style-type: none"> • Song: The Scientific Method • Science Investigation 	<ul style="list-style-type: none"> • Speaking and listening: Follow agreed-upon rules for discussions. <ul style="list-style-type: none"> - Speaking and Listening—Taking Turns
(4) Scientific and engineering practices. The student knows the contributions of scientists and recognizes the importance of scientific research and innovation on society. The student is expected to:		
(A) explain how science or an innovation can help others; and	<ul style="list-style-type: none"> • Book: Inventions All Around • Simple Machines 	<ul style="list-style-type: none"> • More to Explore Experiment: Simple Machines • How It Works
(B) identify scientists and engineers such as Isaac Newton, Mae Jemison, and Ynes Mexia and explore what different scientists and engineers do.	<ul style="list-style-type: none"> • Books: I Want to Be a Scientist Like: Jane Goodall; George Washington Carver; Wilbur and Orville Wright; Antoni van Leeuwenhoek; Carl Linnaeus; Alexander von Humboldt; Joanne Simpson; Thomas Edison; Louis Pasteur; Marie Curie; Stephen Hawking; Isaac Newton 	<ul style="list-style-type: none"> • Defying Gravity: The Story of Mae Jemison
(5) Recurring themes and concepts. The student uses recurring themes and concepts to make connections across disciplines. The student is expected to:		
(A) identify and use patterns to describe phenomena or design solutions;	<ul style="list-style-type: none"> • Song: Seasons • Books: Moon Song; The Four Seasons; That's What I Like: A Book About Seasons • Moon Patterns • Calendar/Graph Weather • Weather Patterns • Sun, Moon, and Earth 	

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
(5) Recurring themes and concepts. The student uses recurring themes and concepts to make connections across disciplines. The student is expected to <i>continued</i> :		
(B) investigate and predict cause-and-effect relationships in science;	<ul style="list-style-type: none"> • Song: Seasons • Books: The Four Seasons; That’s What I Like: A Book About Seasons • Calendar/Graph Weather • Sun, Moon, and Earth • Astronomy Unit • Plants Need Water • Healthy Plants’ Needs • Food Chains • Care of Earth 	<ul style="list-style-type: none"> • More to Explore Experiment: Evaporation; Light for Plants; Water for Plants
(C) describe the properties of objects in terms of relative size (scale) and relative quantity;	<ul style="list-style-type: none"> • Song: Savanna Size • Size • Big and Little • Large Small Toys • Tall and Short • Heavy and Light • More than, Fewer than 	<ul style="list-style-type: none"> • More to Explore Experiment: Dinosaur Size
(D) examine the parts of a whole to define or model a system;	<ul style="list-style-type: none"> • Edible Plant Parts • Food Chains • Functions of Plant Parts 	<ul style="list-style-type: none"> • Plant Parts.pdf: Draw a plant, and label the parts. • Body Parts • Insect Parts Poster
(E) identify forms of energy and properties of matter;	<ul style="list-style-type: none"> • Songs: Matter; Precipitation; Solid or Liquid • Book: Pancakes Matter • Sun • Matter • Solid and Liquid • Solid, Liquid, Gas • States of Water • Heat Changes Water 	<ul style="list-style-type: none"> • More to Explore Experiment: Temperature and Melting • Learning Together: Solids, Liquids, and Gases • Solid and Liquid • States of Water
(F) describe the relationship between the structure and function of objects, organisms, and systems; and	<ul style="list-style-type: none"> • Animal Groups • Teeth • Functions of Plant Parts 	

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
(5) Recurring themes and concepts. The student uses recurring themes and concepts to make connections across disciplines. The student is expected to <i>continued</i> :		
(G) describe how factors or conditions can cause objects, organisms, and systems to either change or stay the same.	<ul style="list-style-type: none"> • Song: Seasons • Book: That's What I Like: A Book About Seasons • Weather • Spring • Summer • Fall • Winter • Animal Behavior • Animal Bodies • Animal Adaptations and Human Tools 	<ul style="list-style-type: none"> • Learning Together: Animals • How Animals Survive
(6) Matter and its properties. The student knows that objects have physical properties that determine how they are described and classified. The student is expected to identify and record observable physical properties of objects, including shape, color, texture, and material, and generate ways to classify objects.	<ul style="list-style-type: none"> • Songs: Marmot Shapes; Shapes, Shapes, Shapes; All Sorts of Laundry; Squirrel's Zoo Colors • Book: Buttons, Buttons • Sort • Touch • Sight • Materials 	<ul style="list-style-type: none"> • Texture Sort.pdf
(7) Force, motion, and energy. The student knows that forces cause changes in motion and position in everyday life. The student is expected to describe and predict how a magnet interacts with various materials and how magnets can be used to push or pull.	<ul style="list-style-type: none"> • Magnets • Materials 	<ul style="list-style-type: none"> • Learning Together: Magnets

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
(8) Force, motion, and energy. The student knows that energy is everywhere and can be observed in everyday life. The student is expected to:		
(A) 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 style="list-style-type: none"> • Books: My Family Campout; Lightning Bugs • Light Properties • Properties of Light 	
(B) demonstrate and explain that light travels through some objects and is blocked by other objects, creating shadows.	<ul style="list-style-type: none"> • Books: My Family Campout; Lightning Bugs • Light Properties • Properties of Light 	
(9) Earth and space. The student knows that there are recognizable patterns in the natural world and among objects in the sky. The student is expected to:		
(A) identify, describe, and predict the patterns of day and night and their observable characteristics; and	<ul style="list-style-type: none"> • Sun, Moon, and Earth 	
(B) observe, describe, and illustrate the Sun, Moon, stars, and objects in the sky such as clouds.	<ul style="list-style-type: none"> • Songs: The Moon; Sun Blues • Books: Star Pictures; What Is a Cloud?; Moon Song • Sun • Moon • Constellations • Clouds • Astronomy 	<ul style="list-style-type: none"> • Learning Together: The Sky Above Us • More to Explore Experiment: The Moon • Sun, Moon, and Earth.pdf
(10) Earth and space. The student knows that the natural world includes earth materials and systems that can be observed. The student is expected to:		
(A) describe and classify rocks by the observable properties of size, shape, color, and texture;	<ul style="list-style-type: none"> • Song: Rock Cycle • Book: Red Rock, River Rock • Rock Cycle 	<ul style="list-style-type: none"> • More to Explore Experiment: Rocks
(B) observe and describe weather changes from day to day and over seasons; and	<ul style="list-style-type: none"> • Songs: The Four Seasons; Precipitation • Books: That's What I Like: A Book About Seasons; Whatever the Weather • Weather Patterns • Calendar/Graph Weather • Spring • Summer • Fall • Winter 	<ul style="list-style-type: none"> • Learning Together: Weather; The Weather Around Us • Weather Cards

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>(10) Earth and space. The student knows that the natural world includes earth materials and systems that can be observed. The student is expected to <i>continued</i>:</p>		
<p>(C) 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 ribbon.</p>	<ul style="list-style-type: none"> • Book: Can You Guess? A Story for Two Voices • Air • Air Uses • Air Experiment 	<ul style="list-style-type: none"> • Taking Care of Our Air.pdf • More to Explore Experiment: Air Movement
<p>(11) Earth and space. The student knows that earth materials are important to everyday life. The student is expected to observe and generate examples of practical uses for rocks, soil, and water.</p>	<ul style="list-style-type: none"> • Songs: Rock Cycle; Water Cycle • Book: Red Rock, River Rock • Natural Resources • Rocks • Rock Cycle • Soil • Care of Water • States of Water • Water Uses 	<ul style="list-style-type: none"> • More to Explore Experiment: Rocks; Cleaning Solution • Where Does Soil Come From?.pdf
<p>(12) Organisms and environments. The student knows that plants and animals depend on the environment to meet their basic needs for survival. The student is expected to:</p>		
<p>(A) observe and identify the dependence of plants on air, sunlight, water, nutrients in the soil, and space to grow; and</p>	<ul style="list-style-type: none"> • Books: A Seed Grows; The Watermelon Seed • Plants • Plants Need Water • Healthy Plants' Needs • Plants and Animals Need Air • Sun • Plants and Animals 	<ul style="list-style-type: none"> • More to Explore Experiment: Water for Plants
<p>(B) observe and identify the dependence of animals on air, water, food, space, and shelter.</p>	<ul style="list-style-type: none"> • Book: Everybody Needs to Eat • Food From Plants • Animals Need Water • Plants and Animals Need Air • Herbivores, Carnivores, and Omnivores • Plants and Animals 	

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
(13) Organisms and environments. The student knows that organisms resemble their parents and have structures and undergo processes that help them interact and survive within their environments. The student is expected to:		
(A) identify the structures of plants, including roots, stems, leaves, flowers, and fruits;	<ul style="list-style-type: none"> • Song: Plants Are Growing • Books: Follow the Apples; A Seed Grows; The Old Maple Tree • Plants • Functions of Plant Parts 	
(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 style="list-style-type: none"> • Book: Animal Bodies • Animal Bodies • Animal Tracks • Animal Behavior • Animal Adaptations and Human Tools 	
(C) identify and record the changes from seed, seedling, plant, flower, and fruit in a simple plant life cycle; and	<ul style="list-style-type: none"> • Song: Plants Are Growing • Books: A Seed Grows; The Old Maple Tree • Plants • Plant Life Cycle and Growth • Plant Experiment 	<ul style="list-style-type: none"> • The Plant Life Cycle.pdf: Create the different stages of a plants' life cycle.
(D) identify ways that young plants resemble the parent plant.	<ul style="list-style-type: none"> • Book: A Seed Grows • Plant Life Cycle and Growth 	<ul style="list-style-type: none"> • The Plant Life Cycle.pdf: Create the different stages of a plants' life cycle.
GRADE 1		
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:		
(A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;	<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
(B) use scientific practices to plan and conduct simple descriptive investigations and use engineering practices to design solutions to problems;	<ul style="list-style-type: none"> • Song: Inventing • Books: Inventions All Around; How Did the Chicken Cross the Road? • Inventions • Simple Machines 	<ul style="list-style-type: none"> • More to Explore Experiment: Recycling; Simple Machines; Water for Plants; Sound; Recycling; Traits; The Moon; Light for Plants; Pollution; Evaporation

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>(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 <i>continued</i>:</p>		
<p>(C) identify, describe, and demonstrate safe practices during classroom and field investigations as outlined in Texas Education Agency-approved safety standards;</p>	<ul style="list-style-type: none"> • Songs: Storms; Sun Blues • Lightning Safety • Science Investigation 	<ul style="list-style-type: none"> • Emergency Preparedness for Kids • Fire Safety Activity for Kids • Thunder and Lightning • Smell Labels (Safe Smelling) • Good Playing Rules Rebus
<p>(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;</p>	<ul style="list-style-type: none"> • Songs: The Scientific Method; Precipitation • Science Investigation • Science Tools • Measurement Tools • Weather Tools • Sun, Moon, and Stars • Plant Life Cycle and Growth • Animal Life Cycle and Growth • Observe a Simple System 	<ul style="list-style-type: none"> • More to Explore Experiment: Water for Plants; Sound; Recycling; Traits; The Moon; Light for Plants; Rocks; Simple Machines; Evaporation • Learning Together: Weather; The Weather Around Us; Green and Growing; How It Works; Our Earth; The Sky Above Us; Places on Earth • Weather Cards • Butterfly Life Cycle • Frog Life Cycle • Amphibians • Metamorphosis
<p>(E) collect observations and measurements as evidence;</p>	<ul style="list-style-type: none"> • Water Unit • Fossils • Observe a Simple System • Calendar/Graph Weather 	
<p>(F) record and organize data using pictures, numbers, words, symbols, and simple graphs; and</p>	<ul style="list-style-type: none"> • Song: Graphing • Graphs • Picture Graphs • Bar Graphs • Calendar/Graph Weather • Observe a Simple System 	

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>(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 <i>continued</i>:</p>		
<p>(G) develop and use models to represent phenomena, objects, and processes or design a prototype for a solution to a problem.</p>	<ul style="list-style-type: none"> • Song: Inventing • Books: I Want to Be a Scientist Like Wilbur and Orville Wright; Inventions All Around • Water Cycle • Experiments: Air; Density; Sound; Buoyancy; Pollution • Inventions 	
<p>(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:</p>		
<p>(A) identify basic advantages and limitations of models such as their size, properties, and materials;</p>	<ul style="list-style-type: none"> • Song: Inventing • Books: I Want to Be a Scientist Like Wilbur and Orville Wright; Inventions All Around • Inventions 	
<p>(B) analyze data by identifying significant features and patterns;</p>	<ul style="list-style-type: none"> • Book: Moon Song • Moon Patterns • Calendar/Graph Weather • Weather Patterns • Sun, Moon, and Earth 	
<p>(C) use mathematical concepts to compare two objects with common attributes; and</p>	<ul style="list-style-type: none"> • Song: Big Small • Water Sources • Big and Little • Tall and Short • Heavy and Light • Large Small Toys • Big Little Animals 	
<p>(D) evaluate a design or object using criteria to determine if it works as intended.</p>	<ul style="list-style-type: none"> • Song: Inventing • Books: I Want to Be a Scientist Like Wilbur and Orville Wright; Inventions All Around • Inventions 	

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
(3) Scientific and engineering practices. The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:		
(A) develop explanations and propose solutions supported by data and models;	<ul style="list-style-type: none"> • Books: How Did the Chicken Cross the Road?; Inventions All Around • Simple Machines 	<ul style="list-style-type: none"> • More to Explore Experiment: Simple Machines • How It Works
(B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and	<ul style="list-style-type: none"> • Song: The Scientific Method • Science Investigation 	<ul style="list-style-type: none"> • Speaking to express ideas: Speak audibly and express thoughts, feelings, and ideas clearly. • My Favorite Things
(C) listen actively to others' explanations to identify important evidence and engage respectfully in scientific discussion.	<ul style="list-style-type: none"> • Song: The Scientific Method • Science Investigation 	<ul style="list-style-type: none"> • Speaking and listening: Follow agreed-upon rules for discussions. • Speaking and Listening - Taking Turns
(4) Scientific and engineering practices. The student knows the contributions of scientists and recognizes the importance of scientific research and innovation for society. The student is expected to:		
(A) explain how science or an innovation can help others; and	<ul style="list-style-type: none"> • Book: Inventions All Around • Simple Machines 	<ul style="list-style-type: none"> • More to Explore Experiment: Simple Machines • How It Works
(B) identify scientists and engineers such as Katherine Johnson, Sally Ride, and Ernest Just and explore what different scientists and engineers do.	<ul style="list-style-type: none"> • Books: I Want to Be a Scientist Like: Jane Goodall; George Washington Carver; Wilbur and Orville Wright; Antoni van Leeuwenhoek; Carl Linnaeus; Alexander von Humboldt; Joanne Simpson; Thomas Edison; Louis Pasteur; Marie Curie; Stephen Hawking; Isaac Newton 	
(5) Recurring themes and concepts. The student uses recurring themes and concepts to make connections across disciplines. The student is expected to:		
(A) identify and use patterns to describe phenomena or design solutions;	<ul style="list-style-type: none"> • Song: Seasons • Books: Moon Song; The Four Seasons; That's What I Like: A Book About Seasons • Moon Patterns • Calendar/Graph Weather • Weather Patterns • Sun, Moon, and Earth 	

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
(5) Recurring themes and concepts. The student uses recurring themes and concepts to make connections across disciplines. The student is expected to <i>continued</i> :		
(B) investigate and predict cause-and-effect relationships in science;	<ul style="list-style-type: none"> • Song: Seasons • Books: The Four Seasons; That’s What I Like: A Book About Seasons • Calendar/Graph Weather • Sun, Moon, and Earth • Astronomy Unit • Plants Need Water • Healthy Plants’ Needs • Food Chains • Care of Earth 	<ul style="list-style-type: none"> • More to Explore Experiment: Evaporation; Light for Plants; Water for Plants
(C) describe the properties of objects in terms of relative size (scale) and relative quantity;	<ul style="list-style-type: none"> • Song: Savanna Size • Size • Big and Little • Large Small Toys • Tall and Short • Heavy and Light • More than, Fewer than 	<ul style="list-style-type: none"> • More to Explore Experiment: Dinosaur Size
(D) examine the parts of a whole to define or model a system;	<ul style="list-style-type: none"> • Edible Plant Parts • Food Chains • Functions of Plant Parts 	<ul style="list-style-type: none"> • Plant Parts.pdf: Draw a plant, and label the parts. • Body Parts • Insect Parts Poster
(E) identify forms of energy and properties of matter;	<ul style="list-style-type: none"> • Songs: Matter; Precipitation; Solid or Liquid • Book: Pancakes Matter • Sun • Matter • Solid and Liquid • Solid, Liquid, Gas • States of Water • Heat Changes Water 	<ul style="list-style-type: none"> • More to Explore Experiment: Temperature and Melting • Learning Together: Solids, Liquids, and Gases • Solid and Liquid • States of Water
(F) describe the relationship between structure and function of objects, organisms, and systems; and	<ul style="list-style-type: none"> • Animal Groups • Teeth • Functions of Plant Parts 	

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
(5) Recurring themes and concepts. The student uses recurring themes and concepts to make connections across disciplines. The student is expected to <i>continued</i> :		
(G) describe how factors or conditions can cause objects, organisms, and systems to either change or stay the same.	<ul style="list-style-type: none"> • Song: Seasons • Book: That’s What I Like: A Book About Seasons • Weather • Spring • Summer • Fall • Winter • Animal Behavior • Animal Bodies • Animal Adaptations and Human Tools 	<ul style="list-style-type: none"> • Learning Together: Animals • How Animals Survive
(6) Matter and its properties. The student knows that objects have physical properties that determine how they are described and classified. The student is expected to:		
(A) classify objects by observable physical properties, including, shape, color, and texture, and attributes such as larger and smaller and heavier and lighter;	<ul style="list-style-type: none"> • Songs: Marmot Shapes; Shapes, Shapes, Shapes; All Sorts of Laundry; Squirrel’s Zoo Colors • Book: Buttons, Buttons • Sort • Touch • Sight • Materials 	<ul style="list-style-type: none"> • Texture Sort.pdf
(B) explain and predict changes in materials caused by heating and cooling; and	<ul style="list-style-type: none"> • Books: Warm Soup for Dedushka; Pancakes Matter • Changes in Matter • Movement of Heat 	
(C) 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 style="list-style-type: none"> • Books: I Want to Be a Scientist Like Wilbur and Orville Wright; Inventions All Around • Geoboard • Tangrams 	

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER 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:		
(A) explain how pushes and pulls can start, stop, or change the speed or direction of an object's motion; and	<ul style="list-style-type: none"> • Song: Push and Pull • Book: Mr. Mario's Neighborhood • Push and Pull 	<ul style="list-style-type: none"> • Learning Together: How It Works
(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 style="list-style-type: none"> • Song: Push and Pull • Book: Mr. Mario's Neighborhood • Push and Pull 	<ul style="list-style-type: none"> • Learning Together: How It Works
(8) Force, motion, and energy. The student knows that energy is everywhere and can be observed in everyday life. The student is expected to:		
(A) investigate and describe applications of heat in everyday life such as cooking food or using a clothes dryer; and	<ul style="list-style-type: none"> • Book: Warm Soup for Dedushka • Heat Sources and Uses • Heat Movement • Movement of Heat • Heat Experiment 	
(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 style="list-style-type: none"> • Songs: Matter; Precipitation • Book: Pancakes Matter • Heat • Heat Changes Water • Changes in Matter 	<ul style="list-style-type: none"> • More to Explore Experiment: Temperature and Melting
(9) Earth and space. The student knows that the natural world has recognizable patterns. The student is expected to describe and predict the patterns of seasons of the year such as order of occurrence and changes in nature.	<ul style="list-style-type: none"> • Song: Seasons • Book: That's What I Like: A Book About Seasons • Spring • Summer • Fall • Winter 	<ul style="list-style-type: none"> • Weather Patterns.pdf: Draw a picture of the weather where you live during each of the four seasons.
(10) Earth and space. The student knows that the natural world includes earth materials that can be observed in systems and processes. The student is expected to:		
(A) investigate and document the properties of particle size, shape, texture, and color and the components of different types of soils such as topsoil, clay, and sand;	<ul style="list-style-type: none"> • Soil 	<ul style="list-style-type: none"> • Where Does Soil Come From.pdf: Draw how rocks erode and make soil.

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
(10) Earth and space. The student knows that the natural world includes earth materials that can be observed in systems and processes. The student is expected to <i>continued</i> :		
(B) investigate and describe how water can move rock and soil particles from one place to another;	<ul style="list-style-type: none"> • Song: Rock Cycle • Rock Cycle 	
(C) compare the properties of puddles, ponds, streams, rivers, lakes, and oceans, including color, clarity, size, shape, and whether it is freshwater or saltwater; and	<ul style="list-style-type: none"> • Song: Water • Book: Water Is All Around • Water Sources • Natural Resources 	
(D) 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 style="list-style-type: none"> • Book: Whatever the Weather • Weather • Calendar/Graph Weather • Weather Patterns • Clouds 	<ul style="list-style-type: none"> • Learning Together: Weather; The Weather Around Us • Weather Cards
(11) Earth and space. The student knows that earth materials and products made from these materials are important to everyday life. The student is expected to:		
(A) identify and describe how plants, animals, and humans use rocks, soil, and water;	<ul style="list-style-type: none"> • Songs: Conservation; Water • Books: Mela’s Water Pot; Water Is All Around; A Seed Grows • Rocks • Care of Water • Animals Need Water • Plants Need Water • Natural Resources • Water Uses 	<ul style="list-style-type: none"> • Rocks.pdf: Find things that are made of rocks. • Water.pdf: Identify and draw things that need water to grow. • Animals Need Water.pdf: Show how animals use water.
(B) explain why water conservation is important; and	<ul style="list-style-type: none"> • Song: Conservation • Book: Water Is All Around • Care of Water • Animals Need Water • Plants Need Water • Natural Resources 	<ul style="list-style-type: none"> • Taking Care of Our Water.pdf: Color this foldable book that shows things you can do to take care of our water.
(C) 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 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 • Learning Together: Our Earth

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>(12) Organisms and environments. The student knows that the environment is composed of relationships between living organisms and nonliving components. The student is expected to:</p>		
<p>(A) classify living and nonliving things based upon whether they have basic needs and produce young;</p>	<ul style="list-style-type: none"> • Song: Living and Nonliving • Living or Nonliving • Mammals • Rocks 	<ul style="list-style-type: none"> • Living or Nonliving.pdf: Identify living things.
<p>(B) describe and record examples of interactions and dependence between living and nonliving components in terrariums or aquariums; and</p>	<ul style="list-style-type: none"> • Ecosystems 	
<p>(C) identify and illustrate how living organisms depend on each other through food chains.</p>	<ul style="list-style-type: none"> • Book: Everybody Needs to Eat • Food Chains • Prairies Food Chain • Polar Lands Food Chain • Wetlands Food Chain • Herbivores, Carnivores, and Omnivores 	
<p>(13) Organisms and environments. The student knows that organisms resemble their parents and have structures and undergo processes that help them interact and survive within their environments. The student is expected to:</p>		
<p>(A) identify the external structures of different animals and compare how those structures help different animals live, move, and meet basic needs for survival;</p>	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Animals Need Water.pdf: Show how animals use water.
<p>(B) record observations of and describe basic life cycles of animals, including a bird, a mammal, and a fish; and</p>	<ul style="list-style-type: none"> • Song: Fish • Birds • Mammals • Fish • Animal Life Cycles and Growth 	<ul style="list-style-type: none"> • More to Explore Experiment: Traits • Butterfly Life Cycle • Frog Life Cycle • Amphibians • Metamorphosis
<p>(C) compare ways that young animals resemble their parents.</p>	<ul style="list-style-type: none"> • Books: George and Jack; A Seed Grows • Build Knowledge: Mine • Mammals • Observe a Simple System 	<ul style="list-style-type: none"> • More to Explore Experiment: Traits

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
GRADE 2		
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:		
(A) ask questions and define problems based on observations or information from text, phenomena, models, or investigations;	<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
(B) use scientific practices to plan and conduct simple descriptive investigations and use engineering practices to design solutions to problems;	<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
(C) identify, describe, and demonstrate safe practices during classroom and field investigations as outlined in Texas Education Agency-approved safety standards;	<ul style="list-style-type: none"> • Songs: Storms; Sun Blues • Lightning Safety • Science Investigation 	<ul style="list-style-type: none"> • Emergency Preparedness for Kids • Fire Safety Activity for Kids • Thunder and Lightning • Smell Labels (Safe Smelling) • Good Playing Rules Rebus
(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 style="list-style-type: none"> • Songs: The Scientific Method; Precipitation • Science Investigation • Science Tools • Measurement Tools • Weather Tools • Sun, Moon, and Stars • Plant Life Cycle and Growth • Animal Life Cycle and Growth • Observe a Simple System 	<ul style="list-style-type: none"> • More to Explore Experiment: Water for Plants; Sound; Recycling; Traits; The Moon; Light for Plants; Rocks; Simple Machines; Evaporation • Learning Together: Weather; The Weather Around Us; Green and Growing; How It Works; Our Earth; The Sky Above Us; Places on Earth • Weather Cards • Butterfly Life Cycle • Frog Life Cycle • Amphibians • Metamorphosis

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>(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 <i>continued</i>:</p>		
<p>(E) collect observations and measurements as evidence;</p>	<ul style="list-style-type: none"> • Water Unit • Fossils • Observe a Simple System • Calendar/Graph Weather 	
<p>(F) record and organize data using pictures, numbers, words, symbols, and simple graphs; and</p>	<ul style="list-style-type: none"> • Song: Graphing • Graphs • Picture Graphs • Bar Graphs • Calendar/Graph Weather • Observe a Simple System 	
<p>(G) develop and use models to represent phenomena, objects, and processes or design a prototype for a solution to a problem.</p>	<ul style="list-style-type: none"> • Song: Inventing • Books: I Want to Be a Scientist Like Wilbur and Orville Wright; Inventions All Around • Water Cycle • Experiments: Air; Density; Sound; Buoyancy; Pollution • Inventions 	
<p>(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:</p>		
<p>(A) identify basic advantages and limitations of models such as their size, properties, and materials;</p>	<ul style="list-style-type: none"> • Song: Inventing • Books: I Want to Be a Scientist Like Wilbur and Orville Wright; Inventions All Around • Inventions 	
<p>(B) analyze data by identifying significant features and patterns;</p>	<ul style="list-style-type: none"> • Book: Moon Song • Moon Patterns • Calendar/Graph Weather • Weather Patterns • Sun, Moon, and Earth 	

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>(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 <i>continued</i>:</p>		
<p>(C) use mathematical concepts to compare two objects with common attributes; and</p>	<ul style="list-style-type: none"> • Song: Big Small • Water Sources • Big and Little • Tall and Short • Heavy and Light • Large Small Toys • Big Little Animals 	
<p>(D) evaluate a design or object using criteria to determine if it works as intended.</p>	<ul style="list-style-type: none"> • Song: Inventing • Books: I Want to Be a Scientist Like Wilbur and Orville Wright; Inventions All Around • Inventions 	
<p>(3) Scientific and engineering practices. The student develops evidence-based explanations and communicates findings, conclusions, and proposed solutions. The student is expected to:</p>		
<p>(A) develop explanations and propose solutions supported by data and models;</p>	<ul style="list-style-type: none"> • Books: How Did the Chicken Cross the Road?; Inventions All Around • Simple Machines 	<ul style="list-style-type: none"> • More to Explore Experiment: Simple Machines • How It Works
<p>(B) communicate explanations and solutions individually and collaboratively in a variety of settings and formats; and</p>	<ul style="list-style-type: none"> • Song: The Scientific Method • Science Investigation 	<ul style="list-style-type: none"> • Speaking to express ideas: Speak audibly and express thoughts, feelings, and ideas clearly. • My Favorite Things
<p>(C) listen actively to others' explanations to identify important evidence and engage respectfully in scientific discussion.</p>	<ul style="list-style-type: none"> • Song: The Scientific Method • Science Investigation 	<ul style="list-style-type: none"> • Speaking and listening: Follow agreed-upon rules for discussions. • Speaking and Listening - Taking Turns
<p>(4) Scientific and engineering practices. The student knows the contributions of scientists and recognizes the importance of scientific research and innovation for society. The student is expected to:</p>		
<p>(A) explain how science or an innovation can help others; and</p>	<ul style="list-style-type: none"> • Book: Inventions All Around • Simple Machines 	<ul style="list-style-type: none"> • More to Explore Experiment: Simple Machines • How It Works
<p>(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.</p>	<ul style="list-style-type: none"> • Books: I Want to Be a Scientist Like: Jane Goodall; George Washington Carver; Wilbur and Orville Wright; Antoni van Leeuwenhoek; Carl Linnaeus; Alexander von Humboldt; Joanne Simpson; Thomas Edison; Louis Pasteur; Marie Curie; Stephen Hawking; Isaac Newton 	

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
(5) Recurring themes and concepts. The student uses recurring themes and concepts to make connections across disciplines. The student is expected to:		
(A) identify and use patterns to describe phenomena or design solutions;	<ul style="list-style-type: none"> • Song: Seasons • Books: Moon Song; The Four Seasons; That’s What I Like: A Book About Seasons • Moon Patterns • Calendar/Graph Weather • Weather Patterns • Sun, Moon, and Earth 	
(B) investigate and predict cause-and-effect relationships in science;	<ul style="list-style-type: none"> • Song: Seasons • Books: The Four Seasons; That’s What I Like: A Book About Seasons • Calendar/Graph Weather • Sun, Moon, and Earth • Astronomy Unit • Plants Need Water • Healthy Plants’ Needs • Food Chains • Care of Earth 	<ul style="list-style-type: none"> • More to Explore Experiment: Evaporation; Light for Plants; Water for Plants
(C) measure and describe the properties of objects in terms of size and quantity;	<ul style="list-style-type: none"> • Song: Savanna Size • Size • Big and Little • Large Small Toys • Tall and Short • Heavy and Light • More than, Fewer than 	<ul style="list-style-type: none"> • More to Explore Experiment: Dinosaur Size
(D) examine the parts of a whole to define or model a system;	<ul style="list-style-type: none"> • Edible Plant Parts • Food Chains • Functions of Plant Parts 	<ul style="list-style-type: none"> • Plant Parts.pdf: Draw a plant, and label the parts. • Body Parts • Insect Parts Poster
(E) identify forms of energy and properties of matter;	<ul style="list-style-type: none"> • Songs: Matter; Precipitation; Solid or Liquid • Book: Pancakes Matter • Sun • Matter • Solid and Liquid • Solid, Liquid, Gas • States of Water • Heat Changes Water 	<ul style="list-style-type: none"> • More to Explore Experiment: Temperature and Melting • Learning Together: Solids, Liquids, and Gases • Solid and Liquid • States of Water

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
(5) Recurring themes and concepts. The student uses recurring themes and concepts to make connections across disciplines. The student is expected to <i>continued</i> :		
(F) describe the relationship between structure and function of objects, organisms, and systems; and	<ul style="list-style-type: none"> • Animal Groups • Teeth • Functions of Plant Parts 	
(G) describe how factors or conditions can cause objects, organisms, and systems to either change or stay the same.	<ul style="list-style-type: none"> • Song: Seasons • Book: That’s What I Like: A Book About Seasons • Weather • Spring • Summer • Fall • Winter • Animal Behavior • Animal Bodies • Animal Adaptations and Human Tools 	<ul style="list-style-type: none"> • Learning Together: Animals • How Animals Survive
(6) Matter and its properties. The student knows that matter has physical properties that determine how it is described, classified, and used. The student is expected to:		
(A) classify matter by observable physical properties, including texture, flexibility, and relative temperature, and identify whether a material is a solid or liquid;	<ul style="list-style-type: none"> • Songs: Marmot Shapes; Shapes, Shapes, Shapes; All Sorts of Laundry; Squirrel’s Zoo Colors • Book: Buttons, Buttons • Sort • Touch • Sight • Materials 	<ul style="list-style-type: none"> • Texture Sort.pdf
(B) conduct a descriptive investigation to explain how physical properties can be changed through processes such as cutting, folding, sanding, melting, or freezing; and	<ul style="list-style-type: none"> • Book: Warm Soup for Dedushka • Changes in Matter • Movement of Heat • States of Water • Materials 	
(C) 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 style="list-style-type: none"> • Books: I Want to Be a Scientist Like Wilbur and Orville Wright; Inventions All Around • Geoboard • Tangrams 	

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER 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:		
(A) explain how objects push on each other and may change shape when they touch or collide; and	<ul style="list-style-type: none"> • Song: Push and Pull • Book: Mr. Mario’s Neighborhood • Push and Pull 	<ul style="list-style-type: none"> • Learning Together: How It Works
(B) plan and conduct a descriptive investigation to demonstrate how the strength of a push and pull changes an object’s motion.	<ul style="list-style-type: none"> • Song: Push and Pull • Book: Mr. Mario’s Neighborhood • Push and Pull 	<ul style="list-style-type: none"> • Learning Together: How It Works
(8) Force, motion, and energy. The student knows that energy is everywhere and can be observed in everyday life. The student is expected to:		
(A) demonstrate and explain that sound is made by vibrating matter and that vibrations can be caused by a variety of means, including sound;	<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
(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 style="list-style-type: none"> • Book: Movin’ to the Music Time 	<ul style="list-style-type: none"> • More to Explore Experiment: Sound
(C) design and build a device using tools and materials that uses 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 	
(9) Earth and space. The student knows that there are recognizable patterns in the natural world and among objects in the sky. The student is expected to:		
(A) describe the Sun as a star that provides light and heat and explain that the Moon reflects the Sun’s light; and	<ul style="list-style-type: none"> • Songs: The Moon; Sun Blues • Books: Star Pictures; Moon Song • Sun • Moon • Constellations • Astronomy 	<ul style="list-style-type: none"> • Learning Together: The Sky Above Us • More to Explore Experiment: The Moon • Sun, Moon, and Earth.pdf
(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 style="list-style-type: none"> • Songs: The Moon; Sun Blues • Books: Star Pictures; Moon Song • Sun • Moon • Constellations • Astronomy 	<ul style="list-style-type: none"> • Learning Together: The Sky Above Us • More to Explore Experiment: The Moon • Sun, Moon, and Earth.pdf

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
(10) Earth and space. The student knows that the natural world includes earth materials that can be observed in systems and processes. The student is expected to:		
(A) 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 style="list-style-type: none"> • Book: Can You Guess? • Air • Care of Air • Air Experiment • Earth Science Unit 	<ul style="list-style-type: none"> • More to Explore Experiment: Air Movement
(B) measure, record, and graph weather information, including temperature and precipitation; and	<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 	<ul style="list-style-type: none"> • Learning Together: Weather; The Weather Around Us • Weather Cards
(C) 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 style="list-style-type: none"> • Ecosystems: Prairie 	
(11) Earth and space. The student knows that earth materials and products made from these materials are important to everyday life. The student is expected to:		
(A) distinguish between natural and manmade resources; and	<ul style="list-style-type: none"> • Natural Resources 	<ul style="list-style-type: none"> • By Nature or By Man?.pdf: Practice identifying natural resources and resources made by people. • Is It a Natural Resources?.pdf: Practice identifying natural resources.
(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 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 • Learning Together: Our Earth

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>(12) Organisms and environments. The student knows that living organisms have basic needs that must be met through interactions within their environment. The student is expected to:</p>		
<p>(A) describe how the physical characteristics of environments, including the amount of rainfall, support plants and animals within an ecosystem;</p>	<ul style="list-style-type: none"> • Books: Where in the World Would You Go Today?; Your Backyard • Ecosystems • Ecosystems Experiment • Deserts • Mountains • Oceans • Rainforests 	
<p>(B) create and describe food chains identifying producers and consumers to demonstrate how animals depend on other living things; and</p>	<ul style="list-style-type: none"> • Book: Everybody Needs to Eat • Food Chains • Prairies Food Chain • Polar Lands Food Chain • Wetlands Food Chain • Herbivores, Carnivores, and Omnivores 	
<p>(C) explain and demonstrate how some plants depend on other living things, wind, or water for pollination and to move their seeds around.</p>	<ul style="list-style-type: none"> • Song: Plants Are Growing • Books: The Bee’s Secret; A Seed Grows; The Old Maple Tree 	
<p>(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:</p>		
<p>(A) 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;</p>	<ul style="list-style-type: none"> • Song: Plants Are Growing • Book: A Seed Grows • Plants • Edible Plant Parts • Functions of Plant Parts • Plant Experiment • Healthy Plants’ Needs 	<ul style="list-style-type: none"> • More to Explore Experiment: Light for Plants • Plant Parts.pdf: Draw a plant, and label the parts.
<p>(B) record and compare how the structures and behaviors of animals help them find and take in food, water, and air;</p>	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Animals Need Water.pdf: Show how animals use water.

TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER 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> :		
(C) record and compare how being part of a group helps animals obtain food, defend themselves, and cope with changes; and	<ul style="list-style-type: none"> • Book: Animal Bodies • Animal Behavior • Animal Bodies 	
(D) investigate and describe some of the unique life cycles of animals where young animals do not resemble their parents, including butterflies and frogs.	<ul style="list-style-type: none"> • Animal Life Cycle and Growth • Observe a Simple System • Amphibians 	<ul style="list-style-type: none"> • Butterfly Life Cycle • Frog Life Cycle • Amphibians • Metamorphosis

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

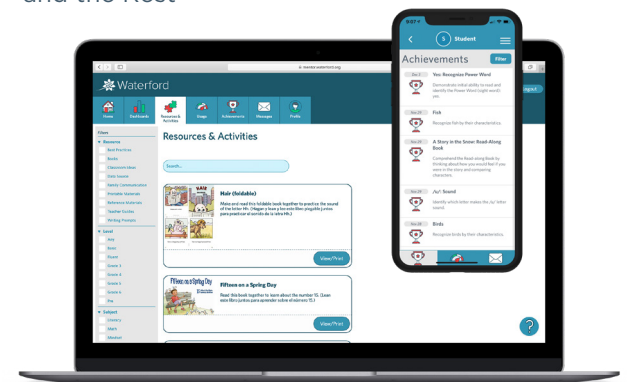
Naming Parts of the Body; First, Next, Last; One-to-One Correspondence; Opposites; Look at Details (identify same and different)

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).