

CURRICULUM *Correlation*

*Waterford Reading
Academy:
Math & Science*

100%

*Missouri
Learning
Standards: Grade-
Level Expectations
Mathematics 2016
Science 2016*

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

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MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
MATHEMATICS		
KINDERGARTEN		
Number Sense		
NS.A Know the number names and count sequence.		
Count to 100 by ones and tens.	<ul style="list-style-type: none"> • Number Songs • Counting Songs • Number Counting • Number Instruction • Skip Counting 	<ul style="list-style-type: none"> • Count to 100 by ones and tens.pdf: Count to 100 by ones and tens. <ul style="list-style-type: none"> - Missing Numbers - Count On By 1 - Numbers 1-5 - Numbers 6-10 - Math Newsletters - Count By 10s - Numbers 60-69 - I Can Count to 100
Count forward beginning from a given number between 1 and 20.	<ul style="list-style-type: none"> • Count On • Counting Songs • Counting Puzzle • Dot-to-Dot 	<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 - Math Newsletter: Count On - Flashcards
Count backward from a given number between 10 and 1.	<ul style="list-style-type: none"> • Song: Counting Backward • Book: A Space Adventure • Count Down • Counting Back 	
Read and write numerals and represent a number of objects from 0 to 20.	<ul style="list-style-type: none"> • Math Books • Counting Songs • Number Songs • Number Counting • Number Instruction 	<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: 1-20 - Numbers 1-5 - Add groups - Count on by 1 - Number Writing Practice: 0-20

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
NS.B Understand the relationship between numbers and quantities; connect counting to cardinality.		
Say the number names when counting objects, in the standard order, pairing each object with one and only one number name and each number name with one and only one object.	<ul style="list-style-type: none"> • Counting Songs • Number Counting • Order Numbers • One-to-one Correspondence • Number Instruction 	<ul style="list-style-type: none"> • Object Counting Basics.pdf: When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object. <ul style="list-style-type: none"> - Number Walk
Demonstrate that the last number name said tells the number of objects counted and 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"> • Make and Count Groups • Number Counting • Number Instruction • Match Numbers • One-to-One Correspondence 	<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
Demonstrate that each successive number name refers to a quantity that is one larger than the previous number.	<ul style="list-style-type: none"> • Number Counting • One-to-One Correspondence • Order Numbers • Count On by 1 	<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
Recognize, without counting, the quantity of groups up to 5 objects arranged in common patterns.	<ul style="list-style-type: none"> • Moving Target (Dots) 	
Demonstrate that a number can be used to represent “how many” are in a set.	<ul style="list-style-type: none"> • Counting Songs • Number Songs • Make and Count Groups • Number Counting • Number Instruction • Numbers Review • One-to-one Correspondence 	<ul style="list-style-type: none"> • How many?.pdf: Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects. <ul style="list-style-type: none"> - Hoop Addition

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
NS.C Compare Numbers		
Compare two or more sets of objects and identify which set is equal to, more than or less than the other.	<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
Compare two numerals, between 1 and 10, and determine which is more than or less than the other.	<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
Number Sense and Operations in Base Ten		
NBT.A Work with numbers 11-19 to gain foundations for place value.		
Compose and decompose numbers from 11 to 19 into sets of tens with additional ones.	<ul style="list-style-type: none"> • Place Value 	<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

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Relationships and Algebraic Thinking		
RA.A Understand addition as putting together or adding to, and understand subtraction as taking apart or taking from.		
Represent addition and subtraction within 10.	<ul style="list-style-type: none"> • Songs: Addition; On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction • Book: Five Delicious Muffins • Make and Count Groups • Add Groups • Subtract Groups • Act Out Addition • Act Out Subtraction 	<ul style="list-style-type: none"> • Represent addition and subtraction with objects. pdf: Represent addition and subtraction with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations. <ul style="list-style-type: none"> - Addition Cubes - Addition Stories - Going Fishing - Let's Count On - Act it out Stories - Manipulative Stories
Demonstrate fluency for addition and subtraction within 5.	<ul style="list-style-type: none"> • Songs: Addition; On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction • Book: Five Delicious Muffins • Add Groups • Subtract Groups • Minuends • Sums • Act Out Addition • Act Out Subtraction 	
Decompose numbers less than or equal to 10 in more than one way.	<ul style="list-style-type: none"> • Make and Count Groups • Add Groups • Subtract Groups • 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
Make 10 for any number from 1 to 9.	<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?

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Geometry and Measurement		
GM.A Reason with shapes and their attributes.		
Describe several measurable attributes of objects.	<ul style="list-style-type: none"> • Song: Measuring Plants • Length 	<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
Compare the measurable attributes of two objects.	<ul style="list-style-type: none"> • Songs: Savanna Size, Measuring Plants • Capacity • Length • Order Size • 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
GM.B Work with time and money.		
Demonstrate an understanding of concepts of time and devices that measure time.	<ul style="list-style-type: none"> • Songs: Telling Time; Clock Hands 	<ul style="list-style-type: none"> • Time.pdf: Practice understanding time. <ul style="list-style-type: none"> - Magazine Activity - Guess How Long - Changes Over Time - How Many in a Minute?
Name the days of the week.	<ul style="list-style-type: none"> • Song: Days of the Week 	

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
GM.B Work with time and money <i>continued</i>.		
Identify pennies, nickels, dimes and quarters.	<ul style="list-style-type: none"> • Song: Save Your Pennies • Coin Identification 	<ul style="list-style-type: none"> • Money.pdf: Learn to identify pennies, nickels, dimes, and quarters. <ul style="list-style-type: none"> - Identify Coins - Penny Jar - 50 Pennies Game - Hidden Coins
GM.C Analyze squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres.		
Identify shapes and describe objects in the environment using names of shapes, recognizing the name stays the same regardless of orientation or size.	<ul style="list-style-type: none"> • Songs: Kites; Shapes, Shapes, Shapes • Books: The Shape of Things; Imagination Shapes • Circle, Square, Triangle, Rectangle • Star, Semicircle, Octagon, Oval, Diamond • Simple Shapes • Solid Shapes • World Shapes 	<ul style="list-style-type: none"> • Describing objects.pdf: Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to. <ul style="list-style-type: none"> - Shapes Scavenger Hunt
Describe the relative positions of objects in space.	<ul style="list-style-type: none"> • Songs: Positioning; Kites; Get Over the Bugs • Book: Up In the Air • Position • Over, Under, Above, Below • Inside, Outside, Between • Above, Below, Next to, On 	<ul style="list-style-type: none"> • Describing objects.pdf: Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to. <ul style="list-style-type: none"> - Shapes Scavenger Hunt
Identify and describe the attribute of shapes, and use the attributes to sort a collection of shapes.	<ul style="list-style-type: none"> • Songs: Corners and Sides; All Sorts of Laundry • Book: Buttons, Buttons • Sort • Circle, Square, Triangle, Rectangle 	<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
Draw or model simple two-dimensional shapes.	<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
Compose simple shapes to form larger shapes using manipulatives.	<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

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Data and Statistics		
DS.A Classify objects and count the number of objects in each category.		
Classify objects into given categories; count the number of objects in each category.	<ul style="list-style-type: none"> • Songs: Same and Different; All Sorts of Laundry • Book: Buttons, Buttons • Sort • Make and Count Groups 	<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
Compare category counts using appropriate language.	<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
GRADE 1		
Number Sense		
NS.A Understand and use numbers up to 120.		
Count to 120, starting at any number less than 120.	<ul style="list-style-type: none"> • Song: Counting On • Count On • Number Chart 	<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

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
NS.A Understand and use numbers up to 120 <i>continued</i>.		
Read and write numerals and represent a number of objects with a written numeral.	<ul style="list-style-type: none"> • Math Books • Counting Songs • Number Songs • Number Counting • Number Instruction 	<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: 1-20 - Numbers 1-5 - Add groups - Count on by 1 - Number Writing Practice: 0-20
Count backward from a given number between 20 and 1.	<ul style="list-style-type: none"> • Song: Counting Backward • Book: A Space Adventure • Count Down • Counting Back 	
Count by 5s to 100 starting at any multiple of five.	<ul style="list-style-type: none"> • Song: Skip Counting • Book: Navajo Beads • Skip Count • Skip Count by 5 	
Number Sense and Operations in Base Ten		
NBT.A Understand place value of two-digit numbers.		
Understand that 10 can be thought of as a bundle of 10 ones – called a “ten”.	<ul style="list-style-type: none"> • Song: Place Value • Place Value of 2-digit Numbers • Add with Manipulatives 	<ul style="list-style-type: none"> • Tens as a bundle of ones.pdf: 10 can be thought of as a bundle of ten ones—called a “ten.” <ul style="list-style-type: none"> - Popsicles to Ten
Understand two-digit numbers are composed of ten(s) and one(s).	<ul style="list-style-type: none"> • Song: Place Value • Place Value of 2-digit Numbers • Add with Manipulatives 	<ul style="list-style-type: none"> • Tens as a bundle of ones.pdf: 10 can be thought of as a bundle of ten ones—called a “ten.” <ul style="list-style-type: none"> - Popsicles to Ten
Compare two two-digit numbers using the symbols $>$, $=$ or $<$.	<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
Count by 10s to 120 starting at any number.	<ul style="list-style-type: none"> • Song: Skip Counting • Book: Navajo Beads • Skip Count • Skip Count by 10 	

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
NBT.B Use place value understanding to add and subtract.		
Add within 100.	<ul style="list-style-type: none"> • Addition • Add Tens • Add with Manipulatives • Add Vertical Squares • Add with Beads • Addition and Subtraction Relationship • Add with Regrouping Concept • Add 2-digit and 1-digit Numbers with Regrouping • Add 2-digit Numbers without Regrouping • Add 2-digit Numbers with Regrouping 	<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
Calculate 10 more or 10 less than a given number mentally without having to count.	<ul style="list-style-type: none"> • Song: Skip Counting • Book: Navajo Beads • Add • Subtract • Add Tens • Subtract Tens • Skip Count by 10 • Number Chart 	<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
Add or subtract a multiple of 10 from another two digit number, and justify the solution.	<ul style="list-style-type: none"> • Subtraction • Subtract Tens • Subtraction Patterns • Subtract • Place Value • Addition and Subtraction Relationship • Use Manipulatives 	<ul style="list-style-type: none"> • Subtracting in 10s.pdf: Subtract multiples of 10 in the range 10–90 from multiples of 10 in the range 10–90. <ul style="list-style-type: none"> - Ten-O - Bingo - Subtract Multiples of 10

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Relationships and Algebraic Thinking		
RA.A Represent and solve problems involving addition and subtraction.		
Use addition and subtraction within 20 to solve problems	<ul style="list-style-type: none"> • Songs: Fact Families; Counting On • Books: Facts about Families; Circus 20; Painting by Number • Addition and Subtraction Fact Families • Addition Sentences • Subtraction Sentences • Commutative Property of Addition • Addition and Subtraction Relationship • Missing Addends • Missing Minuends and Subtrahends • Add 3 One-digit Numbers • Subtraction Patterns 	<ul style="list-style-type: none"> • Add and subtract within 20.pdf: Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. <ul style="list-style-type: none"> - The Three Little Bears - Fact Family Bingo - A Graph of Fact Families - Bean Facts - Draw a Picture - Addition - Number Pyramid - Subtraction Sentences - Model the Story - Fact Families
Solve problems that call for addition of three whole numbers whose sum is within 20.	<ul style="list-style-type: none"> • Add 3 One-digit Numbers • Commutative Property of Addition 	
Develop the meaning of the equal sign and determine if equations involving addition and subtraction are true or false.	<ul style="list-style-type: none"> • Song: Fact Families • Book: Facts About Families • Addition and Subtraction Fact Families • Addition and Subtraction Relationship • Commutative Property of Addition • Addition Sentences • Subtraction Sentences • Greater Than, Less Than • More Than, Fewer 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
Determine the unknown whole number in an addition or subtraction equation relating three whole numbers.	<ul style="list-style-type: none"> • Addition Sentences • Subtraction Sentences • Addition and Subtraction Fact Families • Missing Addends • Missing Minuends and Subtrahends 	

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
RA.B Understand and apply properties of operations and the relationship between addition and subtraction.		
Use properties as strategies to add and subtract.	<ul style="list-style-type: none"> • Addition and Subtraction Relationship • Addition and Subtraction Fact Families • Subtraction Patterns • Commutative Property of Addition 	<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
Demonstrate that subtraction can be solved as an unknown-addend problem.	<ul style="list-style-type: none"> • Missing Addends • Subtraction Patterns • Addition and Subtraction Fact Families 	<ul style="list-style-type: none"> • Understand subtraction as an unknown addend problem.pdf: Understand subtraction as an unknown-addend problem. Add and subtract within 20. <ul style="list-style-type: none"> - Write each subtraction problem as an addition problem and solve it.
RA.C Add and subtract within 20.		
Add and subtract within 20.	<ul style="list-style-type: none"> • Songs: Fact Families; Counting On • Books: Facts about Families; Circus 20; Painting by Number • Addition and Subtraction Fact Families • Addition Sentences • Subtraction Sentences • Commutative Property of Addition • Addition and Subtraction Relationship • Missing Addends • Missing Minuends and Subtrahends • Add 3 One-digit Numbers • Subtraction Patterns 	<ul style="list-style-type: none"> • Add and subtract within 20.pdf: Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. <ul style="list-style-type: none"> - The Three Little Bears - Fact Family Bingo - A Graph of Fact Families - Bean Facts - Draw a Picture - Addition - Number Pyramid - Subtraction Sentences - Model the Story - Fact Families
Demonstrate fluency with addition and subtraction within 10.	<ul style="list-style-type: none"> • Songs: Fact Families; Counting On • Books: Facts about Families; Circus 20; Painting by Number • Addition and Subtraction Fact Families • Addition Sentences • Subtraction Sentences • Commutative Property of Addition • Addition and Subtraction Relationship • Missing Addends • Missing Minuends and Subtrahends • Add 3 One-digit Numbers • Subtraction Patterns 	<ul style="list-style-type: none"> • Add and subtract within 20.pdf: Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. <ul style="list-style-type: none"> - The Three Little Bears - Fact Family Bingo - A Graph of Fact Families - Bean Facts - Draw a Picture - Addition - Number Pyramid - Subtraction Sentences - Model the Story - Fact Families

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Geometry and Measurement		
GM.A Reason with shapes and their attributes.		
Distinguish between defining attributes versus non-defining attributes; build and draw shapes that possess defining attributes.	<ul style="list-style-type: none"> • Songs: Corners and Sides; Kites • Geoboard • Space 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
Compose and decompose two- and three-dimensional shapes to build an understanding of part-whole relationships and the properties of the original and composite shapes.	<ul style="list-style-type: none"> • Song: Kites • Space Shapes • Geoboard • Tangrams 	
Recognize two- and three-dimensional shapes from different perspectives and orientations.	<ul style="list-style-type: none"> • Songs: Kites; Shapes, Shapes, Shapes • Books: The Shape of Things; Imagination Shapes • Circle, Square, Triangle, Rectangle • Star, Semicircle, Octagon, Oval, Diamond • Simple Shapes • Solid Shapes • World Shapes 	<ul style="list-style-type: none"> • Shape recognition.pdf: Correctly name shapes regardless of their orientations or overall size. <ul style="list-style-type: none"> - Shapes Scavenger Hunt - Shapes and Positioning - Shapes Flashcards
Partition circles and rectangles into two or four equal shares, and describe the shares and the wholes verbally.	<ul style="list-style-type: none"> • Song: Fractions • Books: Halves and Fourths and Thirds; Half For You and Half For Me • Equal-part Fractions • Label Parts of 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
GM.B Measure lengths in non-standard units.		
Order three or more objects by length.	<ul style="list-style-type: none"> • Length • Nonstandard Units of Length 	<ul style="list-style-type: none"> • Order by length.pdf: Order three objects by length; compare the lengths of two objects indirectly by using a third object. <ul style="list-style-type: none"> - Estimating Length - A Fruit and Vegetable Measure

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
GM.B Measure lengths in non-standard units <i>continued</i>.		
Compare the lengths of two objects indirectly by using a third object.	<ul style="list-style-type: none"> • Length • Nonstandard Units of Length 	<ul style="list-style-type: none"> • Order by length.pdf: Order three objects by length; compare the lengths of two objects indirectly by using a third object. <ul style="list-style-type: none"> - Estimating Length - A Fruit and Vegetable Measure
Demonstrate the ability to measure length or distance using objects.	<ul style="list-style-type: none"> • Length • Nonstandard Units of Length • Measurement Tools • Standard Units of Length 	
GM.C Work with time and money.		
Tell and write time in hours and half-hours using analog and digital clocks.	<ul style="list-style-type: none"> • Song: Clock Hands • Books: Mr. Romano’s Secret: A Time Story; How Long Is a Minute? • 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
Know the value of a penny, nickel, dime and quarter.	<ul style="list-style-type: none"> • Songs: Money; Save Your Pennies • Coin Identification • Coin Value • Quarters • Count Dimes, Nickels, and Pennies • Count Quarters, Dimes, Nickels, and Pennies • Count Nickels and Pennies or Dimes and Pennies • Count Coins 	

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Data and Statistics		
DS.A Represent and interpret data.		
Collect, organize and represent data with up to three categories.	<ul style="list-style-type: none"> • Songs: Tallying; Graphing • Books: Painting by Number; One More Cat; The Booneville Nine • Tally Marks • Graphs • Make a Table 	<ul style="list-style-type: none"> • Data Categorization.pdf: Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another. <ul style="list-style-type: none"> - Ice-Cream Sundae - Make A Real Object Graph - Make a Weather Bar Graph - Weather Flashcards - Our Favorite Foods - Make a Graph - Make a table - How Many? - Bugs! - Use Graphs and Tables - How Big Is Your Family?
Draw conclusions from object graphs, picture graphs, T-charts and tallies.	<ul style="list-style-type: none"> • Songs: Tallying; Graphing • Books: Painting by Number; One More Cat; The Booneville Nine • Tally Marks • Graphs • Make a Table 	<ul style="list-style-type: none"> • Data Categorization.pdf: Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another. <ul style="list-style-type: none"> - Ice-Cream Sundae - Make A Real Object Graph - Make a Weather Bar Graph - Weather Flashcards - Our Favorite Foods - Make a Graph - Make a table - How Many? - Bugs! - Use Graphs and Tables - How Big Is Your Family?

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
GRADE 2		
Number Sense and Operations in Base Ten		
NBT.A Understand place value of three-digit numbers.		
Understand three-digit numbers are composed of hundreds, tens and ones.	<ul style="list-style-type: none"> • Song: Place Value • Place Value • Place Value of 3-digit Numbers 	
Understand that 100 can be thought of as 10 tens – called a “hundred”.	<ul style="list-style-type: none"> • Song: Place Value • Place Value • Place Value of 3-digit Numbers 	<ul style="list-style-type: none"> • Thinking of 100 as a bundle of ten 10s.pdf: 100 can be thought of as a bundle of ten tens—called a “hundred.” <ul style="list-style-type: none"> - The Kingdom of Popsicle Stick-Filled Purses
Count within 1000 by 1s, 10s and 100s starting with any number.	<ul style="list-style-type: none"> • Song: Skip Counting • Book: Jump Rope Rhymes • Skip Count • Skip Count by 10 • Number Sequences and Patterns 	<ul style="list-style-type: none"> • Counting within 1000.pdf: Count within 1,000; skip-count by 5s, 10s, and 100s. <ul style="list-style-type: none"> - Chart Patterns - My 199 Picture; 200 Picture; 299 Picture; 300 Picture; 399 Picture; 400 Picture; 499 Picture; 500 Picture; 599 Picture; 600 Picture; 699 Picture; 700 Picture - 900 Chart
Read and write numbers to 1000 using number names, base-ten numerals and expanded form.	<ul style="list-style-type: none"> • Sequences of 2-digit Numbers • Sequences of 3-digit Numbers • Number Chart • 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
Compare two three-digit numbers using the symbols $>$, $=$ or $<$.	<ul style="list-style-type: none"> • Greater Than, Less Than (3-digit Numbers) • Place Value of 3-digit Numbers 	<ul style="list-style-type: none"> • Less than, equal to, or greater than.pdf: Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons. <ul style="list-style-type: none"> - More or Less - The Hands Have It! - Larger or Smaller? - Comparing Number Cards - Number Cards - $<$, $>$, $=$ Cards - Greater Than, Less Than, Equal To

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
NBT.B Use place value understanding and properties of operations to add and subtract.		
Demonstrate fluency with addition and subtraction within 100.	<ul style="list-style-type: none"> • Place Value • Addition and Subtraction Relationship • Commutative Properties of Addition • Addition • Subtraction • Add without Regrouping • Add with Regrouping • Subtract without regrouping • Subtract with Regrouping 	<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
Add up to four two-digit numbers.	<ul style="list-style-type: none"> • Add Two-digit Numbers with Regrouping • Commutative Properties of Addition • 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
Add or subtract within 1000, and justify the solution.	<ul style="list-style-type: none"> • Place Value • Addition and Subtraction Relationship • Commutative Properties of Addition • Addition • Subtraction • Add without Regrouping • Add with Regrouping • Subtract without regrouping • Subtract with Regrouping • Act Out Addition • Act Out Subtraction 	<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

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
NBT.B Use place value understanding and properties of operations to add and subtract <i>continued</i> .		
Use the relationship between addition and subtraction to solve problems.	<ul style="list-style-type: none"> • Addition and Subtraction Relationship • Commutative Properties of Addition • Addition • Subtraction • Add without Regrouping • Add with Regrouping • Subtract without regrouping • Subtract with Regrouping • Act Out Addition • Act Out Subtraction 	<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
Add or subtract mentally 10 or 100 to or from a given number within 1000.	<ul style="list-style-type: none"> • Skip Count • Place Value • Number Chart • Number Patterns 	<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

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
NBT.C Represent and solve problems involving addition and subtraction.		
Write and solve problems involving addition and subtraction within 100.	<ul style="list-style-type: none"> • Book: Painting by Number • Addition • Subtraction • Missing Addends and Subtrahends • Subtraction Sentences • Addition and Subtraction Facts 	<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
Relationships and Algebraic Thinking		
RA.A Add and subtract within 20.		
Demonstrate fluency with addition and subtraction within 20.	<ul style="list-style-type: none"> • Songs: Fact Families; Doubles • Subtraction Patterns • Addition Facts to 20 	<ul style="list-style-type: none"> • Add and subtract within 20.pdf: Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. <ul style="list-style-type: none"> - The Three Little Bears - Fact Family Bingo - A Graph of Fact Families - Bean Facts - Draw a Picture - Addition - Number Pyramid - Subtraction Sentences - Model the Story - Fact Families

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
RA.B. Develop foundations for multiplication and division.		
Determine if a set of objects has an odd or even number of members.	<ul style="list-style-type: none"> • Song: Odd Todd and Even Steven • Skip Count by 2 	<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?
a. Count by 2s to 100 starting with any even number.	<ul style="list-style-type: none"> • Song: Skip Counting • Book: Navajo Beads • Skip Count by 2 	
b. Express even numbers as pairings/ groups of 2, and write an expression to represent the number using addends of 2.	<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?
c. Express even numbers as being composed of equal groups and write an expression to represent the number with 2 equal addends.	<ul style="list-style-type: none"> • Song: Odd Todd and Even Steven • Skip Count by 2 • Addition Facts 	
Find the total number of objects arranged in a rectangular array with up to 5 rows and 5 columns, and write an equation to represent the total as a sum of equal addends.	<ul style="list-style-type: none"> • Addition • Multiply Using Repeated Addition • Multiply Using Arrays 	

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Geometry and Measurement		
GM.A Reason with shapes and their attributes.		
Recognize and draw shapes having specified attributes, such as a given number of angles or sides. a. Identify triangles, quadrilaterals, pentagons, hexagons, circles and cubes.	<ul style="list-style-type: none"> • Songs: Shapes, Shapes, Shapes; Corners and Sides; Kites • Book: The Shape of Things • Space Shapes • World Shapes • Geoboard 	<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
b. Identify the faces of three-dimensional objects.	<ul style="list-style-type: none"> • Song: Corners and Sides • Space Shapes • World Shapes 	
Partition a rectangle into rows and columns of same-size squares and count to find the total number of squares.	<ul style="list-style-type: none"> • Song: Fractions • Fractions of Regions 	
Partition circles and rectangles into two, three or four equal shares, and describe the shares and the whole. a. Demonstrate that equal shares of identical wholes need not have the same shape.	<ul style="list-style-type: none"> • Song: Fractions • Books: Halves and Fourths and Thirds; The Fraction Twins • Fractions • Label Parts of Fractions • Fractions of Regions • Fractions of Groups 	<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
GM.B Measure and estimate lengths in standard units.		
Measure the length of an object by selecting and using appropriate tools.	<ul style="list-style-type: none"> • Song: Measuring Plants • Book: Birds at My House • Length • Measurement Tools • Standard 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!

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
GM.B Measure and estimate lengths in standard units <i>continued</i>.		
Analyze the results of measuring the same object with different units.	<ul style="list-style-type: none"> • Length • Standard Units of Length • Measurement Tools 	<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
Estimate lengths using units of inches, feet, yards, centimeters and meters.	<ul style="list-style-type: none"> • Song: Measuring Plants • 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
Measure to determine how much longer one object is than another.	<ul style="list-style-type: none"> • Length • Standard Units of Length 	<ul style="list-style-type: none"> • Measure length.pdf: Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit. <ul style="list-style-type: none"> - Ready, Set, Measure - Treasure Hunt
GM.C. Relate addition and subtraction to length.		
Use addition and subtraction within 100 to solve problems involving lengths that are given in the same units.	<ul style="list-style-type: none"> • Book: Yangshi's Perimeter • Addition • Subtraction • Length • Standard Units of Length 	<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
Represent whole numbers as lengths on a number line, and represent whole-number sums and differences within 100 on a number line	<ul style="list-style-type: none"> • Number Line • Length 	

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
GM.D Work with time and money.		
<p>Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.</p>	<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
<p>Describe a time shown on a digital clock as representing hours and minutes, and relate a time shown on a digital clock to the same time on an analog clock.</p>	<ul style="list-style-type: none"> • Songs: Telling Time; Clock Hands • Book: Mr. Romano's Secret: A Time Story • 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
<p>Find the value of combinations of dollar bills, quarters, dimes, nickels and pennies, using \$ and ¢ appropriately.</p>	<ul style="list-style-type: none"> • Book: Bugs For Sale • Coin Identification • Coin Value • Quarters • Count Dimes, Nickels, and Pennies • Count Quarters, Dimes, Nickels, and Pennies • Count Nickels and Pennies or Dimes and Pennies • Count Coins • Count Bills and Coins • Equivalent Sums of Money 	<ul style="list-style-type: none"> • 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¢

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
GM.D Work with time and money <i>continued</i>.		
Find combinations of coins that equal a given amount.	<ul style="list-style-type: none"> • Coin Value • Quarters • Count Dimes, Nickels, and Pennies • Count Quarters, Dimes, Nickels, and Pennies • Count Nickels and Pennies or Dimes and Pennies • Count Coins • Count Bills and Coins • Equivalent Sums of Money 	<ul style="list-style-type: none"> • 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¢
Data and Statistics		
DS.A Represent and interpret data.		
Create a line plot to represent a set of numeric data, given a horizontal scale marked in whole numbers.	<ul style="list-style-type: none"> • Number Line • Measurement Tools 	
Generate measurement data to the nearest whole unit, and display the data in a line plot.	<ul style="list-style-type: none"> • Number Line • Measurement Tools 	<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!

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
DS.A Represent and interpret data <i>continued</i>.		
Draw a picture graph or a bar graph to represent a data set with up to four categories.	<ul style="list-style-type: none"> • Song: Graphing • Graphing • Bar Graphs • Picture Graphs • Use Graphs and Tables 	<ul style="list-style-type: none"> • Graphs.pdf: Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph. <ul style="list-style-type: none"> - Questions and Answers - Library Book Survey - Playground Survey - Rock Collections - Use Graphs and Tables
Solve problems using information presented in line plots, picture graphs and bar graphs.	<ul style="list-style-type: none"> • Song: Graphing • Graphing • Bar Graphs • Picture Graphs • Use Graphs and Tables 	<ul style="list-style-type: none"> • Graphs.pdf: Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph. <ul style="list-style-type: none"> - Questions and Answers - Library Book Survey - Playground Survey - Rock Collections - Use Graphs and Tables
Draw conclusions from line plots, picture graphs and bar graphs.	<ul style="list-style-type: none"> • Song: Graphing • Graphing • Bar Graphs • Picture Graphs • Use Graphs and Tables 	

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
SCIENCE		
KINDERGARTEN		
Structure and Properties of Matter		
PS1-Matter and Its Interactions		
K.PS1.A.1 Make qualitative observations of the physical properties of objects (i.e., size, shape, color, mass).	<ul style="list-style-type: none"> • Songs: Savanna Size; Large, Larger, Largest; Big Small Song • Size • Big and Little • Tall and Short • Heavy and Light • Big Little Animals • Large Small Toys 	
Forces and Motion		
PS2- Motion and Stability: Forces and Interactions		
K.PS2.A.1 Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.	<ul style="list-style-type: none"> • Song: Push and Pull • Book: Mr. Mario's Neighborhood • Push and Pull 	<ul style="list-style-type: none"> • Learning Together: How It Works
K.PS2.A.2 Describe ways to change the motion of an object (i.e., how to cause an object to go slower, go faster, go farther, change direction, stop).	<ul style="list-style-type: none"> • Song: Push and Pull • Push and Pull 	
Definitions of Energy		
PS3-Energy		
K.PS3.A.1 Make observations to determine the effect of sunlight on Earth's surface.	<ul style="list-style-type: none"> • Songs: Water; Plants Are Growing; Sun Blues • Sun • Water 	

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Conservation of Energy and Energy Transfer		
K.PS3.B.1 With prompting and support, use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area	Waterford encourages everyone to have writing, drawing, and art materials available for children’s creations.	
Organization for Matter and Energy Flow in Organisms		
LS1-From Molecules to Organisms: Structure and Processes		
K.LS1.C.1 Use observations to describe patterns of what plants and animals (including humans) need to survive.	<ul style="list-style-type: none"> • Songs: Water; Food From Plants • Books: Mela’s Water Pot; Everybody Needs to Eat • Sun • Plants • Water • Plants and Animals Need Air 	<ul style="list-style-type: none"> • More to Explore Experiment: Water for Plants • Learning Together: Green and Growing
Earth and the Solar System		
ESS1-Earth’s Place in the Universe		
K.ESS1.B.1 Make observations during different seasons to relate the amount of daylight to the time of year.	<ul style="list-style-type: none"> • Book: That’s What I Like: A Book About Seasons • Sun • Spring • Summer • Fall • Winter 	
Weather and Climate		
ESS2-Earth’s Systems		
K.ESS2.D.1 Use and share observations of local weather conditions to describe patterns over time.	<ul style="list-style-type: none"> • Song: Seasons • Book: That’s What I Like: A Book About Seasons • 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

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Biogeology		
K.ESS2.E.1 With prompting and support, construct an argument using evidence for how plants and animals (including but not limited to humans) can change the environment to meet their needs.	<ul style="list-style-type: none"> Books: Winter Snoozers; Birds at my House; Turtle's Pond 	
Natural Resources		
ESS3-Earth and Human Activity		
K.ESS3.A.1 Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.	<ul style="list-style-type: none"> Song: Four Ecosystems Book: Where in the World Would You Go Today? Oceans Mountains Deserts Rainforests 	<ul style="list-style-type: none"> Learning Together: Our Earth
Human Impacts on Earth's Systems		
K.ESS3.C.1 Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.	<ul style="list-style-type: none"> Songs: Conservation; Pollution Rap Pollution and Recycling Care of Water Care of Earth 	<ul style="list-style-type: none"> More to Explore Experiment: Recycling Learning Together: Our Earth
Defining and Delimiting Engineering Problems		
ETS1-Engineering Design		
K.ETS1.A.1 Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.	<ul style="list-style-type: none"> Song: Inventing Books: Inventions All Around; I Want to Be a Scientist Like Wilbur and Orville Wright Inventions 	<ul style="list-style-type: none"> More to Explore Experiment: Recycling; Simple Machines

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Developing Possible Solutions		
K.ETS1.B.1 Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.	<ul style="list-style-type: none"> • Books: How Did the Chicken Cross the Road?; Inventions All Around • Simple Machines 	
Optimizing the Solution Process		
K.ETS1.C.1 Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.	<ul style="list-style-type: none"> • Book: Warm Soup for Dedushka • Heat Movement • Movement of Heat • Heat Experiment 	<ul style="list-style-type: none"> • More to Explore Experiment: Evaporation
GRADE 1		
Definitions of Energy		
PS3-Energy		
1.PS3.A.1 Identify the source of energy that causes an increase in the temperature of an object (e.g., sun, stove, flame, light bulb).	<ul style="list-style-type: none"> • Book: Warm Soup for Dedushka • Heat Movement • Movement of Heat • Heat Experiment 	<ul style="list-style-type: none"> • More to Explore Experiment: Evaporation
Wave Properties		
PS4-Waves and Their Applications in Technologies for Information Transfer		
1.PS4.A.1 Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.	<ul style="list-style-type: none"> • Song: Sound • Book: What Sounds Say • Sound Waves 	<ul style="list-style-type: none"> • More to Explore Experiment: Sound
Information Technologies and Instrumentation		
1.PS4.C.1 Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.	<ul style="list-style-type: none"> • Song: Inventing • Books: I Want to Be a Scientist Like Thomas Edison; Inventions All Around 	

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Structure and Function		
LS1-From Molecules to Organisms: Structure and Processes		
1.LS1.A.1 Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.	<ul style="list-style-type: none"> • Books: I Wish I Had Ears Like a Bat; Animal Bodies; Fawn Eyes • Deserts 	
Inheritance of Traits		
LS3-Heredity: Inheritance and Variation of Traits		
1.LS3.A.1 Make observations to construct an evidence based account that young plants and animals are like, but not exactly like, their parents.	<ul style="list-style-type: none"> • Books: George and Jack; A Seed Grows • Build Knowledge: Mine 	<ul style="list-style-type: none"> • More to Explore Experiment: Traits
The Universe and Its Stars		
ESS1-Earth's Place in the Universe		
1.ESS1.A.1 Describe the presence of the sun, moon, and stars in the sky over time.	<ul style="list-style-type: none"> • Songs: The Moon; Sun Blues • Books: Moon Song; Star Pictures; My Family Campout • Sun • Moon • Constellations 	<ul style="list-style-type: none"> • More to Explore Experiment: The Moon • Learning Together: The Sky Above Us
1.ESS1.A.2 Use observations of the sun, moon, and stars to describe patterns that can be predicted.	<ul style="list-style-type: none"> • Songs: The Moon; Sun Blues • Books: Moon Song; Star Pictures; My Family Campout • Sun • Moon • Constellations 	<ul style="list-style-type: none"> • More to Explore Experiment: The Moon • Learning Together: The Sky Above Us
Weather and Climate		
ESS2-Earth's Systems		
1.ESS2.D.1 Identify patterns indicating relationships between observed weather data and weather phenomena (e.g., temperature and types of precipitation, clouds and amounts of precipitation).	<ul style="list-style-type: none"> • Book: That's What I Like: A Book About Seasons • Weather • Calendar/Graph Weather • Weather Patterns • Clouds 	<ul style="list-style-type: none"> • Learning Together: Weather; The Weather Around Us • Weather Cards

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Defining and Delimiting Engineering Problems		
ETS1-Engineering Design		
1.ETS1.A.1 Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.	<ul style="list-style-type: none"> • Song: Inventing • Books: Inventions All Around; I Want to Be a Scientist Like Wilbur and Orville Wright • Inventions 	<ul style="list-style-type: none"> • More to Explore Experiment: Recycling; Simple Machines
Developing Possible Solutions		
1.ETS1.B.1 Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.	<ul style="list-style-type: none"> • Books: How Did the Chicken Cross the Road?; Inventions All Around • Simple Machines 	
Optimizing the Solution Process		
1.ETS1.C.1 Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.	<ul style="list-style-type: none"> • Book: Warm Soup for Dedushka • Heat Movement • Movement of Heat • Heat Experiment 	<ul style="list-style-type: none"> • More to Explore Experiment: Evaporation
GRADE 2		
Structure and Properties of Matter		
PS1-Matter and Its Interactions		
2. PS1.A.1 Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.	<ul style="list-style-type: none"> • Book: Warm Soup for Dedushka • Changes in Matter • Movement of Heat • States of Water • Materials 	
2.PS1.A.2 Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose.	<ul style="list-style-type: none"> • Book: Warm Soup for Dedushka • Heat Movement • Movement of Heat • Heat Experiment 	

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Forces and Motion		
PS2- Motion and Stability: Forces and Interactions		
2.PS2.A.1 Analyze data to determine how the motion of an object changed by an applied force or the mass of an object.	<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
Wave Properties		
PS4-Waves and Their Applications in Technologies for Information Transfer		
2.PS4.A.1 Plan and conduct investigations to provide evidence that changes in vibration create change in 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
Interdependent Relationships in Ecosystems		
LS2-Ecosystems: Interactions, Energy, and Dynamics		
2.LS2.A.1 Plan and conduct investigations on the growth of plants when growing conditions are altered (e.g., dark vs. light, water vs. no water).	<ul style="list-style-type: none"> • Song: Plants Are Growing • Sun • Water • Plant Experiment 	<ul style="list-style-type: none"> • More to Explore Experiment: Light for Plants
2.LS2.A.2 Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.	Waterford encourages everyone to have writing, drawing, and art materials available for children's creations.	
The History of Planet Earth		
ESS1-Earth's Place in the Universe		
2.ESS1.C.1 Use information from several sources to provide evidence that Earth events can occur quickly or slowly.	<ul style="list-style-type: none"> • Songs: The Four Seasons; Rock Cycle • Books: That's What I Like: A Book About Seasons; Whatever the Weather; Fossils Under Our Feet • Rock Cycle • Fossils • Spring • Summer • Fall • Winter • Water 	<ul style="list-style-type: none"> • More to Explore Experiment: Rocks

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Earth Materials and Systems		
ESS2-Earth's Systems		
2.ESS2.A.1 Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land.	Waterford encourages everyone to have writing, drawing, and art materials available for children's creations.	
Plate Tectonics and Large-Scale Systems		
2.ESS2.B.1 Develop a model to represent the shapes and kinds of land and bodies of water in an area.	<ul style="list-style-type: none"> • Songs: Water; Precipitation; Water Is All Around • Water Sources • Water • Water Cycle • Care of Water • Oceans 	
The Role of Water in Earth's Surface Processes		
2.ESS2.C.1 Obtain information to identify where water is found on Earth and that it can be solid or liquid.		<ul style="list-style-type: none"> • Songs: Water; Uses of Water; Precipitation; Water Is All Around • Water Sources • Water • Water Cycle • Care of Water • States of Water • Heat Changes Water
Defining and Delimiting Engineering Problems		
ETS1-Engineering Design		
2.ETS1.A.1 Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.	<ul style="list-style-type: none"> • Song: Inventing • Books: Inventions All Around; I Want to Be a Scientist Like Wilbur and Orville Wright • Inventions 	<ul style="list-style-type: none"> • More to Explore Experiment: Recycling; Simple Machines

MISSOURI STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Developing Possible Solutions		
2.ETS1.B.1 Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.	<ul style="list-style-type: none"> • Books: How Did the Chicken Cross the Road?; Inventions All Around • Simple Machines 	
Optimizing the Solution Process		
2.ETS1.C.1 Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.	<ul style="list-style-type: none"> • Book: Warm Soup for Dedushka • Heat Movement • Movement of Heat • Heat Experiment 	<ul style="list-style-type: none"> • More to Explore Experiment: Evaporation

PRE-MATH & SCIENCE

Math Books

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; 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; Z: The Zulu Warrior

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; Chip Chop; Adjectives Describe; Lazy Letter Q; Nouns; Verbs; Adverbs; Irregular Verbs; Preposition Ship; 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

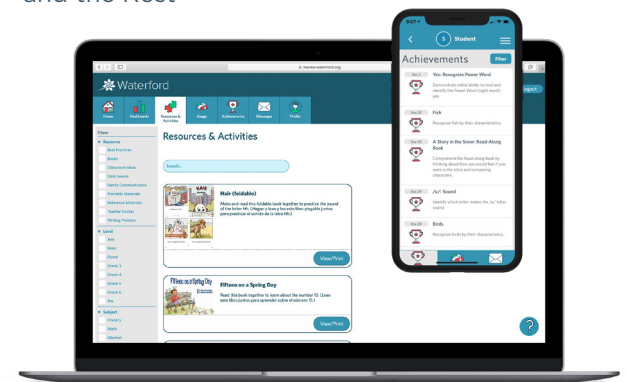
Naming Parts of the Body; First, Next, Last; One-to-One Correspondence; Opposites; Look at Details (identify same and different)

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).