

# CURRICULUM *Correlation*

*Waterford Early  
Learning:*

*Math & Science  
and Classroom  
Advantage*

**100%**

*Arkansas  
Mathematics  
Standards 2016  
and Science  
Standards 2015*

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## *This document provides a detailed correlation of WATERFORD EARLY LEARNING: MATH & SCIENCE and CLASSROOM ADVANTAGE to ARKANSAS MATHEMATICS STANDARDS 2016 AND SCIENCE STANDARDS 2015.*

### WATERFORD.ORG CURRICULUM DETAILS

**Waterford Early Learning** is a technology-based early reading, math, and science program with integrated assessments and teacher resources.

**Waterford Early Learning: Reading** is a comprehensive, adaptive program designed to ensure that each student moves from preliteracy to fluent reading. It incorporates five essential reading strands: phonological awareness, phonics, comprehension and vocabulary, language concepts, and fluency. Students take a placement assessment to determine their appropriate starting point.



*Following an extensive review, Waterford Early Learning: Reading received CASE endorsement in 2016. The Council of Administrators of Special Education (CASE) is an international educational organization affiliated with the Council for Exceptional Children.*

### **Waterford Early Learning: Math & Science**

provides young learners comprehensive instruction in the major areas of early math: numbers and operation, algebraic reasoning, geometry and measurement, and data analysis. The integrated science curriculum emphasizes exploration and the scientific method while teaching earth, life, and physical science. Students begin with a research-based placement assessment.

**Waterford Early Learning: SmartStart** presents Waterford's curriculum in an integrated format specifically designed for preschoolers. Students explore reading, math, science, and

social and emotional learning activities while practicing executive function skills. Once students complete Waterford Early Learning: SmartStart, they are ready for Waterford Early Learning: Reading and Waterford Early Learning: Math & Science.

*Note:* Preschool students can also begin their Waterford experience with Waterford Early Learning: Reading as it is adaptive.

### EVIDENCE-BASED CURRICULUM

Waterford curriculum has been formally [evaluated in dozens of studies](#). In each study, Waterford classrooms outperform comparison-group classes in most, if not all, of the examined measures. In particular, Waterford stands out for providing significant learning gains for at-risk students and English Language Learners.

### STUDENT-CENTERED LEARNING

Waterford's student-centered, personalized learning software adapts automatically to give each student a unique learning experience tailored to his or her own skill level and pace.

**Adaptive, Individualized Learning:** Waterford provides a mastery-based curriculum. As such, Waterford automatically provides instruction, remediation, and review to support students toward mastery of learning objectives based on student performance in ongoing assessment.

**Data-Informed Instruction:** Administrators and teachers can also use the program's rich reporting features to monitor progress in real time, to identify areas of difficulty, and to utilize additional intervention tools in varied instructional settings.

### TEACHER RESOURCES

Waterford Early Learning: Classroom Advantage provides teachers thousands of online activities to use with an interactive whiteboard or projector. This flexible tool for blended learning increases teachers' instructional efficacy. [Teachers can easily deliver engaging lessons](#) aligned to their own pacing guide, core curriculum, or state standards.

For PreK teachers looking for daily lesson plans, a complete Waterford Early Learning: SmartStart curriculum, comprised of seven thematic units, is available for download in the Waterford Manager.

### CORRELATION DESCRIPTION

This document correlates state standards to Waterford resources. Waterford resources include

- **Digital Resources:** Engaging, evidence-based online activities that are presented to students during their individualized instruction. These activities are also available for collaborative instruction in Waterford Early Learning: Classroom Advantage.
- **Print, PDF, and Internet Resources:** Teacher guides, teacher PDFs, hundreds of student books and songs, family engagement activities, newsletters and more complement Waterford's extensive digital resources.

### CONTINUAL DEVELOPMENT

At Waterford, we are continually developing our programs with the latest research findings. Please note that this correlation is accurate as of the date on the cover.

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES*
<b>PRE-MATH—KINDERGARTEN</b>		
<b>COUNTING AND CARDINALITY</b>		
Know number names and count the sequence		
K.CC.A.1 Count to 100 by ones, fives, and tens.	<ul style="list-style-type: none"> <li>• Number Songs</li> <li>• Counting Songs</li> <li>• Math Books (See titles at end of document.)</li> <li>• Number Counting</li> <li>• Order Numbers</li> <li>• Number Instruction</li> <li>• Skip Counting</li> <li>• Counting Puzzle</li> </ul>	<ul style="list-style-type: none"> <li>• Count to 100 by ones and tens.pdf: Count to 100 by ones and tens.                             <ul style="list-style-type: none"> <li>- Missing Numbers</li> <li>- Count On By 1</li> <li>- Numbers 1-5</li> <li>- Numbers 6-10</li> <li>- Math Newsletters</li> <li>- Count By 10s</li> <li>- Numbers 60-69</li> <li>- I Can Count to 100</li> </ul> </li> </ul>
K.CC.A.2 Count forward, by ones, from any given number up to 100	<ul style="list-style-type: none"> <li>• Song: Counting On</li> <li>• Count On</li> <li>• Counting Songs (See titles at end of document.)</li> <li>• Counting Puzzle</li> <li>• Dot-to-Dot</li> </ul>	<ul style="list-style-type: none"> <li>• Counting forward.pdf: Count forward beginning with a given number within the known sequence.                             <ul style="list-style-type: none"> <li>- Let's Count On</li> <li>- Toss and Count</li> <li>- Count On by 1</li> <li>- Math Newsletter: Count On</li> <li>- Flashcards</li> </ul> </li> </ul>
K.CC.A.3 Read, write, and represent numerals from 0 to 20	<ul style="list-style-type: none"> <li>• Math Books</li> <li>• Counting Songs</li> <li>• Number Songs (See titles at end of document.)</li> <li>• Number Counting</li> <li>• Number Instruction</li> <li>• Counting Puzzle</li> </ul>	<ul style="list-style-type: none"> <li>• Writing from 0 to 20.pdf: Write numbers from 0 to 20. Represent a number of objects with a written numeral.                             <ul style="list-style-type: none"> <li>- Numbers Practice: 1-20 (one per number)</li> <li>- Numbers 1-5</li> <li>- Add groups</li> <li>- Count on by 1</li> <li>- Number Writing Practice: 0-20 (one per number)</li> </ul> </li> </ul>

\* Waterford Teacher Resources are available for download in the Waterford Manager (<https://manager.waterford.org/>).

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<b>Count to tell the number of objects</b>		
<p>Understand the relationship between numbers and quantities; connect counting to cardinality.</p> <ul style="list-style-type: none"> <li>• Say the numbers in order, pairing each object with only one number and each number with only one object (one to one correspondence)</li> <li>• Understand that the last number said tells the number of objects counted</li> <li>• Understand that each successive number refers to a quantity that is one larger</li> </ul>	<ul style="list-style-type: none"> <li>• Counting Songs</li> <li>• Number Songs</li> <li>• Math Books</li> <li>• Number Counting</li> <li>• Order Numbers</li> <li>• One-to-one Correspondence</li> <li>• Match Numbers</li> <li>• Make and Count Groups</li> <li>• Number Instruction</li> <li>• Counting Puzzle</li> <li>• Dot-to-Dot</li> </ul>	<ul style="list-style-type: none"> <li>• 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"> <li>- Number Walk</li> </ul> </li> <li>• 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"> <li>- Mixed Up Counting</li> </ul> </li> <li>• Object Counting Succession.pdf: Understand that each successive number name refers to a quantity that is one larger.</li> <li>• Hoop Addition Object Counting Succession.pdf: Understand that each successive number name refers to a quantity that is one larger. <ul style="list-style-type: none"> <li>- Hoop Addition</li> </ul> </li> </ul>
<p>K.CC.B.5. Count to answer “how many?”</p> <ul style="list-style-type: none"> <li>• Count up to 20 objects in any arrangement</li> <li>• Count up to 10 objects in a scattered configuration</li> <li>• Given a number from 1-20, count out that many objects</li> </ul>	<ul style="list-style-type: none"> <li>• Counting Songs</li> <li>• Number Songs</li> <li>• Math Books (See titles at end of document.)</li> <li>• Make and Count Groups</li> <li>• Number Counting</li> <li>• Order Numbers</li> <li>• Number Instruction</li> <li>• Match Numbers</li> <li>• Bug Fun</li> <li>• One-to-one Correspondence</li> </ul>	<ul style="list-style-type: none"> <li>• 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"> <li>- Hoop Addition</li> </ul> </li> </ul>

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<b>Compare numbers</b>		
<p>K.CC.C.6. Identify whether the number of objects in one group from 0-10 is greater than (more, most), less than (less, fewer, least), or equal to (same as) the number of objects in another group of 0-10</p>	<ul style="list-style-type: none"> <li>• Book: For the Birds</li> <li>• Greater Than, Less Than</li> <li>• More Than, Fewer Than</li> <li>• More Than</li> <li>• Fewer Than</li> <li>• Make a Math Story: More Than, Fewer Than</li> </ul>	<ul style="list-style-type: none"> <li>• 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"> <li>- Beans and More</li> <li>- More Than Buttons</li> <li>- Short Names, Long Names</li> <li>- Noodle Necklaces</li> <li>- Groups Do Count!</li> <li>- More Than, Fewer Than, Equal</li> <li>- Which Has More? 1</li> <li>- Fewer Than</li> <li>- More or Fewer</li> <li>- Which Has More? 2</li> <li>- Greater or Less</li> <li>- More Than/Fewer Than Flashcard Sets</li> </ul> </li> </ul>
<p>K.CC.C.7. Compare two numbers between 0 and 20 presented as written numerals.</p>	<ul style="list-style-type: none"> <li>• Book: For the Birds</li> <li>• Greater Than, Less Than</li> <li>• More Than, Fewer Than</li> <li>• More Than</li> <li>• Fewer Than</li> <li>• Order Numbers</li> <li>• Make a Math Story: More Than, Fewer Than</li> </ul>	<ul style="list-style-type: none"> <li>• Comparing numbers.pdf: Compare two numbers between 1 and 10 presented as written numerals.                             <ul style="list-style-type: none"> <li>- More or Less Spinner</li> <li>- Catch Me If You Can!</li> <li>- Greater or Less</li> <li>- Less or Greater</li> <li>- Spinner</li> <li>- Board game</li> <li>- Number cards</li> </ul> </li> </ul>
<p>K.CC.C.8 Quickly identify a number of items in a set from 0-10 without counting (e.g., dominoes, dot cubes, tally marks, ten-frames)</p>	<ul style="list-style-type: none"> <li>• Moving Target (Dots)</li> <li>• Bug Bits</li> <li>• Dominoes</li> </ul>	

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<b>OPERATIONS AND ALGEBRAIC THINKING (OA)</b>		
Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from		
<p>K.OA.A.1 Represent addition and subtraction using objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions (e.g., <math>2+3</math>), or equations (e.g., <math>2+3 = </math>)</p>	<ul style="list-style-type: none"> <li>• Songs: Addition; Pirates Can Add; On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction</li> <li>• Book: Five Delicious Muffins</li> <li>• Make and Count Groups</li> <li>• Add Groups</li> <li>• Subtract Groups</li> <li>• Act Out Addition</li> <li>• Act Out Subtraction</li> </ul>	
<p>K.OA.A.2 Solve real-world problems that involve addition and subtraction within 10 (e.g., by using objects or drawings to represent the problem)</p>	<ul style="list-style-type: none"> <li>• Songs: Addition; Pirates Can Add; On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction</li> <li>• Book: Five Delicious Muffins</li> <li>• Add Groups</li> <li>• Subtract Groups</li> <li>• Act Out Addition</li> <li>• Act Out Subtraction</li> </ul>	<ul style="list-style-type: none"> <li>• 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"> <li>- Additions Stories</li> <li>- Act It Out Stories</li> <li>- Manipulative Stories</li> <li>- Edible Stories</li> <li>- One, Two, Three, Show</li> <li>- Circus Subtraction</li> <li>- Partner Subtraction</li> <li>- Farmer’s Market</li> <li>- Green and Speckled Frogs</li> <li>- Cars and Trucks Subtraction</li> <li>- Yummy Subtraction</li> <li>- Act Out Addition</li> <li>- Act Out Subtraction</li> <li>- Addition Newsletter</li> <li>- Subtraction Newsletter</li> <li>- Subtraction Flashcards</li> </ul> </li> </ul>
<p>K.OA.A.3. Use objects or drawings to decompose (break apart) numbers less than or equal to 10 into pairs in more than one way, and record each decomposition (part) by a drawing or an equation (e.g., <math>5 = 2 + 3</math> and <math>5 = 4 + 1</math>)</p>	<ul style="list-style-type: none"> <li>• Make and Count Groups</li> <li>• Add Groups</li> <li>• Subtract Groups</li> <li>• Act Out Subtraction</li> </ul>	

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<b>Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from <i>continued</i></b>		
K.OA.A.4. 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"> <li>• Missing Addends</li> <li>• Count On</li> <li>• Act Out Addition</li> </ul>	
K.OA.A.5. Fluently add and subtract within 10 by using various strategies and manipulatives	<ul style="list-style-type: none"> <li>• Songs: Addition; Pirates Can Add; On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction</li> <li>• Book: Five Delicious Muffins</li> <li>• Sums</li> <li>• Act Out Addition</li> <li>• Act Out Subtraction</li> </ul>	
<b>NUMBERS AND OPERATIONS IN BASE TEN</b>		
<b>Work with numbers 11-19 to gain foundations for place value.</b>		
K.NBT.A.1 Develop initial understanding of place value and the base-ten number system by showing equivalent forms of whole numbers from 11 to 19 as groups of tens and ones using objects and drawings	<ul style="list-style-type: none"> <li>• Place Value</li> </ul>	<ul style="list-style-type: none"> <li>• 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"> <li>- Place Value 11-19</li> </ul> </li> </ul>
<b>MEASUREMENT AND DATA</b>		
<b>Describe and compare measurable attributes</b>		
K.MD.A.1 Describe several measurable attributes of a single object, including but not limited to length, weight, height, and temperature	<ul style="list-style-type: none"> <li>• Song: Measuring Plants</li> <li>• Length</li> </ul>	<ul style="list-style-type: none"> <li>• 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"> <li>- Filling Table</li> <li>- Order It Up</li> <li>- Straw Rulers</li> <li>- Measuring Walk</li> <li>- Heavy or Light</li> <li>- Make A Balance</li> <li>- Measurable Attributes</li> </ul> </li> </ul>



ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<b>Describe and compare measurable attributes <i>continued</i></b>		
<p>K.MD.A.2 Describe the difference when comparing two objects (side-by-side) with a measurable attribute in common, to see which object has more of or less of the common attribute</p>	<ul style="list-style-type: none"> <li>• Songs: Savanna Size, Measuring Plants</li> <li>• Capacity</li> <li>• Length</li> <li>• Order Size</li> <li>• Big and Little</li> <li>• Tall and Short</li> <li>• Heavy and Light</li> <li>• Size</li> <li>• Match</li> </ul>	<ul style="list-style-type: none"> <li>• Comparing objects.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"> <li>- Filling Table</li> <li>- Order It Up</li> <li>- Straw Rulers</li> <li>- Measuring Walk</li> <li>- Heavy or Light</li> <li>- Make A Balance</li> <li>- Size Scavenger Hunt</li> <li>- Big and Little Sort</li> <li>- Boxes in a Line</li> <li>- Teddy Bear Line-Up</li> <li>- Magazine Sorting</li> <li>- Tall and Short</li> <li>- Big and Little</li> <li>- Tall and Short</li> <li>- Heavy and Light</li> <li>- Small, Medium, Large</li> <li>- Measuring Length</li> <li>- Measurable Attributes</li> </ul> </li> </ul>
<p>K.MD.B.3. Classify, sort, and count objects using both measurable and non-measurable attributes such as size, number, color, or shape</p>	<ul style="list-style-type: none"> <li>• Songs: Same and Different; All Sorts of Laundry</li> <li>• Book: Buttons, Buttons</li> <li>• Match</li> <li>• Sort</li> <li>• Make and Count Groups</li> <li>• Logic Game</li> </ul>	<ul style="list-style-type: none"> <li>• 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"> <li>- Let's Sort</li> <li>- Sort</li> </ul> </li> </ul>

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<b>Work with time and money</b>		
<p>K.MD.C.4 Understand concepts of time including morning, afternoon, evening, today, yesterday, tomorrow, day, week, month, and year</p> <ul style="list-style-type: none"> <li>Understand that clocks, both analog and digital, and calendars are tools that measure time</li> </ul>	<ul style="list-style-type: none"> <li>Tell Time</li> <li>Yesterday/Tomorrow</li> <li>Today</li> <li>Calendar</li> </ul>	
<p>K.MD.C.5 Read time to the hour on digital and analog clocks</p>	<ul style="list-style-type: none"> <li>Tell Time</li> </ul>	
<p>K.MD.C.6 Identify pennies, nickels, and dimes, and know the value of each</p>	<ul style="list-style-type: none"> <li>Song: Money; Save Your Pennies</li> <li>Coin Identification</li> </ul>	
<b>GEOMETRY</b>		
<b>Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres)</b>		
<p>K.G.A.1 Describe the positions of objects in the environment and geometric shapes in space using names of shapes, and describe the relative positions of these objects</p>	<ul style="list-style-type: none"> <li>Songs: Positioning; Kites; Get Over the Bugs; Shapes, Shapes, Shapes</li> <li>Books: Up in the Air; The Shape of Things; Imagination Shapes</li> <li>Position</li> <li>Over, Under, Above, Below</li> <li>Inside, Outside, Between</li> <li>Circle, Square, Triangle, Rectangle</li> <li>Star, Semicircle, Octagon, Oval, Diamond</li> <li>Solid Shapes</li> <li>World Shapes</li> <li>Above, Below, Next to, On</li> </ul>	<ul style="list-style-type: none"> <li>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"> <li>Shapes Scavenger Hunt</li> </ul> </li> </ul>
<p>K.G.A.2. Correctly name shapes regardless of their orientations or overall size</p>	<ul style="list-style-type: none"> <li>Songs: Kites; Shapes, Shapes, Shapes</li> <li>Books: The Shape of Things; Imagination Shapes; Up in the Air</li> <li>Circle, Square, Triangle, Rectangle</li> <li>Star, Semicircle, Octagon, Oval, Diamond</li> <li>Simple Shapes</li> <li>Solid Shapes</li> <li>World Shapes</li> </ul>	<ul style="list-style-type: none"> <li>Shape recognition.pdf: Correctly name shapes regardless of their orientations or overall size.                             <ul style="list-style-type: none"> <li>Shapes Scavenger Hunt</li> <li>Shapes and Positioning</li> <li>Shapes Flashcards</li> </ul> </li> </ul>
<p>K.G.A.3. Identify shapes as two-dimensional (flat) or three-dimensional (solid).</p>	<ul style="list-style-type: none"> <li>Solid Shapes</li> <li>Space Shapes</li> <li>Simple Shapes</li> </ul>	

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<b>Analyze, compare, create, and compose shapes</b>		
K.G.B.4. 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"> <li>• Song: Corners and Sides</li> <li>• Simple Shapes</li> <li>• Solid Shapes</li> <li>• Space Shapes</li> <li>• Congruence</li> <li>• Tangrams</li> <li>• Similar Figures</li> </ul>	
K.G.B.5. Model shapes in the world by building shapes from components (e.g., use sticks and clay balls) and drawing shapes.	<ul style="list-style-type: none"> <li>• Geoboard</li> <li>• Tangrams</li> </ul>	
K.G.B.6. Compose two-dimensional shapes to form larger two-dimensional shapes	<ul style="list-style-type: none"> <li>• Geoboard</li> <li>• Tangrams</li> </ul>	
<b>BASIC MATH—FIRST GRADE</b>		
<b>OPERATIONS AND ALGEBRAIC THINKING</b>		
<b>Represent and solve problems involving addition and subtraction</b>		
1.OA.A.1 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 (e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem)	<ul style="list-style-type: none"> <li>• Songs: Fact Families; Doubles</li> <li>• Book: Facts About Families</li> <li>• Addition and Subtraction Fact Families</li> <li>• Addition and Subtraction Relationship</li> </ul>	<ul style="list-style-type: none"> <li>• 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"> <li>- Guess and Check</li> <li>- Model the Story</li> </ul> </li> </ul>
1.OA.A.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20 (e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem)	<ul style="list-style-type: none"> <li>• Story Problem Strategies: Add 3 One-digit Numbers</li> <li>• Problem Solving Strategy: Model or Act Out</li> </ul>	<ul style="list-style-type: none"> <li>• Word problems adding 3 numbers.pdf: Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20.                             <ul style="list-style-type: none"> <li>- Draw a Picture</li> </ul> </li> </ul>

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<b>Understand and apply properties of operations and the relationship between addition and subtraction</b>		
<p>1.OA.B.3 Apply properties of operations as strategies to add and subtract. Examples: If <math>8 + 3 = 11</math> is known, then <math>3 + 8 = 11</math> is also known. (Commutative property of addition.) To add <math>2 + 6 + 4</math>, the second two numbers can be added to make a ten, so <math>2 + 6 + 4 = 2 + 10 = 12</math>. (Associative property of addition.)</p>	<ul style="list-style-type: none"> <li>• Addition and Subtraction Relationship</li> <li>• Addition and Subtraction Fact Families</li> <li>• Subtraction Patterns</li> <li>• Commutative Property of Addition</li> </ul>	
<p>1.OA.B.4 Understand subtraction as an unknown-addend problem. For example, subtract <math>10 - 8</math> by finding the number that makes 10 when added to 8.</p>	<ul style="list-style-type: none"> <li>• Missing Addends</li> <li>• Subtraction Patterns</li> <li>• Addition and Subtraction Fact Families</li> <li>• Mental Math Games: Missing Addends</li> </ul>	<ul style="list-style-type: none"> <li>• 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"> <li>- Write each subtraction problem as an addition problem and solve it.</li> </ul> </li> </ul>
<b>Add and subtract within 20</b>		
<p>1.OA.C.5 Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).</p>	<ul style="list-style-type: none"> <li>• Song: Counting On</li> <li>• Books: Circus 20; Painting by Number</li> <li>• Jump Rope Rhymes</li> <li>• Skip Count by 2</li> <li>• Count On</li> <li>• Make and Count Groups</li> <li>• Add Groups</li> <li>• Subtract Groups</li> </ul>	<ul style="list-style-type: none"> <li>• Relate counting to addition and subtraction.pdf: Relate counting to addition and subtraction.                             <ul style="list-style-type: none"> <li>- Skip Counting Chant</li> <li>- Jump Rope Counting</li> <li>- Related Facts</li> <li>- Count by 10s</li> <li>- Count by 5s</li> <li>- Count by 2s</li> </ul> </li> </ul>

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<i>Add and subtract within 20 continued</i>		
<p>1.OA.C.6 Add and subtract within 20, demonstrating computational fluency for addition and subtraction within 10. Use strategies such as:</p> <ul style="list-style-type: none"> <li>counting on</li> <li>making ten (e.g., <math>8 + 6 = 8 + 2 + 4 = 10 + 4 = 14</math>)</li> <li>decomposing a number leading to a ten (e.g., <math>13 - 4 = 13 - 3 - 1 = 10 - 1 = 9</math>);</li> <li>using the relationship between addition and subtraction (e.g., knowing that <math>8 + 4 = 12</math>, one knows <math>12 - 8 = 4</math>); and</li> <li>creating equivalent but easier or known sums (e.g., adding <math>6 + 7</math> by creating the known equivalent <math>6 + 6 + 1 = 12 + 1 = 13</math>)</li> </ul>	<ul style="list-style-type: none"> <li>Songs: Fact Families; Counting On</li> <li>Books: Facts about Families; Circus 20; Painting by Number</li> <li>Addition and Subtraction Fact Families</li> <li>Addition Sentences</li> <li>Subtraction Sentences</li> <li>Commutative Property of Addition</li> <li>Addition and Subtraction Relationship</li> <li>Missing Addends</li> <li>Missing Minuends and Subtrahends</li> <li>Add 3 One-digit Numbers</li> <li>Subtraction Patterns</li> </ul>	<ul style="list-style-type: none"> <li>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"> <li>The Three Little Bears</li> <li>Fact Family Bingo</li> <li>A Graph of Fact Families</li> <li>Bean Facts</li> <li>Draw a Picture</li> <li>Addition</li> <li>Number Pyramid</li> <li>Subtraction Sentences</li> <li>Model the Story</li> <li>Fact Families</li> <li>Add _ and 1-5</li> <li>Add _ and 6-10</li> <li>Order Property of Addition</li> <li>Add Doubles +1 to 11</li> <li>Add Doubles to 20</li> <li>Add Doubles +1 to 21)</li> <li>Make 10</li> <li>Subtract _ from</li> <li>Subtract</li> <li>Subtraction Patterns</li> <li>Fact Families to 10</li> <li>Fact Families to 20</li> <li>Add and Subtract Doubles to 10</li> <li>Add and Subtract Doubles to 20</li> <li>Sets of flashcards: <ul style="list-style-type: none"> <li>Addition—horizontal</li> <li>Subtraction—horizontal</li> <li>Addition—vertical</li> <li>Subtraction—horizontal</li> </ul> </li> </ul> </li> </ul>

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<b>Work with addition and subtraction equations</b>		
<p>1.OA.D.7. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? <math>6 = 6</math>, <math>7 = 8 - 1</math>, <math>5 + 2 = 2 + 5</math>, <math>4 + 1 = 5 + 2</math>.</p>	<ul style="list-style-type: none"> <li>• Addition Sentences</li> <li>• Subtraction Sentences</li> <li>• Greater Than, Less Than</li> <li>• More Than, Fewer Than</li> </ul>	
<p>1.OA.D.8. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations <math>8 + ? = 11</math>, <math>5 = ? - 3</math>, <math>6 + 6 = ?</math>.</p>	<ul style="list-style-type: none"> <li>• Addition Sentences</li> <li>• Subtraction Sentences</li> <li>• Addition and Subtraction Fact Families</li> <li>• Missing Addends</li> <li>• Missing Minuends and Subtrahends</li> <li>• Mental Math Games</li> </ul>	
<b>NUMBERS AND OPERATIONS IN BASE TEN</b>		
<b>Extend the counting sequence</b>		
<p>1.NBT.A.1 Count to 120, starting at any number less than 120.</p> <ul style="list-style-type: none"> <li>• In this range, read and write numerals and represent a number of objects with a written numeral.</li> </ul>	<ul style="list-style-type: none"> <li>• Song: Counting On</li> <li>• Books: Painting by Number; Circus 20; Hooray, Hooray for the One Hundredth Day!</li> <li>• Count On</li> <li>• Number Recognition and Sense</li> <li>• Number Chart</li> </ul>	<ul style="list-style-type: none"> <li>• 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"> <li>- Mystery Numbers</li> <li>- I Can Write Numbers to 99</li> <li>- Numbers 20-29</li> <li>- Numbers 30-39</li> <li>- Numbers 40-49</li> <li>- Numbers 50-59</li> <li>- Numbers 60-69</li> <li>- Counting to 89</li> <li>- Counting Charts:                                     <ul style="list-style-type: none"> <li>- I Can Count to 50</li> <li>- I Can Count to 100</li> <li>- I Can Count to 99</li> <li>- I Can Count to 120</li> </ul> </li> </ul> </li> </ul>

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<b>Understand place value</b>		
<p>1.NBT.B.2 Understand that the two digits of a two-digit number represent amounts of tens and ones</p> <ul style="list-style-type: none"> <li>• 10 can be thought of as a bundle of ten ones—called a “ten.”</li> <li>• The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones</li> <li>• 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)</li> </ul>	<ul style="list-style-type: none"> <li>• Song: Place Value</li> <li>• Place Value of 2-digit Numbers</li> <li>• Expanded Notation</li> <li>• Add with Manipulatives</li> <li>• Flower Story Problems</li> <li>• Number Recognition and Sense</li> </ul>	<ul style="list-style-type: none"> <li>• 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"> <li>- Popsicles to Ten</li> </ul> </li> <li>• 11-19 broken down.pdf: The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. <ul style="list-style-type: none"> <li>- Toss It</li> <li>- Make a Number</li> <li>- Numbers Flashcards</li> <li>- Numbers 10-19</li> <li>- More Numbers 10-19</li> </ul> </li> <li>• Ten groupings.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"> <li>- Toss It</li> </ul> </li> </ul>
<p>1.NBT.B.3 Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols <math>&gt;</math>, <math>=</math>, and <math>&lt;</math>.</p>	<ul style="list-style-type: none"> <li>• Place Value</li> <li>• Greater Than, Less Than (2-digit Numbers)</li> <li>• You Be the Teacher: Greater Than, Less Than</li> </ul>	

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Use place value understanding and properties of operations to add and subtract		
<p>1.NBT.C.4. Add within 100 using concrete models or drawings, relate the strategy used to a written expression or equation, and be able to explain the reasoning</p>	<ul style="list-style-type: none"> <li>• Addition</li> <li>• Add Tens</li> <li>• Doubles</li> <li>• Doubles Plus 1</li> <li>• Add with Manipulatives</li> <li>• Add Vertical Squares</li> <li>• Add with Beads</li> <li>• Addition and Subtraction Relationship</li> <li>• Flower Story Problems</li> <li>• Story Problem Strategies</li> <li>• Mental Math Games</li> <li>• Speed Games</li> <li>• Add with Regrouping Concept</li> <li>• Add 2-digit and 1-digit Numbers with Regrouping</li> <li>• Add 2-digit Numbers without Regrouping</li> <li>• Add 2-digit Numbers with Regrouping</li> <li>• You Be the Teacher: Add 2-digit Numbers without Regrouping</li> <li>• You Be the Teacher: Add 2-digit Numbers with Regrouping</li> </ul>	<ul style="list-style-type: none"> <li>• 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"> <li>- Drawing Tens</li> <li>- Beans, Beans, and More Beans</li> <li>- The Kingdome of Popsicle Stick-Filled Purses</li> <li>- Straws and Macaroni</li> <li>- Bean Addition</li> <li>- Newsletter</li> <li>- Adding Tens and Ones</li> <li>- Color Adds Up</li> <li>- Cookies and Milk!</li> <li>- Addition of Two-Digit Numbers</li> <li>- Addition and Subtraction of Large Numbers</li> <li>- 1 set of flashcards</li> </ul> </li> </ul>
<p>1.NBT.C.5 Mentally find 10 more or 10 less than a given two-digit number, without having to count</p>	<ul style="list-style-type: none"> <li>• Song: Skip Counting</li> <li>• Book: Navajo Beads</li> <li>• Add 10 and 6-10</li> <li>• Subtract 10 from 10-20</li> <li>• Add Tens</li> <li>• Subtract Tens</li> <li>• Skip Count by 10</li> <li>• Number Chart</li> <li>• Kingdom of Counting</li> <li>• Flower Story Problems</li> </ul>	<ul style="list-style-type: none"> <li>• 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"> <li>- Ten-O</li> <li>- Toss It</li> <li>- Make a Number</li> <li>- Subtract 10</li> <li>- Flashcards</li> <li>- Bingo</li> <li>- Addition of Tens</li> </ul> </li> </ul>



ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<b>Use place value understanding and properties of operations to add and subtract <i>continued</i></b>		
<p>1.NBT.C.6. Subtract multiples of 10 from multiples of 10 (both in the range of 10-90) using concrete models or drawings, relate the strategy to a written method, and explain the reasoning used</p>	<ul style="list-style-type: none"> <li>• Subtraction</li> <li>• Subtraction Sentences</li> <li>• Subtract Tens</li> <li>• Subtraction Patterns</li> <li>• Subtract 10 from 10–20</li> <li>• Place Value</li> <li>• Addition and Subtraction Relationship</li> <li>• Use Manipulatives</li> <li>• Flower Story Problems: Subtraction Patterns</li> <li>• Story Problem Strategies: Subtract Ten</li> <li>• Problem Solving Strategies: Look for a Pattern; Model or Act Out</li> <li>• Mental Math Games</li> <li>• You Be the Teacher: Subtraction</li> </ul>	<ul style="list-style-type: none"> <li>• 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"> <li>- Ten-O</li> <li>- Bingo</li> <li>- Subtract Multiples of 10</li> </ul> </li> </ul>
<b>MEASUREMENT AND DATA</b>		
<b>Measure lengths indirectly and by iterating length units</b>		
<p>1.MD.A.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object.</p>	<ul style="list-style-type: none"> <li>• Length</li> <li>• Nonstandard Units of Length</li> <li>• Story Problem Strategies: Nonstandard Units of Length</li> </ul>	
<p>1.MD.A.2 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.</p>	<ul style="list-style-type: none"> <li>• Length</li> <li>• Nonstandard Units of Length</li> <li>• Story Problem Strategies: Nonstandard Units of Length</li> <li>• Problem Solving</li> <li>• Problem Solving Strategies: Make and Use a Picture</li> </ul>	<ul style="list-style-type: none"> <li>• 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"> <li>- Measures of Me</li> <li>- Measure a Handful</li> <li>- Estimating Length</li> <li>- A Fruit and Vegetable</li> <li>- Measure Up!</li> <li>- Inches/Centimeters Rulers</li> </ul> </li> </ul>

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<b>Work with time and money</b>		
<p>1.MD.B.3 Tell and write time in hours and half-hours using analog and digital clocks.</p>	<ul style="list-style-type: none"> <li>• Song: Clock Hands</li> <li>• Books: Mr. Romano’s Secret: A Time Story; How Long is a Minute?</li> <li>• Tell Time to the Hour</li> <li>• Tell Time to the Half-Hour</li> <li>• Compare Minutes to Hours</li> <li>• Sequence Times</li> <li>• Order Numbers on a Clock</li> <li>• Story Problem Strategies: Time</li> </ul>	<ul style="list-style-type: none"> <li>• 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"> <li>- What Comes After, Before, Or Between?</li> <li>- Make Your Own Clock</li> <li>- Learning to Tell Time</li> <li>- Matching Time</li> <li>- What Numbers are Missing?</li> <li>- What Time Is It?</li> <li>- Time of Day</li> <li>- Clock flashcards</li> </ul> </li> </ul>
<p>1.MD.B.4 Identify and know the value of a penny, nickel, dime, and quarter</p>	<ul style="list-style-type: none"> <li>• Songs: Money; Save Your Pennies</li> <li>• Coin Identification</li> <li>• Coin Value</li> <li>• Quarters</li> <li>• Count Dimes, Nickels, and Pennies</li> <li>• Count Quarters, Dimes, Nickels, and Pennies</li> <li>• Count Nickels and Pennies or Dimes and Pennies</li> <li>• Count Coins</li> <li>• Equivalent Sums of Money</li> </ul>	
<p>1.MD.B.5 Count collections of like coins (pennies, nickels, and dimes)</p>	<ul style="list-style-type: none"> <li>• Songs: Money; Save Your Pennies</li> <li>• Coin Identification</li> <li>• Coin Value</li> <li>• Quarters</li> <li>• Count Dimes, Nickels, and Pennies</li> <li>• Count Quarters, Dimes, Nickels, and Pennies</li> <li>• Count Nickels and Pennies or Dimes and Pennies</li> <li>• Count Coins</li> <li>• Count Bills and Coins</li> <li>• Equivalent Sums of Money</li> </ul>	

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<b>Represent and interpret data</b>		
<p>1.MD.C.6 Organize, represent, and interpret data with up to three categories, using tally tables, picture graphs and bar graphs</p> <ul style="list-style-type: none"> <li>Ask and answer questions about the total number represented, how many in each category, and how many more or less are in one category than in another</li> </ul>	<ul style="list-style-type: none"> <li>Songs: Tallying; Graphing</li> <li>Books: One More Cat; Painting by Number</li> <li>Tally Marks</li> <li>Problem Solving Strategy: Make a Graph, Make a Table</li> <li>Graphs</li> <li>Make a Table</li> <li>Story Problem Strategies: Graphs</li> </ul>	<ul style="list-style-type: none"> <li>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"> <li>Ice Cream Sundae</li> <li>Make A Real Object Graph</li> <li>Make a Weather Bar Graph</li> <li>Weather Flashcards</li> <li>Our Favorite Foods</li> <li>Make a Graph</li> <li>Make a table</li> <li>How Many?</li> <li>Bugs!</li> <li>Use Graphs and Tables</li> <li>How Big is Your Family?</li> </ul> </li> </ul>
<b>GEOMETRY</b>		
<b>Reason with shapes and their attributes</b>		
<p>1.G.A.1 Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.</p>	<ul style="list-style-type: none"> <li>Songs: Corners and Sides; Kites</li> <li>Geoboard</li> <li>Space Shapes</li> </ul>	
<p>1.G.A.2 Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape</p>	<ul style="list-style-type: none"> <li>Song: Kites</li> <li>Space Shapes</li> <li>Story Problem Strategies: Space Shapes</li> <li>Geoboard</li> <li>Tangrams</li> </ul>	

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<b>Reason with shapes and their attributes <i>continued</i></b>		
<p>1.G.A.3 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.</p> <ul style="list-style-type: none"> <li>Describe the whole as two of, or four of the shares</li> <li>Understand for these examples that decomposing into more equal shares creates smaller shares</li> </ul>	<ul style="list-style-type: none"> <li>Song: Fractions</li> <li>Book: Halves and Fourths and Thirds</li> <li>Equal-part Fractions</li> <li>Label Parts of Fractions</li> <li>Story Problem Strategies: Equal-part Fractions, Label Parts of Fractions</li> </ul>	
<b>FLUENT MATH—SECOND GRADE</b>		
<b>OPERATIONS AND ALGEBRAIC THINKING</b>		
<b>Represent and solve problems involving addition and subtraction</b>		
<p>2.OA.A.1 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</p> <ul style="list-style-type: none"> <li>Represent a strategy with a related equation including a symbol for the unknown number</li> </ul>	<ul style="list-style-type: none"> <li>Book: Painting by Number</li> <li>Addition</li> <li>Subtraction</li> <li>Problem Solving Strategies: Act Out Addition; Act Out Subtraction</li> <li>Story Problem Strategies</li> <li>Missing Addends and Subtrahends</li> <li>Subtraction Sentences</li> <li>Addition and Subtraction Facts</li> </ul>	<ul style="list-style-type: none"> <li>Solving 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"> <li>Animal Math</li> <li>Picture Problems</li> <li>Act it Out</li> <li>Guess and Check</li> </ul> </li> </ul>

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<b>Add and subtract within 20</b>		
<p>2.OA.B.2 Fluently add and subtract within 20 using mental strategies</p> <ul style="list-style-type: none"> <li>By end of grade 2, know from memory all sums of two one-digit numbers</li> </ul>	<ul style="list-style-type: none"> <li>Songs: Fact Families; Doubles</li> <li>Mental Math Games: Addition Facts; Missing Addends and Subtrahends; Addition and Subtraction Facts</li> <li>Speed Games: Addition and Subtraction Facts</li> <li>Subtraction Patterns</li> <li>Addition Facts to 20</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul> <p><i>Sets of flashcards:</i></p> <ul style="list-style-type: none"> <li>Addition—horizontal</li> <li>Subtraction—horizontal</li> <li>Addition—vertical</li> <li>Subtraction—vertical</li> <li>Addition and subtraction—horizontal and vertical</li> </ul>
<b>Work with equal groups of objects to gain foundations for multiplication</b>		
<p>2.OA.C.3. Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s</p> <ul style="list-style-type: none"> <li>Write an equation to express an even number (up to 20) as a sum of two equal addends.</li> </ul>	<ul style="list-style-type: none"> <li>Song: Odd Todd and Even Steven</li> <li>Skip Count by 2</li> <li>Addition Facts</li> </ul>	<ul style="list-style-type: none"> <li>Odd and even recognition.pdf: Determine whether a group of objects (up to 20) has an odd or even number of members.</li> <li>Missing Patterns</li> <li>Counting by 2's</li> <li>What's My Number?</li> </ul>
<p>2.OA.C.4. Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns</p> <ul style="list-style-type: none"> <li>Write an equation to express the total as a sum of equal addends.</li> </ul>	<ul style="list-style-type: none"> <li>Addition</li> <li>Multiply Using Repeated Addition</li> <li>Multiply Using Arrays</li> </ul>	

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<b>NUMBERS AND OPERATIONS IN BASE TEN</b>		
<b>Understand place value</b>		
<p>2.NBT.A.1 Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 726 equals 7 hundreds, 2 tens, and 6 ones</p> <ul style="list-style-type: none"> <li>Understand that 100 can be thought of as a group of ten tens—called a “hundred”</li> <li>Understand that the numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine groups of 100</li> </ul>	<ul style="list-style-type: none"> <li>Song: Place Value</li> <li>Place Value of 3-digit Numbers</li> </ul>	<ul style="list-style-type: none"> <li>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"> <li>The Kingdom of Popsicle Stick-Filled Purses</li> </ul> </li> <li>Grouping hundreds.pdf: The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).                             <ul style="list-style-type: none"> <li>My Three-Digit Numbers</li> </ul> </li> </ul>
<p>2.NBT.A.2 Count within 1,000</p> <ul style="list-style-type: none"> <li>Skip-count by 5s, 10s, and 100s beginning at zero</li> </ul>	<ul style="list-style-type: none"> <li>Song: Skip Counting</li> <li>Skip Count</li> <li>Skip Count by 10</li> <li>Skip Count by 5</li> <li>Story Problem Strategies: Skip Count</li> <li>Number Sequences and Patterns</li> </ul>	<ul style="list-style-type: none"> <li>Counting within 1000.pdf: Count within 1,000; skip-count by 5s, 10s, and 100s.                             <ul style="list-style-type: none"> <li>Chart Patterns</li> <li>My 199 Picture</li> <li>My 200 Picture</li> <li>My 299 Picture</li> <li>My 300 Picture</li> <li>My 399 Picture</li> <li>My 400 Picture</li> <li>My 499 Picture</li> <li>My 500 Picture</li> <li>My 599 Picture</li> <li>My 600 Picture</li> <li>My 699 Picture</li> <li>My 700 Picture</li> <li>900 Chart</li> </ul> </li> </ul>
<p>2.NBT.A.3 Read and write numbers to 1,000 using base-ten numerals, number names, and expanded form</p> <ul style="list-style-type: none"> <li>Model and describe number within 1000 as groups of 10 in a variety of ways</li> </ul>	<ul style="list-style-type: none"> <li>Sequences of 2-digit Numbers</li> <li>Sequences of 3-digit Numbers</li> <li>Number Chart</li> <li>Place Value</li> <li>Number Recognition and Sense</li> </ul>	

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<i>Understand place value continued</i>		
<p>2.NBT.A.4 Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using <math>&gt;</math>, <math>=</math>, and <math>&lt;</math> symbols and correct terminology for the symbols to record the results of comparisons.</p>	<ul style="list-style-type: none"> <li>• Story Problem Strategies: Greater Than, Less Than 3-digit</li> <li>• Greater Than, Less Than (3-digit Numbers)</li> <li>• Place Value of 3-digit Numbers</li> </ul>	<ul style="list-style-type: none"> <li>• Less than, equal to, or greater than.pdf: Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using <math>&gt;</math>, <math>=</math>, and <math>&lt;</math> symbols to record the results of comparisons.                             <ul style="list-style-type: none"> <li>- More or Less</li> <li>- The Hands Have It!</li> <li>- Larger or Smaller?</li> <li>- Comparing Number Cards</li> <li>- Number Cards</li> <li>- <math>&lt;</math>, <math>&gt;</math>, <math>=</math> Cards</li> <li>- Greater Than, Less Than, Equal To</li> </ul> </li> </ul>
<i>Use place value understanding and properties of operations to add and subtract</i>		
<p>2.NBT.B.5 Add and subtract within 100 with computational fluency using strategies based on place value, properties of operations, and the relationship between addition and subtraction</p>	<ul style="list-style-type: none"> <li>• Place Value</li> <li>• Addition and Subtraction Relationship</li> <li>• Commutative Properties of Addition</li> <li>• Addition</li> <li>• Subtraction</li> <li>• Add without Regrouping</li> <li>• Add with Regrouping</li> <li>• Subtract without regrouping</li> <li>• Subtract with Regrouping</li> <li>• Speed Games</li> <li>• Mental Math Games</li> </ul>	<ul style="list-style-type: none"> <li>• Adding or subtracting 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"> <li>- Addition Flashcards</li> <li>- Addition of Two-Digit Numbers</li> <li>- Tic Tac Toe</li> <li>- Subtraction of Two-Digit Numbers</li> </ul> </li> </ul>
<p>2.NBT.B.6. Add up to four two-digit numbers using strategies based on place value and properties of operations</p>	<ul style="list-style-type: none"> <li>• Add Two-digit Numbers with Regrouping</li> <li>• Commutative Properties of Addition</li> <li>• Place Value</li> </ul>	<ul style="list-style-type: none"> <li>• 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"> <li>- Add Four Two-Digit Numbers</li> </ul> </li> </ul>

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Use place value understanding and properties of operations to add and subtract <i>continued</i>		
<p>2.NBT.B.7 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 expression or equation</p>	<ul style="list-style-type: none"> <li>• Place Value</li> <li>• Addition and Subtraction Relationship</li> <li>• Commutative Properties of Addition</li> <li>• Addition</li> <li>• Subtraction</li> <li>• Add without Regrouping</li> <li>• Add with Regrouping</li> <li>• Subtract without regrouping</li> <li>• Subtract with Regrouping</li> <li>• Act Out Addition</li> <li>• Act Out Subtraction</li> </ul>	<ul style="list-style-type: none"> <li>• 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"> <li>- Choose and Add</li> <li>- Mix and Match Addition</li> <li>- Expanded Subtraction</li> <li>- Subtracting Repeats</li> <li>- 999</li> <li>- Prediction</li> <li>- Up and Away</li> <li>- Regrouping Treasure Hunt</li> <li>- Play Ball</li> <li>- Squirrel Facts</li> <li>- Number Cards</li> </ul> </li> </ul>
<p>2.NBT.B.8 Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.</p>	<ul style="list-style-type: none"> <li>• Mental Math Games</li> <li>• Speed Games</li> <li>• Skip Count</li> <li>• Place Value</li> <li>• Number Chart</li> <li>• Number Patterns</li> </ul>	<ul style="list-style-type: none"> <li>• 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"> <li>- Spin and Solve (with spinner and numbers cards)</li> </ul> </li> </ul>



ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<b>Use place value understanding and properties of operations to add and subtract <i>continued</i></b>		
<p>2.NBT.B.9 Explain why addition and subtraction strategies work, using place value and the properties of operations.</p>	<ul style="list-style-type: none"> <li>• Addition</li> <li>• Subtraction</li> <li>• Add with Regrouping Concept</li> <li>• Subtract with Regrouping Concept</li> <li>• Place Value</li> <li>• Number Line</li> <li>• Addition and Subtraction Relationship</li> <li>• You Be the Teacher</li> <li>• Commutative Properties of Addition</li> <li>• Act Out Addition</li> <li>• Act Out Subtraction</li> </ul>	<ul style="list-style-type: none"> <li>• 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"> <li>- Cube Trails</li> <li>- Race for a Flat</li> <li>- High/Low Number Cube Throw</li> <li>- Lucky Five</li> <li>- Hundreds, Tens, Ones Chart</li> <li>- Numbers Cards</li> </ul> </li> </ul>
<b>MEASUREMENT AND DATA</b>		
<b>Measure and estimate lengths in standard units</b>		
<p>2.MD.A.1 Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes</p>	<ul style="list-style-type: none"> <li>• Song: Measuring Plants</li> <li>• Birds at My House</li> <li>• Length</li> <li>• Measurement Tools</li> <li>• Standard Units of Length</li> </ul>	<ul style="list-style-type: none"> <li>• 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"> <li>- Ready, Set, Measure</li> <li>- Treasure Hunt</li> <li>- Centimeter ruler</li> <li>- Inch Ruler</li> <li>- Let's Measure in Centimeters!</li> <li>- Let's Measure in Inches!</li> </ul> </li> </ul>
<p>2.MD.A.2 Measure the length of an object twice with two different length units</p> <ul style="list-style-type: none"> <li>• Describe how the two measurements relate to the size of the unit chosen</li> </ul>	<ul style="list-style-type: none"> <li>• Length</li> <li>• Standard Units of Length</li> </ul>	<ul style="list-style-type: none"> <li>• 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"> <li>- Ready, Set, Measure</li> </ul> </li> </ul>
<p>2.MD.A.3 Estimate lengths using units of inches, feet, centimeters, and meters</p>	<ul style="list-style-type: none"> <li>• Song: Measuring Plants</li> <li>• Length</li> <li>• Standard Units of Length</li> <li>• Measurement Tools</li> </ul>	<ul style="list-style-type: none"> <li>• Estimating lengths.pdf: Estimate lengths using units of inches, feet, centimeters, and meters.                             <ul style="list-style-type: none"> <li>- Ready, Set, Measure</li> <li>- Treasure Hunt</li> <li>- Let's Measure in Centimeters!</li> <li>- Let's Measure in Inches!</li> <li>- Measuring Perimeter</li> </ul> </li> </ul>

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<b>Measure and estimate lengths in standard units <i>continued</i></b>		
2.MD.A.4 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"> <li>• Length</li> <li>• Standard Units of Length</li> </ul>	
<b>Relate addition and subtraction to length</b>		
2.MD.B.5 Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units and write equations with a symbol for the unknown number to represent the problem	<ul style="list-style-type: none"> <li>• Book: Yangshi’s Perimeter</li> <li>• Story Problem Strategies: Standard Units of Length</li> <li>• Addition</li> <li>• Subtraction</li> <li>• Length</li> <li>• Standard Units of Length</li> </ul>	
2.MD.B.6 Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and solve addition and subtraction problems within 100 on a number line diagram.	<ul style="list-style-type: none"> <li>• Number Line</li> <li>• Length</li> </ul>	
<b>Work with time and money</b>		
2.MD.C.7 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"> <li>• Songs: Telling Time; Clock Hands</li> <li>• Tell Time</li> <li>• Tell Time to Five Minutes</li> <li>• Tell Time to the Quarter Hour</li> <li>• Tell Time to the Minute</li> <li>• Tell Time to the Hour</li> <li>• Tell Time to the Half-hour</li> <li>• You Be the Teacher: Tell Time</li> <li>• Story Problem Strategies: Time to the Quarter Hour; Time to the Minute; Time to Five Minutes</li> </ul>	

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<i>Work with time and money continued</i>		
<p>2.MD.C.8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately</p>	<ul style="list-style-type: none"> <li>• Songs: Money; Save Your Pennies</li> <li>• Coin Identification</li> <li>• Coin Value</li> <li>• Quarters</li> <li>• Count Dimes, Nickels, and Pennies</li> <li>• Count Quarters, Dimes, Nickels, and Pennies</li> <li>• Count Nickels and Pennies or Dimes and Pennies</li> <li>• Make Change</li> <li>• Count Coins</li> <li>• Count Bills and Coins</li> <li>• Equivalent Sums of Money</li> <li>• Story Problem Strategies: Make Change, Count Coins, Count Bills and Coins</li> <li>• You Be the Teacher: Make Change</li> </ul>	<ul style="list-style-type: none"> <li>• 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"> <li>- Supermarket Hunt</li> <li>- Shopping for My Family</li> <li>- Money Combinations</li> <li>- Money Sums</li> <li>- Pizza Parlor</li> <li>- How Much Back?</li> <li>- Coin Count</li> <li>- Bills and Coins</li> <li>- Let's Count Coins</li> <li>- Money Addition</li> <li>- Change is Good!</li> <li>- Make 45¢</li> </ul> </li> </ul>
<i>Represent and interpret data</i>		
<p>2.MD.D.9 Generate data by measuring the same attribute of similar objects to the nearest whole unit</p> <ul style="list-style-type: none"> <li>• Display the measurement data by making a line plot, where the horizontal scale is marked off in whole- number units</li> <li>• Generate data from multiple measurements of the same object</li> <li>• Make a line plot, where the horizontal scale is marked off in whole-number units, to compare precision of measurements</li> </ul>	<ul style="list-style-type: none"> <li>• Song: Measuring Plants</li> <li>• Length</li> <li>• Standard Units of Length</li> <li>• Measurement Tools</li> </ul>	<ul style="list-style-type: none"> <li>• 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"> <li>- Measuring Inches</li> <li>- Ready, Set, Measure</li> <li>- Let's Measure in Centimeters!</li> <li>- Let's Measure in Inches!</li> </ul> </li> </ul>
<p>2.MD.D.10 Draw a picture graph and a bar graph with single-unit scale to represent a data set with up to four categories</p> <ul style="list-style-type: none"> <li>• Solve simple put-together, take-apart, and compare problems using information presented in a bar graph</li> </ul>	<ul style="list-style-type: none"> <li>• Song: Graphing</li> <li>• Graphing</li> <li>• Bar Graphs</li> <li>• Picture Graphs</li> <li>• Use Graphs and Tables</li> <li>• Story Problem Strategies: Picture Graphs, Bar Graphs</li> </ul>	

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<b>GEOMETRY</b>		
Reason with shapes and their attributes		
<p>2.G.A.1 Recognize and draw shapes having specified attributes (e.g., number of angles, number of sides, or a given number of equal faces)</p> <ul style="list-style-type: none"> <li>Identify triangles, quadrilaterals, pentagons, hexagons, and cubes</li> </ul>	<ul style="list-style-type: none"> <li>Song: Kites</li> <li>Geoboard</li> <li>Songs: Shapes, Shapes, Shapes; Corners and Sides</li> <li>Book: The Shape of Things</li> <li>Space Shapes</li> <li>World Shapes</li> <li>Story Problem Strategies: Space Shapes</li> </ul>	
<p>2.G.A.2 Partition a rectangle into rows and columns of same-size squares and count to find the total number of squares</p>	<ul style="list-style-type: none"> <li>Song: Fractions</li> <li>Fractions of Regions</li> <li>Story Problem Strategies: Fractions of Regions, Fractions of Groups</li> <li>You Be the Teacher: Fractions of Regions</li> </ul>	
<p>2.G.A.3 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.</p>	<ul style="list-style-type: none"> <li>Song: Fractions</li> <li>Books: Halves and Fourths and Thirds; The Fraction Twins</li> <li>Fractions</li> <li>Label Parts of Fractions</li> <li>Geoboard</li> <li>Fractions of Regions</li> <li>Fractions of Groups</li> <li>Story Problem Strategies: Fractions of Regions, Fractions of Groups</li> <li>You Be the Teacher: Fractions of Regions, Fractions of Groups</li> </ul>	
<p>2.G.A.4 Recognize that equal shares of identical wholes need not have the same shape.</p>	<ul style="list-style-type: none"> <li>Song: Fractions</li> <li>Books: Halves and Fourths and Thirds; The Fraction Twins</li> <li>Fractions</li> <li>Label Parts of Fractions</li> <li>Geoboard</li> <li>Fractions of Regions</li> <li>Fractions of Groups</li> <li>Story Problem Strategies: Fractions of Regions, Fractions of Groups</li> <li>You Be the Teacher: Fractions of Regions, Fractions of Groups</li> </ul>	

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<b>SCIENCE</b>		
<b>KINDERGARTEN</b>		
<b>FORCES AND INTERACTIONS: PUSHES AND PULLS</b>		
<i>Students who demonstrate understanding can:</i>		
K-PS2-1 Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.	<ul style="list-style-type: none"> <li>• Songs: The Scientific Method; Push and Pull</li> <li>• Science Investigation</li> <li>• Push and Pull</li> </ul>	
K-PS2-2 Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.	<ul style="list-style-type: none"> <li>• Songs: The Scientific Method; Push and Pull</li> <li>• Science Investigation</li> <li>• Push and Pull</li> </ul>	
<b>WEATHER AND CLIMATE</b>		
<i>Students who demonstrate understanding can:</i>		
K-PS3-1 Make observations to determine the effect of sunlight on Earth's surface.	<ul style="list-style-type: none"> <li>• Song: Sun Blues</li> <li>• Sun</li> <li>• Deserts</li> </ul>	
K-PS3-2 Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area.	Waterford encourages everyone to have writing, drawing, and art materials available for children's creations. <ul style="list-style-type: none"> <li>• Deserts</li> </ul>	
K-ESS2-1 Use and share observations of local weather conditions to describe patterns over time.	<ul style="list-style-type: none"> <li>• Song: Seasons</li> <li>• Book: That's What I Like, A Book About Seasons</li> <li>• Calendar/Graph Weather</li> <li>• Weather</li> <li>• Spring</li> <li>• Summer</li> <li>• Fall</li> <li>• Winter</li> </ul>	
K-ESS3-2 Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.	<ul style="list-style-type: none"> <li>• Song: Storms</li> <li>• Book: Whatever the Weather</li> <li>• Lightning Safety</li> <li>• Weather</li> </ul>	

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<b>INTERDEPENDENT RELATIONSHIPS IN ECOSYSTEMS: ANIMALS, PLANTS, AND THEIR ENVIRONMENT</b>		
<i>Students who demonstrate understanding can:</i>		
<p>K-LS1-1 Use observations to describe patterns of what plants and animals (including humans) need to survive.</p>	<ul style="list-style-type: none"> <li>• Song: Food From Plants</li> <li>• Books: Everybody Needs to Eat; Whatever the Weather</li> <li>• Deserts</li> <li>• Mountains</li> <li>• Oceans</li> <li>• Rainforests</li> </ul>	
<p>K-ESS2-2 Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.</p>	<ul style="list-style-type: none"> <li>• Songs: I Am Part of All I See; Conservation</li> <li>• Science Investigation</li> </ul>	
<p>K-ESS3-1 Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.</p>	<p>Waterford encourages everyone to have writing, drawing, and art materials available for children’s creations.</p> <ul style="list-style-type: none"> <li>• Song: Four Ecosystems</li> <li>• Book: Where In the World Would You Go Today?</li> <li>• Traits of Living Things</li> </ul>	
<p>K-ESS3-3 Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.</p>	<ul style="list-style-type: none"> <li>• Songs: I Am Part of All I See; Conservation; Pollution Rap</li> <li>• Pollution and Recycling</li> <li>• Care of Earth</li> <li>• Care of Water</li> <li>• Care of Air</li> </ul>	

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<b>ENGINEERING, TECHNOLOGY, AND APPLICATIONS OF SCIENCE</b>		
<i>Students who demonstrate understanding can:</i>		
K-ETS1-1 Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.	<ul style="list-style-type: none"> <li>• Book: I Want to Be a Scientist Like Wilbur and Orville Wright</li> <li>• Science Investigation</li> <li>• Science Tools</li> <li>• Weather Tools</li> </ul>	
K-ETS1-2 Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.	Waterford encourages everyone to have writing, drawing, and art materials available for children's creations. <ul style="list-style-type: none"> <li>• Song: Push and Pull</li> <li>• Push and Pull</li> </ul>	
K-ETS1-3 Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.	<ul style="list-style-type: none"> <li>• Song: The Scientific Method</li> <li>• Health Experiment</li> </ul>	
<b>GRADE ONE</b>		
<b>WAVES: LIGHT AND SOUND</b>		
<i>Students who demonstrate understanding can:</i>		
1-PS4-1 Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.	<ul style="list-style-type: none"> <li>• Song: Sound</li> <li>• Book: What Sounds Say</li> <li>• Sound Waves</li> <li>• Sound Experiment</li> <li>• Science Investigation</li> </ul>	
1-PS4-2 Make observations to construct an evidence-based account that objects can be seen only when illuminated.	<ul style="list-style-type: none"> <li>• Book: My Family Campout</li> <li>• Light Experiment</li> </ul>	

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<b>WAVES: LIGHT AND SOUND</b>		
<i>Students who demonstrate understanding can continued:</i>		
1-PS4-3 Plan and conduct an investigation to determine the effect of placing objects made with different materials in the path of a beam of light.	<ul style="list-style-type: none"> <li>• Book: My Family Campout</li> <li>• Light Properties</li> <li>• Light Experiment</li> </ul>	
1-PS4-4 Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.	<ul style="list-style-type: none"> <li>• Books: I Want to Be a Scientist Like Thomas Edison; I Want to Be a Scientist Like Isaac Newton; My Family Campout</li> <li>• Science Tools</li> <li>• Science Investigation</li> </ul>	
<b>STRUCTURE, FUNCTION, AND INFORMATION PROCESSING</b>		
<i>Students who demonstrate understanding can:</i>		
1-LS1-1 Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.	<ul style="list-style-type: none"> <li>• Song: Animal Bodies</li> <li>• Books: I Want to Be a Scientist Like Wilbur and Orville Wright; I Want to Be a Scientist Like George Washington Carver; Everybody Needs to Eat</li> <li>• Animal Adaptations and Human Tools</li> <li>• Animal Tracks</li> <li>• Animal Behavior</li> <li>• Traits of Living Things</li> <li>• Science Investigation</li> <li>• Science Tools</li> <li>• Materials</li> </ul>	
1-LS1-2 Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.	<ul style="list-style-type: none"> <li>• Animal Behavior</li> <li>• Traits of Living Things</li> <li>• Deserts</li> <li>• Mountains</li> <li>• Oceans</li> <li>• Spring</li> <li>• Summer</li> <li>• Fall</li> <li>• Winter</li> </ul>	



ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<b>STRUCTURE, FUNCTION, AND INFORMATION PROCESSING</b>		
<i>Students who demonstrate understanding can continued:</i>		
1-LS3-1 Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.	<ul style="list-style-type: none"> <li>• Song: Plants Are Growing</li> <li>• Books: A Seed Grows; Guess What I Am</li> <li>• Traits of Living Things</li> <li>• Mammals</li> <li>• Reptiles</li> <li>• Birds</li> <li>• Fish</li> <li>• Plants</li> </ul>	
<b>SPACE SYSTEMS: PATTERNS AND CYCLES</b>		
<i>Students who demonstrate understanding can:</i>		
1-ESS1-1 Use observations of the sun, moon, and stars to describe patterns that can be predicted.	<ul style="list-style-type: none"> <li>• Song: The Moon</li> <li>• Book: My Family Campout</li> <li>• Sun, Moon, and Earth</li> <li>• Moon Patterns</li> </ul>	
1-ESS1-2 Make observations at different times of year to relate the amount of daylight to the time of year.	<ul style="list-style-type: none"> <li>• Sun, Moon, and Earth</li> <li>• Sun</li> <li>• Spring</li> <li>• Summer</li> <li>• Fall</li> <li>• Winter</li> </ul>	
<b>ENGINEERING, TECHNOLOGY, AND APPLICATIONS OF SCIENCE</b>		
<i>Students who demonstrate understanding can:</i>		
1-ETS1-1 Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.	<ul style="list-style-type: none"> <li>• Book: I Want to Be a Scientist Like Stephen Hawking; I Want to Be a Scientist Like Thomas Edison; I Want to Be a Scientist Like Carl Linnaeus; I Want to Be a Scientist Like Antoni van Leeuwenhoek</li> <li>• Science Investigation</li> </ul>	

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<b>ENGINEERING, TECHNOLOGY, AND APPLICATIONS OF SCIENCE</b>		
<i>Students who demonstrate understanding can continued:</i>		
1-ETS1-2 Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.	Waterford encourages everyone to have writing, drawing, and art materials available for children’s creations. <ul style="list-style-type: none"> <li>• Song: Push and Pull</li> <li>• Push and Pull</li> </ul>	
1-ETS1-3 Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.	<ul style="list-style-type: none"> <li>• Song: The Scientific Method</li> <li>• Health Experiment</li> </ul>	
<b>GRADE TWO</b>		
<b>STRUCTURE AND PROPERTIES OF MATTER</b>		
<i>Students who demonstrate understanding can:</i>		
2-PS1-1 Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.	<ul style="list-style-type: none"> <li>• Songs: The Scientific Method; Corners and Sides; Gravity; Matter</li> <li>• Changes in Matter</li> <li>• Materials</li> <li>• Gravity</li> <li>• Magnets</li> <li>• Heat Movement</li> </ul>	
2-PS1-2 Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose.	<ul style="list-style-type: none"> <li>• Song: The Scientific Method</li> <li>• Book: I Want to Be a Scientist Like Wilbur and Orville Wright</li> <li>• Science Investigation</li> <li>• Materials</li> <li>• Magnets</li> </ul>	
2-PS1-3 Make observations to construct an evidence-based account of how an object made of a small set of pieces can be disassembled and made into a new object.	<ul style="list-style-type: none"> <li>• Book: I Want to Be a Scientist Like Wilbur and Orville Wright</li> <li>• Tangrams</li> </ul>	

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<b>STRUCTURE AND PROPERTIES OF MATTER</b>		
<i>Students who demonstrate understanding can continued:</i>		
2-PS1-4 Construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot.	<ul style="list-style-type: none"> <li>• Songs: Matter; Solid or Liquid</li> <li>• Book: Pancakes Matter</li> <li>• Solid and Liquid</li> <li>• Changes in Matter</li> <li>• Solid, Liquid, Gas</li> </ul>	
<b>INTERDEPENDENT RELATIONSHIPS IN ECOSYSTEMS</b>		
<i>Students who demonstrate understanding can:</i>		
2-LS2-1 Plan and conduct an investigation to determine if plants need sunlight and water to grow.	<ul style="list-style-type: none"> <li>• Songs: The Scientific Method; Plants Are Growing</li> <li>• Book: Mela's Water Pot</li> <li>• Plant Experiment</li> <li>• Healthy Plants' Needs</li> <li>• Plants Need Water</li> <li>• Plants</li> <li>• Plants and Animals Need Air</li> </ul>	
2-LS2-2 Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.	<ul style="list-style-type: none"> <li>• Song: Plants Are Growing</li> <li>• Book: A Seed Grows</li> <li>• Animal Adaptations and Human Tools</li> </ul>	
2-LS4-1 Make observations of plants and animals to compare the diversity of life in different habitats.	<ul style="list-style-type: none"> <li>• Song: Four Ecosystems</li> <li>• Books: Where In the World Would You Go Today?; Your Backyard</li> <li>• Deserts</li> <li>• Mountains</li> <li>• Oceans</li> <li>• Rainforests</li> <li>• Prairies</li> <li>• Wetlands</li> </ul>	

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<b>EARTH'S SYSTEMS: PROCESSES THAT SHAPE THE EARTH</b>		
<i>Students who demonstrate understanding can:</i>		
2-ESS1-1 Use information from several sources to provide evidence that Earth events can occur quickly or slowly.	<ul style="list-style-type: none"> <li>• Book: Water Is All Around</li> <li>• Water Sources</li> <li>• The Water Cycle</li> </ul>	
2-ESS2-1 Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land.	<ul style="list-style-type: none"> <li>• Songs: Conservation; Water</li> <li>• Book: Water Is All Around</li> </ul>	
2-ESS2-2 Develop a model to represent the shapes and kinds of land and bodies of water in an area.	<p>Waterford encourages everyone to have writing, drawing, and art materials available for children's creations.</p> <ul style="list-style-type: none"> <li>• Songs: Water; Four Ecosystems</li> <li>• Book: Where In The World Would You Go Today?</li> <li>• Water</li> <li>• Team Science (Ecosystems)</li> <li>• Deserts</li> <li>• Mountains</li> <li>• Rainforests</li> <li>• Oceans</li> <li>• Wetlands</li> <li>• Prairies</li> </ul>	
2-ESS2-3 Obtain information to identify where water is found on Earth and that it can be solid or liquid.	<ul style="list-style-type: none"> <li>• Songs: Water; Uses of Water; Precipitation; Solid or Liquid</li> <li>• Water</li> <li>• Water Sources</li> <li>• Solid and Liquid</li> <li>• Solid, Liquid, Gas</li> </ul>	

ARKANSAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
ENGINEERING, TECHNOLOGY, AND APPLICATIONS OF SCIENCE		
<i>Students who demonstrate understanding can:</i>		
2-ETS1-1 Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.	<ul style="list-style-type: none"> <li>• Book: I Want to Be a Scientist Like Stephen Hawking; I Want to Be a Scientist Like Thomas Edison; I Want to Be a Scientist Like Carl Linnaeus; I Want to Be a Scientist Like Antoni van Leeuwenhoek; I Want to Be a Scientist Like Wilbur and Orville Wright</li> <li>• Science Investigation</li> </ul>	
2-ETS1-2 Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.	Waterford encourages everyone to have writing, drawing, and art materials available for children’s creations. <ul style="list-style-type: none"> <li>• Song: Push and Pull</li> <li>• Push and Pull</li> </ul>	
2-ETS1-3 Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.	<ul style="list-style-type: none"> <li>• Song: The Scientific Method</li> <li>• Health Experiment</li> </ul>	

## 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.](#)*

## ALBUMS

### Beginning Math Songs: Volume 1

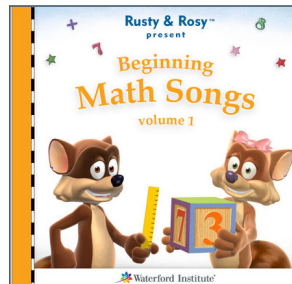
Odd Todd and Even Steven; Salsa Counting; On the Bayou—Addition; Subtract Those Cars; More Than, Fewer Than; A Nice Addition; Marching Band Counting; Doubles 1-5; Multiply by 0

### 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; Bicky 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



*Download these albums and more at iTunes. Search for "Waterford's Rusty & Rosy and Friends."*

## 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

## MY BACKPACK APP

Mental Math, Read-Along Books, Traditional Tales, Sing-Along Songs, Nursery Rhymes

