

Correlation Criteria: LOUISIANA STUDENT STATE STANDARDS: MATHEMATICS for KINDERGARTEN, FIRST AND SECOND GRADES

MAY 2017

# CURRICULUM Correlation

Waterford Math & Science and Classroom Advantage

100%

Louisiana Student State Standards: Mathematics

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WATERFORD BOOKS AND RELATED ACTIVITIES



## OVERVIEW



## *This document provides a detailed correlation of* WATERFORD MATH & SCIENCE AND CLASSROOM ADVANTAGE to LOUISIANA STUDENT STATE STANDARDS: MATHEMATICS.

#### WATERFORD CURRICULUM DETAILS

Waterford Curriculum provides technologydriven curriculum for PreK through second grade.

Waterford SmartStart (PreK) includes individualized learning software that adjusts to each child's pace and level. The software combined with the offline materials teach early reading, math, science, and social studies concepts as well as executive function, creative arts, and health and physical development.

**Waterford Early Learning (K-2)** is a technologybased early reading, math, and science program with integrated assessments and teacher tools.

Waterford Reading is a comprehensive, adaptive reading curriculum designed to help each student develop into a fluent reader. Waterford Reading incorporates five essential reading strands: phonological awareness, phonics, comprehension and vocabulary, language concepts, and fluency.



Waterford 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. **Classroom Advantage (PreK-2)** puts Waterford's award-winning, comprehensive online curriculum at teachers' fingertips for whole-class or small-group lessons.

#### **EVIDENCE-BASED CURRICULUM**

Waterford curriculum has been formally <u>evaluated</u> <u>in dozens of studies</u>. 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, individualized learning software adapts automatically to give each student a unique learning experience tailored to his or her own skill level and pace.

**Placement Assessment:** K-2 students begin their experience with a Placement Tool. Based on rigorous research, the Placement Tool evaluates a student's abilities and determines an appropriate starting point.

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 realtime, to identify areas of difficulty, and to utilize additional intervention tools in varied instructional settings.

#### **COLLABORATIVE LEARNING**

With Classroom Advantage, Waterford's 10,000 online activities are available for teachers to use with an interactive whiteboard or projector. This flexible tool for blended learning increases teachers' instructional efficacy. <u>Teachers can easily</u> <u>deliver engaging lessons</u> aligned to their own pacing guide, core curriculum, or state standards.

#### **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 Classroom Advantage.
- Print, PDF, and Internet Resources: Teacher guides, Waterford Manager teacher PDFs, hundreds of student books and songs, family engagement activities, newsletters and more complement Waterford's extensive digital resources.

#### **CONTINUAL DEVELOPMENT**

**SUPPORT** 

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



**Professional Services** offers a continuum of customizable services. Learn more bere.



LOUISIANA STANDARD	WATERFORD DIGITAL RESOURCES	WATERFORD PRINT RESOURCES
KINDERGARTEN		
COUNTING AND CARDINALITY		
A. Know number names and the co	ount sequence.	
1. Count to 100 by ones and by tens.	<ul> <li>Number Songs (See titles at end of document.)</li> <li>Counting Songs (See titles at end of document.)</li> <li>Math Books (See titles at end of document.)</li> <li>Number Counting</li> <li>Count on by 1</li> <li>Number Sense and Recognition</li> <li>Skip Count by 10</li> <li>Bug Bits</li> <li>Moving Target</li> <li>Number Instruction</li> <li>Picture and Shape Puzzle</li> <li>Telephone</li> <li>Counting Puzzle</li> <li>Dot to Dot</li> <li>Number Line</li> </ul>	<ul> <li>K.CC.1.pdf: Count to 100 by ones and tens.</li> <li>Missing Numbers <i>Practice Pages:</i></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>
2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1).	<ul> <li>Count on by 1</li> <li>Counting Songs (see list at end of document)</li> <li>Counting Puzzle</li> <li>Dot-to-dot</li> <li>Count On</li> </ul>	<ul> <li>K.CC.2.pdf: Count forward beginning with a given number within the known sequence.         <ul> <li>Let's Count On</li> <li>Toss and Count</li> </ul> </li> <li>Practice Pages:         <ul> <li>Count On by 1</li> <li>Math Newsletter: Count On</li> <li>Flashcards</li> </ul> </li> </ul>
3. Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).	<ul> <li>Number Counting</li> <li>Math Books (See titles at end of document.)</li> <li>Counting Songs (See titles at end of document.)</li> <li>Moving Target</li> <li>Number Instruction</li> <li>Number Recognition and Sense</li> <li>Picture and Shape Puzzle</li> <li>Counting Puzzle</li> <li>Telephone—Number 9</li> </ul>	<ul> <li>K.CC.3.pdf: Write numbers from 0 to 20. Represent a number of objects with a written numeral. <i>Practice Pages:</i></li> <li>Numbers Practice</li> <li>Numbers 1-5</li> <li>Add groups</li> <li>Count on by 1</li> <li>Number Writing Practice</li> </ul>



LOUISIANA STANDARD	WATERFORD DIGITAL RESOURCES	WATERFORD PRINT RESOURCES	
B. Count to tell the number of obje	B. Count to tell the number of objects.		
4. Understand the relationship between numbers and quantities; connect counting to cardinality.	<ul> <li>Make and Count Groups</li> <li>Number Counting</li> <li>Order Numbers</li> <li>Books (See titles at end of document.)</li> <li>Counting Songs (See titles at end of document.)</li> <li>Number Instruction</li> <li>Number Recognition and Sense</li> <li>Picture and Shape Puzzle</li> <li>Counting Puzzle</li> <li>Dot-to-Dot</li> <li>Number Chart</li> </ul>		
a. When counting objects in standard order, say the number names as they relate to each object in the group, demonstrating one-to- one correspondence.	<ul> <li>Make and Count Groups</li> <li>Number Counting</li> <li>Order Numbers</li> <li>Math Books (See titles at end of document.)</li> <li>Counting Songs (See titles at end of document.)</li> <li>Moving Target</li> <li>Number Instruction</li> <li>Number Recognition and Sense</li> <li>Picture and Shape Puzzle</li> <li>Counting Puzzle</li> <li>Dot-to-Dot</li> <li>Number Chart</li> </ul>	<ul> <li>K.CC.4a.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.</li> <li>Number Walk</li> </ul>	
b. 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> <li>Make and Count Groups</li> <li>Number Counting</li> <li>Order Numbers</li> <li>Math Books (See titles at end of document.)</li> <li>Counting Songs (See titles at end of document.)</li> <li>Moving Target</li> <li>Number Instruction</li> <li>Number Recognition and Sense</li> <li>Picture and Shape Puzzle</li> <li>Counting Puzzle</li> <li>Dot-to-Dot</li> <li>Number Chart</li> </ul>	<ul> <li>K.CC.4b.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.</li> <li>Mixed-up Counting</li> </ul>	



LOUISIANA STANDARD	WATERFORD DIGITAL RESOURCES	WATERFORD PRINT RESOURCES	
B. Count to tell the number of obje	B. Count to tell the number of objects <i>continued</i> .		
c. Understand that each successive number name refers to a quantity that is one larger.	<ul> <li>Number Recognition and Sense</li> <li>Make and Count Groups</li> <li>Number Counting</li> <li>Number Instruction</li> </ul>	<ul> <li>K.CC.4c.pdf: Understand that each successive number name refers to a quantity that is one larger.</li> <li>Hoop Addition</li> </ul>	
5. Count to answer "How many?" questions.	<ul> <li>Make and Count Groups</li> <li>Number Counting</li> <li>Order Numbers</li> <li>Math Books (See titles at end of document.)</li> <li>Counting Songs (See titles at end of document.)</li> <li>Number Instruction</li> <li>Number Recognition and Sense</li> <li>Dominoes</li> </ul>	<ul> <li>K.CC.5.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.</li> <li>Hoop Addition</li> </ul>	
a. Count objects up to 20, arranged in a line, a rectangular array, or a circle.	<ul> <li>Make and Count Groups</li> <li>Number Instruction</li> <li>Moving Target</li> <li>Dominoes</li> <li>Math Books (See titles at end of document.)</li> <li>Counting Songs (See titles at end of document.)</li> </ul>	<ul> <li>K.CC.5.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.</li> <li>Hoop Addition</li> </ul>	
b. Count objects up to 10 in a scattered configuration.	<ul> <li>Make and Count Groups</li> <li>Number Instruction</li> <li>Moving Target</li> <li>Dominoes</li> <li>Math Books (See titles at end of document.)</li> <li>Counting Songs (See titles at end of document.)</li> </ul>		
c. When given a number from 1-20, count out that many objects.	<ul> <li>Make and Count Groups</li> <li>Number Instruction</li> <li>Dominoes</li> <li>Math Books (See titles at end of document.)</li> <li>Counting Songs (See titles at end of document.)</li> </ul>		



LOUISIANA STANDARD	WATERFORD DIGITAL RESOURCES	WATERFORD PRINT RESOURCES
C. Compare Numbers.		
6. Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies. (Include groups with up to ten objects.)	<ul> <li>Greater Than, Less Than</li> <li>More Than, Fewer Than</li> <li>More Than</li> <li>Fewer Than</li> <li>Fewer Than</li> <li>Make a Math Story: More Than, Fewer Than</li> <li>Book: For the Birds</li> </ul>	<ul> <li>K.CC.6.pd: Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group.</li> <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>Practice Pages:         <ul> <li>Which Has More? 1 &amp; 2</li> <li>Fewer Than</li> <li>More or Fewer</li> <li>Greater or Less</li> <li>More Than/Fewer Than Flashcard Sets</li> </ul> </li> </ul>
7. Compare two numbers between 1 and 10 presented as written numerals.	<ul> <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> <li>Book: For the Birds</li> </ul>	<ul> <li>K.CC.7.pdf: Compare two numbers between 1 and 10 presented as written numerals.</li> <li>More or Less Spinner</li> <li>Catch Me If You Can!</li> <li>Practice Pages:</li> <li>Greater or Less</li> <li>Less or Greater</li> <li>Spinner</li> <li>Board game</li> <li>Number cards</li> </ul>



LOUISIANA STANDARD	WATERFORD DIGITAL RESOURCES	WATERFORD PRINT RESOURCES
OPERATIONS AND ALGEBRAIC THINKING		
A. Understand addition as putting t	ogether and adding to, and understand subtraction as	s taking apart and taking from.
1. Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.	<ul> <li>Songs: Addition; Pirates Can Add; On the Bayou; Bakery Subtraction; Circus Subtraction; Subtract Those Cars</li> <li>Book: Five Delicious Muffins</li> <li>Add Groups</li> <li>Subtract Groups</li> <li>Minuends to 5</li> <li>Minuends to 9</li> <li>Sums to 4-10 and Subtract from 4-9</li> <li>Act Out Addition/Subtraction</li> </ul>	
2. Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.	<ul> <li>Songs: Addition; Pirates Can Add; On the Bayou; Bakery Subtraction; Circus Subtraction; Subtract Those Cars</li> <li>Book: Five Delicious Muffins</li> <li>Add Groups</li> <li>Minuends to 5</li> <li>Minuends to 9</li> <li>Add Groups</li> <li>Subtract Groups</li> <li>Subtract Groups</li> <li>Sums to 4-10 and Subtract from 4-9</li> <li>Act Out Addition/Subtraction</li> <li>Flower Story Problems</li> <li>Story Problem Strategies</li> </ul>	<ul> <li>K.OA.2.pdf: Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.</li> <li>Addition 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>Act Out Subtraction</li> <li>Subtraction</li> <li>Yummy Subtraction</li> <li>Act Out Subtraction</li> <li>Subtraction</li> <li>Act Out Subtraction</li> <li>Subtraction</li> <li>Act Out Subtraction</li> </ul>
3. 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 (e.g., $5 = 2 + 3$ and $5 = 4 + 1$ ).	<ul> <li>Make and Count Groups</li> <li>Add Groups</li> <li>Subtract Groups</li> </ul>	



LOUISIANA STANDARD	WATERFORD DIGITAL RESOURCES	WATERFORD PRINT RESOURCES
A. Understand addition as putting	together and adding to, and understand subtraction as	s taking apart and taking from <i>continued</i> .
4. 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> <li>Missing Addends</li> <li>Kingdom of Counting</li> <li>Flower Story Problems</li> <li>Counting On</li> </ul>	
5. Fluently add and subtract within 5.	<ul> <li>Songs: Addition; On the Bayou; Pirates Can Add; Bakery Subtraction; Circus Subtraction; Subtract Those Cars</li> <li>Book: Five Delicious Muffins</li> <li>Add Groups</li> <li>Subtract Groups</li> <li>Subtract Groups</li> <li>Subtract from 5</li> <li>Minuends</li> <li>Act Out Addition</li> <li>Act Out Subtraction</li> <li>Speed Games</li> </ul>	
NUMBER AND OPERATIONS IN BA	SE TEN	
A. Work with numbers 11-19 to gain	foundations for place value.	
1. Gain understanding of place value.	Place Value	
a. Understand that the numbers 11-19 are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.	• Place Value (10-19)	<ul> <li>K.NBT.1.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.</li> <li><i>Practice Pages:</i></li> <li>Place Value 11-19 (1 &amp; 2)</li> </ul>



LOUISIANA STANDARD	WATERFORD DIGITAL RESOURCES	WATERFORD PRINT RESOURCES
A. Work with numbers 11-19 to gain	foundations for place value <i>continued</i> .	
b. Compose and decompose numbers 11 to 19 using place value (e.g., by using objects or drawings).	• Place Value (10-19)	<ul> <li>K.NBT.1.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. <i>Practice Pages:</i></li> <li>Place Value 11-19 (1 &amp; 2)</li> </ul>
c. Record each composition or decomposition using a drawing or equation (e.g., 18 is one ten and eight ones, 18 = 1 ten + 8 ones, 18 = 10 + 8).	• Place Value	<ul> <li>K.NBT.1.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. <i>Practice Pages:</i></li> <li>Place Value 11-19 (1 &amp; 2)</li> </ul>
MEASUREMENT AND DATA		
A. Describe and compare measurab	ple attributes.	
1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.	<ul> <li>Song: Measuring Plants</li> <li>Length</li> </ul>	<ul> <li>K.MD.1.pdf: Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.</li> <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>Practice Pages:</li> <li>Measurable Attributes</li> </ul>



LOUISIANA STANDARD	WATERFORD DIGITAL RESOURCES	WATERFORD PRINT RESOURCES
A. Describe and compare measural	ole attributes <i>continued</i> .	
2. 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. For example, directly compare the heights of two children and describe one child as taller/ shorter.	<ul> <li>Songs: Savanna Size; Measuring Plants</li> <li>Order Size</li> <li>Capacity</li> <li>Length</li> <li>Big and Little</li> <li>Tall and Short</li> <li>Heavy and Light</li> <li>Size</li> </ul>	<ul> <li>K.MD.2.pdf: Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.         <ul> <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>Practice Pages:</li> <li>Big and Little</li> <li>Tall and Short</li> <li>Heavy and Light</li> <li>Measuring Length</li> <li>Measurable Attributes</li> </ul> </li> </ul>
B. Classify objects and count the n	umber of objects in each category.	
3. Classify objects into given categories based on their attributes; count the numbers of objects in each category and sort the categories by count.	<ul> <li>Songs: Same and Different; All Sorts of Laundry</li> <li>Book: Buttons, Buttons</li> <li>Match</li> <li>Matching</li> <li>Sort</li> <li>Logic Game</li> </ul>	<ul> <li>K.MD.3.pdf: Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.</li> <li>Let's Sort</li> <li><i>Practice Pages:</i></li> <li>Sort</li> </ul>
C. Work with money.		
4. Recognize pennies, nickels, dimes, and quarters by name and value (e.g., This is a nickel and it is worth 5 cents.)	Song: Save Your Pennies	



LOUISIANA STANDARD	WATERFORD DIGITAL RESOURCES	WATERFORD PRINT RESOURCES	
GEOMETRY	GEOMETRY		
A. Identify and describe shapes (sq	uare, circles, triangles, rectangles, hexagons, cubes, co	ones, cylinders, and spheres.	
1. 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> <li>Over, Under, Above, Below</li> <li>Inside, Outside, Between</li> <li>Circle, Square, Triangle, Rectangle</li> <li>Songs: Position; Kites; Get Over the Bugs; Shapes, Shapes, Shapes; Up in the Air</li> <li>Books: The Shape of Things; Imagination Shapes</li> <li>Star, Semicircle, Octagon, Oval, Diamond</li> <li>Solid Shapes</li> <li>World Shapes</li> <li>Above, Below, Next to, On</li> <li>Story Problem Strategies: Shapes</li> </ul>	<ul> <li>K.G.1.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.</li> <li>Shapes Scavenger Hunt</li> </ul>	
2. Correctly name shapes regardless of their orientations or overall size.	<ul> <li>Books: The Shape of Things; Imagination Shapes</li> <li>Songs: Kites; Shapes, Shapes, Shapes; Corners and Sides; Congruent Parts</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> <li>Congruence</li> <li>Story Problem Strategies: Shape</li> </ul>	<ul> <li>K.G.2.pdf: Correctly name shapes regardless of their orientations or overall size.</li> <li>Shapes Scavenger Hunt</li> <li>Shapes and Positioning</li> <li>Shapes Flashcard</li> </ul>	
3. Identify shapes as two-dimensional (lying in a plane, "flat") or three- dimensional ("solid").	<ul><li>Simple Shapes</li><li>Solid Shapes</li><li>Space Shapes</li></ul>	<ul> <li>K.G.2.pdf: Correctly name shapes regardless of their orientations or overall size.</li> <li>Shapes Scavenger Hunt</li> <li>Shapes and Positioning</li> <li>Shapes Flashcard</li> </ul>	



LOUISIANA STANDARD	WATERFORD DIGITAL RESOURCES	WATERFORD PRINT RESOURCES
B. Analyze, compare, create, and co	ompose shapes.	
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> <li>Song: Corners and Sides</li> <li>Space Shapes</li> <li>Congruence</li> <li>Tangrams</li> <li>Similar Figures</li> <li>Story Problem Strategies</li> </ul>	
5. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.	<ul><li>Geoboard</li><li>Tangrams</li></ul>	
6. Compose simple shapes to form larger shapes. For example, "Can you join these two triangles with full sides touching to make a rectangle?	<ul><li>Geoboard</li><li>Tangrams</li></ul>	
GRADE 1		
OPERATIONS AND ALGEBRAIC TH	INKING	
A. Represent and solve problems in	volving addition and subtraction.	
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> <li>Problem Solving Strategy: Model or Act Out</li> <li>Flower Story Problems</li> <li>Story Problem Strategies: Commutative Property of Addition; Subtraction Sentences; Subtraction Relationship; Fact Families</li> </ul>	<ul> <li>1.OA.1.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.</li> <li><i>Practice Pages:</i></li> <li>Guess and Check</li> <li>Model the Story</li> </ul>
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.	• Story Problem Strategies: Add 3 One-digit Numbers	<ul> <li>1.OA.2.pdf: Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20.</li> <li>Practice Pages:         <ul> <li>Draw a Picture</li> </ul> </li> </ul>



LOUISIANA STANDARD	WATERFORD DIGITAL RESOURCES	WATERFORD PRINT RESOURCES
A. Represent and solve problems ir	volving addition and subtraction continued.	
3. Apply properties of operations to add and subtract.3 Examples: If 8 + 3 = 11 is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$ , the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$ . (Associative property of addition.)	<ul> <li>Subtraction Patterns</li> <li>Commutative Property of Addition</li> <li>Kingdom of Counting: Commutative Property of Addition</li> <li>Mental Math Games: Commutative Property of Addition</li> </ul>	
4. Understand subtraction as an unknown-addend problem. For example, subtract 10 – 8 by finding the number that makes 10 when added to 8.	<ul> <li>Missing Addends</li> <li>Subtraction Patterns</li> <li>Kingdom of Counting: Missing Addends, Missing Addends to Sums to 10</li> <li>Mental Math Games: Missing Addends Sums to 10</li> </ul>	<ul> <li>1.OA.4.pdf: Understand subtraction as an unknown- addend problem. Add and subtract within 20. <i>Worksheet:</i></li> <li>Write each subtraction problem as an addition problem and solve it .</li> </ul>
C. Add and subtract within 20.		
5. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).	<ul> <li>Jump Rope Rhymes</li> <li>Skip Count by 2</li> <li>Count On</li> <li>Song: Counting On</li> <li>Book: Circus 20</li> </ul>	<ul> <li>1.OA.5.pdf: Relate counting to addition and subtraction.</li> <li>Skip Counting Chant</li> <li>Jump Rope Counting Practice Pages:</li> <li>Related Facts</li> <li>Count by 10s</li> <li>Count by 5s</li> <li>Count by 2s</li> </ul>



LOUISIANA STANDARD	WATERFORD DIGITAL RESOURCES	WATERFORD PRINT RESOURCES
C. Add and subtract within 20 cont	inued.	
6. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use mental strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 - 4 = 13 - 3 - 1 = 10 - 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 - 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).	<ul> <li>Addition and Subtraction Relationship</li> <li>Kingdom of Counting</li> <li>Add 3 One-digit Numbers</li> <li>Subtraction Patterns</li> <li>Mental Math Games</li> <li>Missing Addends</li> <li>Missing Subtrahends</li> <li>Addition and Subtraction Fact Families</li> </ul>	<ul> <li>1.OA.6.pdf: Add and subtract within 20, demonstrating fluency for addition and subtraction within 10.</li> <li>The Three Little Bears</li> <li>Fact Family Bingo</li> <li>A Graph of Fact Families</li> <li>Bean Facts</li> <li><i>Practice Pages:</i></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 to 20</li> <li>Subtract</li> <li>Subtract</li> <li>Subtract</li> <li>Subtract</li> <li>Add Doubles to 20</li> <li>Addition A to 2</li></ul>



LOUISIANA STANDARD	WATERFORD DIGITAL RESOURCES	WATERFORD PRINT RESOURCES
D. Work with addition and subtract	ion equations.	
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? $6 = 6$ , $7 = 8 - 1$ , $5 + 2 = 2 + 5$ , $4 + 1 = 5 + 2$ .	<ul> <li>Finding the Difference song</li> <li>Book: Circus 20</li> <li>Addition Sentences</li> <li>Subtraction Sentences</li> </ul>	
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 8 + ? = 11, 5 = -3, 6 + 6 = .	<ul> <li>Missing Addends</li> <li>Missing Minuends and Subtrahends</li> <li>Mental Math Games</li> </ul>	
NUMBER AND OPERATIONS IN BA	SE TEN	
A. Extend the counting sequence.		
1. 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> <li>Song: Counting On</li> <li>Book: Hooray, Hooray for the One Hundredth Day!</li> <li>Count On</li> <li>Number Recognition and Sense</li> <li>Number Chart</li> </ul>	<ul> <li>1.NBT.1.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.</li> <li>Mystery Numbers</li> <li>Practice Pages:</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:</li> <li>I Can Count to 100</li> <li>I Can Count to 99</li> <li>I Can Count to 120</li> </ul>



LOUISIANA STANDARD	WATERFORD DIGITAL RESOURCES	WATERFORD PRINT RESOURCES
B. Understand place value.		
2. Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:	<ul> <li>Song: Place Value</li> <li>Place Value of 2-digit Numbers</li> <li>Expanded Notation</li> <li>Add with Manipulatives: Add 10 and 6-10</li> <li>Flower Story Problems: Add 10 and 6-10</li> <li>Number Recognition and Sense</li> </ul>	
a. 10 can be thought of as a bundle of ten ones—called a "ten."	<ul> <li>Song: Place Value</li> <li>Place Value of 2-digit Numbers</li> <li>Expanded Notation</li> <li>Add with Manipulatives: Add 10 and 6-10</li> <li>Flower Story Problems: Add 10 and 6-10</li> <li>Number Recognition and Sense</li> </ul>	<ul> <li>1.NBT.2a.pdf: 10 can be thought of as a bundle of ten ones—called a "ten."</li> <li>Popsicles to Ten</li> </ul>
b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.	<ul> <li>Song: Place Value</li> <li>Expanded Notation</li> <li>Add with Manipulatives: Add 10 and 6-10</li> <li>Flower Story Problems: Add 10 and 6-10</li> </ul>	<ul> <li>1.NBT.2b.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> <li>Toss It</li> <li>Make a Number</li> <li>Numbers Flashcards</li> </ul> </li> <li>Practice Pages:         <ul> <li>Numbers 10-19</li> <li>More Numbers 10-19</li> </ul> </li> </ul>
c. 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> <li>Expanded Notation</li> <li>Story Problem Strategies: Expanded Notation, Place Value</li> <li>Place Value</li> <li>Place Value of 2-digit Numbers</li> <li>Number Recognition and Sense</li> </ul>	<ul> <li>1.NBT.2c.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).</li> <li>Toss It</li> </ul>
3. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.	<ul> <li>Greater Than, Less Than (2-digit Numbers)</li> <li>You Be the Teacher: Greater Than, Less Than</li> </ul>	



LOUISIANA STANDARD	WATERFORD DIGITAL RESOURCES	WATERFORD PRINT RESOURCES
C. Use place value understanding a	nd properties of operations to add and subtract.	
4. Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10.	<ul> <li>Addition</li> <li>Add Tens</li> <li>Kingdom of Counting</li> <li>Doubles, Sums to 20</li> <li>Doubles Plus 1, Sums to 20</li> <li>Add with Manipulatives</li> <li>Add Vertical Squares</li> <li>Add with Beads</li> <li>Flower Story Problems</li> <li>Story Problem Strategies: Addition Strategy</li> <li>Mental Math Games</li> <li>Speed Games</li> <li>Story Problem Strategies; with Regrouping, without Regrouping</li> <li>You Be the Teacher</li> </ul>	<ul> <li>1.NBT.4.pdf: Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of ten.</li> <li>Drawing Tens</li> <li>Beans, Beans, and More Beans</li> <li>The Kingdom of Popsicle Stick-Filled Purses</li> <li>Straws and Macaroni</li> <li>Bean Addition</li> <li>Practice Pages:</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>
a. Use 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 number sentence; justify the reasoning used with a written explanation.	<ul> <li>Addition</li> <li>Place Value</li> <li>Add Tens</li> <li>Kingdom of Counting</li> <li>Doubles, Sums to 20</li> <li>Doubles Plus 1, Sums to 20</li> <li>Add with Manipulatives</li> <li>Add Vertical Squares</li> <li>Add with Beads</li> <li>Flower Story Problems</li> <li>Story Problem Strategies: Addition Strategy</li> <li>Mental Math Games</li> <li>Speed Games</li> <li>Story Problem Strategies; with Regrouping, without Regrouping</li> <li>You Be the Teacher</li> </ul>	
b. Understand that in adding two- digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.	<ul> <li>Place Value</li> <li>Add 2-digit Numbers Without Regrouping</li> <li>Add 2-digit Numbers with Regrouping</li> <li>Add 3 Two-digit Numbers</li> </ul>	



LOUISIANA STANDARD	WATERFORD DIGITAL RESOURCES	WATERFORD PRINT RESOURCES
C. Use place value understanding a	nd properties of operations to add and subtract <i>contin</i>	nued.
5. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.	<ul> <li>Add 10 and 6-10</li> <li>Subtract 10 from 10-20</li> <li>Kingdom of Counting: Add 10 and 6-10; Subtract 10 from 10-20</li> <li>Flower Story Problems: Add 10 and 6-10; Subtract 10 from 10-20</li> </ul>	<ul> <li>1.NBT.5.pdf: Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.</li> <li>Ten-O</li> <li>Toss It</li> <li>Make a Number</li> <li>Practice Pages:</li> <li>Subtract 10</li> <li>Flashcards</li> <li>Bingo</li> <li>Addition of Tens</li> </ul>
6. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), 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 and explain the reasoning used.	<ul> <li>Subtraction</li> <li>Subtraction Sentences</li> <li>Subtract Tens</li> <li>Subtract 10 from 10-20</li> <li>Kingdom of Counting: Subtraction Patterns</li> <li>Use Manipulatives: Subtract 10 from 10-20</li> <li>Flower Story Problems: Subtraction Patterns; Subtract 10 from 10-20</li> <li>Story Problem Strategies: Subtract Ten</li> <li>Problem Solving Strategies: Look for a Pattern</li> <li>Mental Math Games</li> <li>Story Problem Strategies: Subtract without Regrouping; Subtract with Regrouping</li> <li>2-digit Minus 1-digit Numbers with Regrouping</li> <li>Subtract 2-digit Numbers with Regrouping</li> <li>Subtract with Regrouping Concept</li> <li>You Be the Teacher: Subtract with Regrouping</li> </ul>	<ul> <li>1.NBT.6.pdf: Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90.</li> <li>Ten-O <i>Practice Pages:</i></li> <li>Bingo</li> <li>Subtract Multiples of 10</li> </ul>



LOUISIANA STANDARD	WATERFORD DIGITAL RESOURCES	WATERFORD PRINT RESOURCES
MEASUREMENT AND DATA		
A. Measure lengths indirectly and b	y iterating length units.	
1. Order three objects by length; compare the lengths of two objects indirectly by using a third object.	<ul><li>Nonstandard Units</li><li>Story Problem Strategies; Nonstandard Units</li></ul>	
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. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.	<ul> <li>Nonstandard Units of Length</li> <li>Story Problem Strategies: Nonstandard Units of Length</li> <li>Painting by Number</li> <li>Problem Solving</li> <li>Problem Solving Strategies: Make and Use a Picture</li> </ul>	<ul> <li>1.MD.2.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.</li> <li>Measures of Me</li> <li>Measure a Handful</li> <li>Estimating Length</li> <li>A Fruit and Vegetable <i>Practice Pages:</i></li> <li>Measure Up!</li> <li>Inches/Centimeters Rulers</li> </ul>
B. Tell and write time.		
3. Tell and write time in hours and half- hours using analog and digital clocks.	<ul> <li>Mr. Romano's Secret: A Time Story</li> <li>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>Story Problem Strategies: Time</li> <li>Clock Hands</li> </ul>	<ul> <li>1.MD.3.pdf: Tell and write time in hours and half-hours using analog and digital clocks.</li> <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>Practice Pages:</li> <li>What Numbers are Missing?</li> <li>What Time Is It?</li> <li>Time of Day</li> <li>Clock flashcards</li> </ul>



LOUISIANA STANDARD	WATERFORD DIGITAL RESOURCES	WATERFORD PRINT RESOURCES
C. Represent and interpret data.		
4. 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> <li>Venn Diagrams: The Birds, the Beasts, and the Bat</li> <li>Tally Marks: One More Cat</li> <li>Problem Solving Strategy: Make a Graph, Make a Table</li> <li>Graphs</li> <li>Make a Table</li> <li>Story Problem Strategies: Graph</li> </ul>	<ul> <li>1.MD.4.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.</li> <li>Ice Cream Sundae</li> <li>Make A Real Object Graph</li> <li>Make a Weather Bar Graph</li> <li>Weather Flashcards</li> </ul>
D. Work with money.		
5. Determine the value of a collection of coins up to 50 cents. (Pennies, nickels, dimes, and quarters in isolation; not to include a combination of different coins.)	<ul> <li>Song: Money</li> <li>Book: Bugs For Sale</li> <li>Count Quarters, Dimes, Nickels, and Pennies</li> <li>Quarters</li> <li>Equivalent Sums of Money</li> </ul>	
GEOMETRY		
A. Reason with shapes and their at	tributes.	
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 that possess defining attributes.	<ul><li>Song: Corners and Sides</li><li>Geoboard</li></ul>	
2. Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter- circles) and three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.	<ul> <li>Space Shapes</li> <li>Story Problem Strategies: Space Shapes</li> <li>Geoboard</li> <li>Tangrams</li> </ul>	



LOUISIANA STANDARD	WATERFORD DIGITAL RESOURCES	WATERFORD PRINT RESOURCES
A. Reason with shapes and their at	tributes <i>continued</i> .	
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. 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> <li>Halves and Fourths and Thirds</li> <li>Equal-part Fractions</li> <li>Label Parts of Fractions</li> <li>Story Problem Strategies: Equal-part Fraction, Label Parts of Fractions</li> </ul>	
GRADE 2		
OPERATIONS AND ALGEBRAIC TH	INKING	
A. Represent and solve problems in	nvolving addition and subtraction.	
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, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	<ul> <li>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> </ul>	<ul> <li>2.OA.1.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> <li>Animal Math</li> <li>Picture Problems</li> <li>Practice Pages:</li> <li>Act it Out</li> <li>Guess and Check</li> </ul> </li> </ul>
B. Add and subtract within 20.		
2. Fluently add and subtract within 20 using mental strategies.2 By the end of Grade 2, know from memory all sums of two one-digit numbers.	<ul><li>Mental Math Games</li><li>Speed Games</li></ul>	<ul> <li>2.OA.2.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> <li><i>Flashcards:</i> <ul> <li>Addition—horizontal and vertical</li> <li>Subtraction—horizontal and vertical</li> </ul> </li> </ul>



LOUISIANA STANDARD	WATERFORD DIGITAL RESOURCES	WATERFORD PRINT RESOURCES
C. Work with equal groups of object	ts to gain foundations for multiplication.	
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; write an equation to express an even number as a sum of two equal addends.	• Song: Odd Todd and Even Steven	<ul> <li>2.OA.3.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>
4. Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.	<ul> <li>Story Problem Strategies: Multiply Using Repeated Addition; Multiply Using Arrays</li> <li>Multiply Using Repeated Addition</li> <li>Multiply Using Arrays</li> </ul>	
NUMBER AND OPERATIONS IN BA	SE TEN	
A. Understand place value.		
1. Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:	<ul><li>Song: Place Value</li><li>Place Value of 3-digit Numbers</li></ul>	
a. 100 can be thought of as a bundle of ten tens—called a "hundred."	<ul><li>Song: Place Value</li><li>Place Value of 3-digit Numbers</li></ul>	<ul> <li>2.NBT.1a.pdf: 100 can be thought of as a bundle of ten tens—called a "hundred."</li> <li>The Kingdom of Popsicle Stick-Filled Purses</li> </ul>
b. 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> <li>Song: Place Value</li> <li>Place Value of 3-digit Numbers</li> </ul>	<ul> <li>2.NBT.1b.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).</li> <li><i>Practice Pages:</i></li> <li>My Three-Digit Numbers</li> </ul>



LOUISIANA STANDARD	WATERFORD DIGITAL RESOURCES	WATERFORD PRINT RESOURCES
A. Understand place value continued.		
2. Count within 1000; skip-count by 5s, 10s, and 100s.	<ul> <li>Skip Count by 10</li> <li>Skip Count by 5</li> <li>Skip Counting</li> <li>Story Problem Strategies: Skip Count</li> <li>Number Sequences and Patterns Introduction</li> </ul>	<ul> <li>2.NBT.2.pdf: Count within 1,000; skip-count by 5s, 10s, and 100s.</li> <li>Chart Patterns</li> <li><i>Practice Pages:</i></li> <li>My 199 Picture</li> <li>My 200 Picture</li> <li>My 209 Picture</li> <li>My 300 Picture</li> <li>My 309 Picture</li> <li>My 400 Picture</li> <li>My 499 Picture</li> <li>My 500 Picture</li> <li>My 500 Picture</li> <li>My 500 Picture</li> <li>My 500 Picture</li> <li>My 600 Picture</li> </ul>
3. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.	<ul> <li>Problem Solving Strategies (Make a List)</li> <li>Story Problem Strategies: Sequences; Place Value</li> <li>Sequences of 2-digit Numbers</li> <li>Sequences of 3-digit Numbers</li> <li>Place Value of 3-digit Numbers</li> </ul>	
4. 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> <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> <li>2.NBT.4.pdf: Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using &gt;, =, and &lt; symbols to record the results of comparisons.         <ul> <li>More or Less</li> <li>The Hands Have It!</li> <li>Larger or Smaller?</li> <li>Comparing Number Cards</li> <li>Practice Pages:                 <ul> <li>Number Cards</li> <li><ul> <li><li><ul> <li><ul> <li><ul> <li><ul> <li><li><ul></ul></li></li></ul></li></ul></li></ul></li></ul></li></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul></li></ul>



LOUISIANA STANDARD	WATERFORD DIGITAL RESOURCES	WATERFORD PRINT RESOURCES
B. Use place value understanding a	nd properties of operations to add and subtract.	
5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	<ul> <li>Mental Math Games</li> <li>Story Problem Strategies: Add with Regrouping; Subtract with Regrouping</li> <li>Add with Regrouping</li> <li>Speed Games</li> <li>Add 3 Two-digit Numbers with Regrouping</li> <li>2-digit Minus 1-digit Numbers with Regrouping</li> <li>Subtract with Regrouping</li> <li>You Be the Teacher</li> </ul>	<ul> <li>2.NBT.5.pdf: Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</li> <li>Addition Flashcards</li> <li>Addition of Two-Digit Numbers</li> <li>Tic Tac Toe</li> <li>Subtraction of Two-Digit Numbers</li> </ul>
6. Add up to four two-digit numbers using strategies based on place value and properties of operations.	Add Two-digit Numbers with Regrouping	<ul> <li>2.NBT.6.pdf: Add up to four two-digit numbers using strategies based on place value and properties of operations.</li> <li>Add Four Two-Digit Numbers</li> </ul>
7. Add and subtract within 1000 using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; justify the reasoning used with a written explanation. 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> <li>Story Problem Strategies: Add 3 Two-digit with Regrouping; Add 3-digit with Regrouping; Subtract 2-digit with Regrouping; Subtract 3-digit with Regrouping</li> <li>Subtract 2-digit Numbers with Regrouping</li> <li>Subtract 3-digit Numbers with Regrouping</li> <li>Subtract with Regrouping Concept</li> <li>Add 3 Two-digit Numbers with Regrouping</li> <li>Add 3-digit Numbers with Regrouping</li> <li>Place Value</li> </ul>	<ul> <li>2.NBT.7.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.</li> <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>Practice Pages:</li> <li>Up and Away</li> <li>Regrouping Treasure Hunt</li> <li>Play Ball</li> <li>Squirrel Facts</li> <li>Number Cards</li> </ul>



LOUISIANA STANDARD	WATERFORD DIGITAL RESOURCES	WATERFORD PRINT RESOURCES	
B. Use place value understanding a	B. Use place value understanding and properties of operations to add and subtract <i>continued</i> .		
8. Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100- 900.	<ul> <li>Mental Math Games</li> <li>Speed Games</li> <li>Skip Count</li> <li>Story Problem Strategies</li> <li>Place Value</li> <li>Number Line</li> </ul>	<ul> <li>2.NBT.8.pdf: Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.</li> <li>Spin and Solve (with spinner and numbers cards)</li> </ul>	
9. Explain why addition and subtraction strategies work, using place value and the properties of operations.	<ul> <li>Addition</li> <li>Subtraction</li> <li>Fact Families</li> <li>Mental Math Games</li> <li>Speed Games</li> <li>Skip Count</li> <li>Subtraction Patterns</li> <li>Place Value</li> <li>Number Line</li> <li>You Be The Teacher</li> </ul>	<ul> <li>2.NBT.9.pdf: Explain why addition and subtraction strategies work, using place value and the properties of operations.</li> <li>Cube Trails</li> <li>Race for a Flat</li> <li>High/Low Number Cube Throw</li> <li>Lucky Five</li> <li>Practice Pages:</li> <li>Hundreds, Tens, Ones Chart</li> <li>Numbers Cards</li> </ul>	
MEASUREMENT AND DATA			
A. Measure and estimate lengths in	standard units.		
1. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.	<ul> <li>Measurement Tools</li> <li>Measuring Plants song</li> <li>Standard Units of Length</li> </ul>	<ul> <li>2.MD.1.pdf: Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.</li> <li>Ready, Set, Measure</li> <li>Treasure Hunt <i>Practice Pages:</i></li> <li>Centimeter ruler</li> <li>Inch Ruler</li> <li>Let's Measure in Centimeters!</li> <li>Let's Measure in Inches!</li> </ul>	
2. 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> <li>Length</li> <li>Standard Units of Length</li> <li>Inch Ruler</li> <li>Centimeter Ruler</li> </ul>	<ul> <li>2.MD.2.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.</li> <li>Ready, Set, Measure</li> </ul>	



LOUISIANA STANDARD	WATERFORD DIGITAL RESOURCES	WATERFORD PRINT RESOURCES	
A. Measure and estimate lengths in standard units <i>continued</i> .			
3. Estimate lengths using units of inches, feet, centimeters, and meters.	<ul> <li>Length</li> <li>Standard Units of Length</li> <li>Inch Ruler</li> <li>Centimeter Ruler</li> </ul>	<ul> <li>2.MD.3.pdf: Estimate lengths using units of inches, feet, centimeters, and meters.</li> <li>Ready, Set, Measure</li> <li>Treasure Hunt <i>Practice Pages:</i></li> <li>Let's Measure in Centimeters!</li> <li>Let's Measure in Inches!</li> <li>Measuring Perimeter</li> </ul>	
4. Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.	<ul> <li>Length</li> <li>Standard Units of Length</li> <li>Inch Ruler</li> <li>Centimeter Ruler</li> </ul>	<ul> <li>2.MD.4.pdf: Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.</li> <li>Ready, Set, Measure</li> <li>Treasure Hunt <i>Practice Pages:</i></li> <li>Let's Measure in Centimeters!</li> <li>Let's Measure in Inches!</li> </ul>	
B. Relate addition and subtraction	to length.		
5. Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.	<ul> <li>Story Problem Strategies: Standard Units of Length</li> <li>Book: Yangshi's Perimeter</li> <li>Addition</li> <li>Subtraction</li> </ul>		
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 represent whole-number sums and differences within 100 on a number line diagram.	• Number Line		



LOUISIANA STANDARD	WATERFORD DIGITAL RESOURCES	WATERFORD PRINT RESOURCES
C. Work with time and money.		
7. Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	<ul> <li>Songs: Telling Time; Clock Hands</li> <li>Tell Time</li> <li>Tell Time to Five Minutes</li> <li>Tell Time to the Quarter Hour</li> <li>Tell Time to the Minute</li> <li>Tell Time to the Hour</li> <li>Tell Time to the Half-hour</li> <li>You Be the Teacher</li> </ul>	
8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?	<ul> <li>Song: Money; Save Your Pennies</li> <li>Money</li> <li>Coin Identification</li> <li>Coin Value</li> <li>Make Change</li> <li>Count Coins</li> <li>Quarters</li> <li>Count Dimes, Nickels, and Pennies</li> <li>Count Quarters, Dimes, Nickels, and Pennies</li> <li>Count Bills and Coins</li> <li>Story Problem Strategies: Make Change, Count Coins, Count Bills and Coins</li> <li>You Be the Teacher: Make Change</li> <li>Equivalent Sums of Money</li> </ul>	<ul> <li>2.MD.8.pdf: Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately.</li> <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>Practice Pages:</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>
D. Represent and interpret data.		
9. 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> <li>2.MD.9.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.</li> <li>Measuring Inches</li> <li>Ready, Set, Measure</li> <li>Practice Pages:</li> <li>Let's Measure in Centimeters!</li> <li>Let's Measure in Inches!</li> </ul>



LOUISIANA STANDARD	WATERFORD DIGITAL RESOURCES	WATERFORD PRINT RESOURCES		
D. Represent and interpret data con	ntinued.			
10. 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> <li>Book: The Boonville Nine</li> <li>Graphing</li> <li>Picture Graphs</li> <li>Bar Graphs</li> <li>Use Graphs and Tables</li> <li>Story Problem Strategies: Picture Graphs, Bar Graphs</li> </ul>			
GEOMETRY				
A. Reason with shapes and their attributes.				
1. 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> <li>Space Shapes</li> <li>World Shapes</li> <li>The Shape of Things book</li> <li>Songs: Shapes, Shapes, Shapes; Corners and Sides; Kites</li> <li>Story Problem Strategies: Space Shapes</li> <li>Geoboard</li> </ul>			
2. Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.	<ul> <li>Story Problem Strategies: Fractions of Regions, Fractions of Groups</li> <li>You Be the Teacher: Fractions of Regions</li> <li>Fractions</li> </ul>			
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. Recognize that equal shares of identical wholes need not have the same shape.	<ul> <li>Fractions song</li> <li>Books: The Fraction Twins; Halves, and Fourths and Thirds</li> <li>Fractions</li> <li>Halves and Fourths and Thirds</li> <li>Label Parts of Fractions</li> <li>Story Problem Strategies: Label Parts of Fractions</li> <li>Geoboard Extension</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>			



#### MATH & SCIENCE LEVEL ONE

#### **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

#### **MATH & SCIENCE LEVEL TWO**

#### 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

#### MATH & SCIENCE LEVEL THREE

#### 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