

CURRICULUM *Correlation*

*Waterford Math
& Science*

91%

*Texas Essential
Knowledge and
Skills (Revised
August 2017)*

TABLE OF CONTENTS



OVERVIEW 1

KINDERGARTEN KNOWLEDGE AND SKILLS 2

1. **Mathematical Process Standards.** 2
The student uses mathematical processes to acquire and demonstrate mathematical understanding. 2
2. **Number and Operations.** 3
The student applies mathematical process standards to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value. 3
3. **Number and Operations.** 7
The student applies mathematical process standards to develop an understanding of addition and subtraction situations in order to solve problems. 7
4. **Number and Operations.** 8
The student applies mathematical process standards to identify coins in order to recognize the need for monetary transactions. 8
5. **Algebraic Reasoning.** 8
The student applies mathematical process standards to identify the pattern in the number word list. 8
6. **Geometry and Measurement.** 9
The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. 9
7. **Geometry and Measurement.** 10
The student applies mathematical process standards to directly compare measurable attributes. 10
8. **Data Analysis.** 10
The student applies mathematical process standards to collect and organize data to make it useful for interpreting information. 10
9. **Personal Financial Literacy.** 11
The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. ... 11

FIRST GRADE KNOWLEDGE AND SKILLS 12

1. **Mathematical Process Standards.** 12
The student uses mathematical processes to acquire and demonstrate mathematical understanding. 12
2. **Number and Operations.** 13
The student applies mathematical process standards to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value. 13
3. **Number and Operations.** 15
The student applies mathematical process standards to develop and use strategies for whole number addition and subtraction computations in order to solve problems. 15
4. **Number and Operations.** 18
The student applies mathematical process standards to identify coins, their values, and the relationships among them in order to recognize the need for monetary transactions. 18
5. **Algebraic Reasoning.** 19
The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships. 19
6. **Geometry and Measurement.** 21
The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. 21
7. **Geometry and Measurement.** 23
The student applies mathematical process standards to select and use units to describe length and time. 23
8. **Data Analysis.** 24
The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems. 24
9. **Personal Financial Literacy.** 25
The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. ... 25

TABLE OF CONTENTS



SECOND GRADE KNOWLEDGE AND SKILLS	26
1. Mathematical Process Standards.	26
The student uses mathematical processes to acquire and demonstrate mathematical understanding.	26
2. Number and Operations.	27
The student applies mathematical process standards to understand how to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value.	27
3. Number and Operations.	29
The student applies mathematical process standards to recognize and represent fractional units and communicates how they are used to name parts of a whole.	29
4. Number and Operations.	30
The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy.	30
5. Number and Operations.	31
The student applies mathematical process standards to determine the value of coins in order to solve monetary transactions.	31
6. Number and Operations.	32
The student applies mathematical process standards to connect repeated addition and subtraction to multiplication and division situations that involve equal groupings and shares.	32

7. Algebraic Reasoning.	33
The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships.	33
8. Geometry and Measurement.	34
The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties.	34
9. Geometry and Measurement.	35
The student applies mathematical process standards to select and use units to describe length, area, and time.	35
10. Data Analysis.	37
The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems.	37
11. Personal Financial Literacy.	38
The student applies mathematical process standards to manage one's financial resources effectively for lifetime financial security. .	38

WATERFORD BOOKS AND RELATED ACTIVITIES **39**

WATERFORD FAMILY ENGAGEMENT RESOURCES **40**

OVERVIEW



This document provides a detailed correlation of WATERFORD MATH & SCIENCE to TEXAS ESSENTIAL KNOWLEDGE AND SKILLS (REVISED AUGUST 2017) .

WATERFORD CURRICULUM DETAILS

Waterford Curriculum provides technology-driven curriculum for early learners.

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

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



Following an extensive review, Waterford 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 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.

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.

Placement Assessment: Students begin their experience with a Placement Assessment. Based on rigorous research, the Placement Assessment 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 real-time, to identify areas of difficulty, and to utilize additional intervention tools in varied instructional settings.

TEACHER RESOURCES

With resources available in the Waterford Manager, thousands of online activities are available for teachers 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 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 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

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.



SUPPORT

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



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES*
KINDERGARTEN KNOWLEDGE AND SKILLS		
1. MATHEMATICAL PROCESS STANDARDS.		
The student uses mathematical processes to acquire and demonstrate mathematical understanding.		
The student is expected to: A. Apply mathematics to problems arising in everyday life, society, and the workplace;	<ul style="list-style-type: none"> • Song: Problem Solving • Book: Milton’s Mittens • Story Problem Strategies • Story Problems 	
B. Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution;	<ul style="list-style-type: none"> • Song: Problem Solving • Book: Milton’s Mittens • Story Problem Strategies • Story Problems 	
C. Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems;	<ul style="list-style-type: none"> • Song: Problem Solving • Book: Milton’s Mittens • Mental Math • Number Recognition and Sense • Story Problem Strategies • Story Problems 	
D. Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate;	<ul style="list-style-type: none"> • Book: Milton’s Mittens • Calendar/Graph Weather • Observe a Simple System • Problem Solving Strategy 	
E. Create and use representations to organize, record, and communicate mathematical ideas;	<ul style="list-style-type: none"> • Book: Milton’s Mittens • Calendar/Graph Weather • Observe a Simple System • Problem Solving Strategy 	

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



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
The student uses mathematical processes to acquire and demonstrate mathematical understanding <i>continued</i> .		
F. Analyze mathematical relationships to connect and communicate mathematical ideas; and	<ul style="list-style-type: none"> • Math Books (See titles at end of document.) • Story Problem Strategies • Number Recognition and Sense • Act Out Addition • Act Out Subtraction 	
G. Display, explain and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.	<ul style="list-style-type: none"> • Math Books (See titles at end of document.) • Story Problem Strategies • Number Recognition and Sense • Act Out Addition • Act Out Subtraction 	
2. NUMBER AND OPERATIONS.		
The student applies mathematical process standards to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value.		
The student is expected to: A. Count forward and backward to at least 20 with and without objects;	<ul style="list-style-type: none"> • Number Songs • Counting Songs • Math Books (See titles at end of document.) • Number Instruction • Number Counting • Order Numbers • Bug Bits • Dot to Dot • Counting Puzzle 	



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>The student applies mathematical process standards to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value <i>continued</i>.</p>		
<p>B. Read, write, and represent whole numbers from 0 to at least 20 with and without objects or pictures;</p>	<ul style="list-style-type: none"> • Math Books • Number Songs • Counting Songs (See titles at end of document.) • Number Counting • Number Instruction • Number Recognition and Sense • Picture Puzzle • Shape Puzzle • Moving Target • Make and Count Groups • Bug Fun • Match Numbers • Number Review 	<ul style="list-style-type: none"> • 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"> - Numbers Practice: 1-20 - Numbers 1-5 - Add groups - Count on by 1 - Number Writing Practice: 0-20
<p>C. Count a set of objects up to at least 20 and demonstrate that the last number said tells the number of objects in the set regardless of their arrangement or order;</p>	<ul style="list-style-type: none"> • Math Books • Counting Songs (See titles at end of document.) • Make and Count Groups • One-to-one Correspondence • Number Counting • Match Numbers 	<ul style="list-style-type: none"> • Object Counting Grouping.pdf: Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted. <ul style="list-style-type: none"> - Mixed Up Counting
<p>D. Recognize instantly the quantity of a small group of objects in organized and random arrangements;</p>	<ul style="list-style-type: none"> • Make and Count Groups • Moving Target (Dots) 	



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>The student applies mathematical process standards to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value <i>continued</i>.</p>		
<p>E. Generate a set using concrete and pictorial models that represents a number that is more than, less than, and equal to a given number up to 20;</p>	<ul style="list-style-type: none"> • Book: For the Birds • Make and Count Groups • Greater Than, Less Than • More Than, Fewer Than • More Than • Fewer Than • Number Line • Make a Math Story: More Than, Fewer Than 	<ul style="list-style-type: none"> • Greater, Less or Equal.pdf: Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group. <ul style="list-style-type: none"> - Beans and More - More Than Buttons - Short Names, Long Names - Noodle Necklaces - Groups Do Count! - More Than, Fewer Than, Equal - Which Has More? - Fewer Than - More or Fewer - Greater or Less - More Than/Fewer Than Flashcard Sets
<p>F. Generate a number that is one more than or one less than another number up to at least 20;</p>	<ul style="list-style-type: none"> • Songs: Counting Backward; Counting Songs • Make and Count Groups • One-to-one Correspondence • Number Counting • Match Numbers • Number Line • Count On • Count Down • Counting Puzzle • Dot-to-Dot 	<ul style="list-style-type: none"> • Object Counting Succession.pdf: Understand that each successive number name refers to a quantity that is one larger. <ul style="list-style-type: none"> - One by One



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>The student applies mathematical process standards to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value <i>continued</i>.</p>		
<p>G. Compare sets of objects up to at least 20 in each set using comparative language.</p>	<ul style="list-style-type: none"> • Book: For the Birds • Make and Count Groups • Greater Than, Less Than • More Than, Fewer Than • More Than • Fewer Than • Make a Math Story: More Than, Fewer Than 	<ul style="list-style-type: none"> • Greater, Less or Equal.pdf: Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group. <ul style="list-style-type: none"> - Beans and More - More Than Buttons - Short Names, Long Names - Noodle Necklaces - Groups Do Count! - More Than, Fewer Than, Equal - Which Has More? - Fewer Than - More or Fewer - Greater or Less - More Than/Fewer Than Flashcard Sets
<p>H. Use comparative language to describe two numbers up to 20 presented as written numerals; and</p>	<ul style="list-style-type: none"> • Book: For the Birds • Make and Count Groups • Greater Than, Less Than • More Than, Fewer Than • More Than • Fewer Than • Make a Math Story: More Than, Fewer Than • Number Recognition and Sense 	<ul style="list-style-type: none"> • Comparing Numbers.pdf: Compare two numbers between 1 and 10 presented as written numerals. <ul style="list-style-type: none"> - More or Less Spinner - Catch Me If You Can! - Greater or Less - Less or Greater
<p>I. Compose and decompose numbers up to 10 with objects and pictures.</p>	<ul style="list-style-type: none"> • Make and Count Groups • Add Groups • Subtract Groups • Sums • Act Out Addition • Act Out Subtraction 	



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
3. NUMBER AND OPERATIONS.		
The student applies mathematical process standards to develop an understanding of addition and subtraction situations in order to solve problems.		
<p>The student is expected to:</p> <p>A. Model the action of joining to represent addition and the action of separating to represent subtraction;</p>	<ul style="list-style-type: none"> • Songs: Addition; Pirates Can Add; On the Bayou; Bakery Subtraction; Circus Subtraction; Subtract Those Cars • Book: Five Delicious Muffins • Add Groups • Subtract Groups • Dominoes • Add With Manipulatives • Add With Beads • Minuends • Act Out Addition • Act Out Subtraction • Mental Math Games 	<ul style="list-style-type: none"> • Addition and Subtraction Word Problems.pdf: Solve addition and subtraction word problems, and add and subtract within 10, e.g. by using objects or drawings to represent the problem. <ul style="list-style-type: none"> - Stories: Addition; Act It Out; Edible; Manipulative - One, Two, Three, Show - Circus Subtraction and Partner Subtraction - Farmer’s Market - Green and Speckled Frogs - Cars and Trucks and Yummy Subtraction - Act Out Addition/Act Out Subtraction - Addition & Subtraction Newsletters - Subtraction Flashcards
<p>B. Solve word problems using objects and drawings to find sums up to 10 and differences within 10; and</p>	<ul style="list-style-type: none"> • Songs: Addition; Pirates Can Add; On the Bayou; Bakery Subtraction; Circus Subtraction; Subtract Those Cars • Book: Five Delicious Muffins • Story Problem Strategies • Add Groups • Subtract Groups • Dominoes • Add With Manipulatives • Add With Beads • Minuends • Act Out Addition • Act Out Subtraction • Mental Math Games 	<ul style="list-style-type: none"> • Addition and Subtraction Word Problems.pdf: Solve addition and subtraction word problems, and add and subtract within 10, e.g. by using objects or drawings to represent the problem. <ul style="list-style-type: none"> - Stories: Addition; Act It Out; Edible; Manipulative - One, Two, Three, Show - Circus Subtraction and Partner Subtraction - Farmer’s Market - Green and Speckled Frogs - Cars and Trucks and Yummy Subtraction - Act Out Addition/Act Out Subtraction - Addition & Subtraction Newsletters - Subtraction Flashcards



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>The student applies mathematical process standards to develop an understanding of addition and subtraction situations in order to solve problems <i>continued</i>.</p>		
<p>C. Explain the strategies used to solve problems involving adding and subtracting within 10 using spoken words, concrete and pictorial models, and number sentences.</p>	<ul style="list-style-type: none"> • Songs: Addition; Pirates Can Add; On the Bayou; Bakery Subtraction; Circus Subtraction; Subtract Those Cars • Book: Five Delicious Muffins • Add Groups • Subtract Groups • Dominoes • Add With Manipulatives • Add With Beads • Minuends • Act Out Addition • Act Out Subtraction • Story Problem Strategies • Mental Math Games 	<ul style="list-style-type: none"> • Addition and Subtraction Word Problems.pdf: Solve addition and subtraction word problems, and add and subtract within 10, e.g. by using objects or drawings to represent the problem. <ul style="list-style-type: none"> - Stories: Addition; Act It Out; Edible; Manipulative - One, Two, Three, Show - Circus Subtraction and Partner Subtraction - Farmer’s Market - Green and Speckled Frogs - Cars and Trucks and Yummy Subtraction - Act Out Addition/Act Out Subtraction - Addition & Subtraction Newsletters - Subtraction Flashcards
<p>4. NUMBER AND OPERATIONS.</p>		
<p>The student applies mathematical process standards to identify coins in order to recognize the need for monetary transactions.</p>		
<p>The student is expected to: identify U.S. coins by name, including pennies, nickels, dimes, and quarters.</p>	<ul style="list-style-type: none"> • Song: Save Your Pennies • Coin Identification 	
<p>5. ALGEBRAIC REASONING.</p>		
<p>The student applies mathematical process standards to identify the pattern in the number word list.</p>		
<p>The student is expected to: recite numbers up to at least 100 by ones and tens beginning with any given number.</p>	<ul style="list-style-type: none"> • Number Songs • Counting Songs • Math Books (See titles at end of document.) • Songs: Skip Counting; Hotel 100 • Number Instruction • Number Counting • Count On • Count On by 1 • Order Numbers • Skip Count by 10 • Dot to Dot • Counting Puzzle 	<ul style="list-style-type: none"> • Counting Forward.pdf: Count forward beginning from a given number within a known sequence. <ul style="list-style-type: none"> - Let’s Count On - Toss and Count - Count on by 1 - Math Newsletter: Count On & Number Cards



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
6. GEOMETRY AND MEASUREMENT.		
The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties.		
The student is expected to: A. Identify two-dimensional shapes, including circles, triangles, rectangles, and squares as special rectangles;	<ul style="list-style-type: none"> • Song: Shapes, Shapes, Shapes; Kites • Books: The Shape of Things; Imagination Shapes • Simple Shapes • World Shapes • Circle, Square, Triangle, Rectangle • Star, Semicircle, Octagon, Oval, Diamond 	<ul style="list-style-type: none"> • Shape Recognition.pdf: Correctly name shapes regardless of their orientations or overall size. <ul style="list-style-type: none"> - Shapes Scavenger Hunt - Shapes and Positioning - Shapes Flashcard
B. Identify three-dimensional solids, including cylinders, cones, spheres, and cubes, in the real world;	<ul style="list-style-type: none"> • Solid Shapes • Space Shapes • World Shapes 	<ul style="list-style-type: none"> • Shape Recognition.pdf: Correctly name shapes regardless of their orientations or overall size. <ul style="list-style-type: none"> - Shapes Scavenger Hunt - Shapes and Positioning - Shapes Flashcard
C. Identify two-dimensional components of three-dimensional objects;	<ul style="list-style-type: none"> • Song: Corners and Sides • Simple Shapes • Solid Shapes 	
D. Identify attributes of two-dimensional shapes using informal and formal geometric language interchangeably;	<ul style="list-style-type: none"> • Songs: Shapes, Shapes, Shapes; Corners and Sides; Congruent Parts; Kites • Books: The Shape of Things; Imagination Shapes • Simple Shapes • World Shapes • Circle, Square, Triangle, Rectangle • Star, Semicircle, Octagon, Oval, Diamond • Congruence • Similar Figures 	<ul style="list-style-type: none"> • Shape Recognition.pdf: Correctly name shapes regardless of their orientations or overall size. <ul style="list-style-type: none"> - Shapes Scavenger Hunt - Shapes and Positioning - Shapes Flashcard
E. Classify and sort a variety of regular and irregular two- and three-dimensional figures regardless of orientation or size; and	<ul style="list-style-type: none"> • Songs: Shapes, Shapes, Shapes; Corners and Sides; Congruent Parts; Kites • Books: The Shape of Things; Imagination Shapes • Simple Shapes • Solid Shapes • Circle, Square, Triangle, Rectangle • Star, Semicircle, Octagon, Oval, Diamond • Congruence • World Shapes • Similar Figures • Sort 	<ul style="list-style-type: none"> • Shape Recognition.pdf: Correctly name shapes regardless of their orientations or overall size. <ul style="list-style-type: none"> - Shapes Scavenger Hunt - Shapes and Positioning - Shapes Flashcard



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties <i>continued</i> .		
F. Create two-dimensional shapes using a variety of materials and drawings.	<ul style="list-style-type: none"> • Geoboard • Tangrams 	
7. GEOMETRY AND MEASUREMENT.		
The student applies mathematical process standards to directly compare measurable attributes.		
The student is expected to: A. Give an example of a measurable attribute of a given object, including length, capacity, and weight; and	<ul style="list-style-type: none"> • Song: Measuring Plants • Length • Capacity • Order Size 	<ul style="list-style-type: none"> • Measurable Attributes.pdf: Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. <ul style="list-style-type: none"> - Filling Table - Order It Up - Straw Rulers - Measuring Walk - Heavy or Light? - Make a Balance - Measurable Attributes
B. Compare two objects with a common measurable attribute to see which object has more of/less of the attribute and describe the difference.	<ul style="list-style-type: none"> • Songs: Measuring Plants; Savanna Size; Large, Larger, Largest • Length • Capacity • Big and Little • Tall and Short • Heavy and Light • Size 	<ul style="list-style-type: none"> • Measurable Attributes.pdf: Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. <ul style="list-style-type: none"> - Filling Table - Order It Up - Straw Rulers - Measuring Walk - Heavy or Light? - Make a Balance - Measurable Attributes
8. DATA ANALYSIS.		
The student applies mathematical process standards to collect and organize data to make it useful for interpreting information.		
The student is expected to: A. Collect, sort, and organize data into two or three categories;	<ul style="list-style-type: none"> • Songs: Same and Different; All Sorts of Laundry • Book: Buttons, Buttons • Match • Matching • Sort • Logic Game 	



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
The student applies mathematical process standards to collect and organize data to make it useful for interpreting information <i>continued</i> .		
B. Use data to create real-object and picture graphs; and	<ul style="list-style-type: none"> • Book: Milton’s Mittens • Calendar/Graph Weather • Observe a Simple System • Problem Solving Strategy 	
C. Draw conclusions from real-object and picture graphs.	<ul style="list-style-type: none"> • Milton’s Mittens • Calendar/Graph Weather • Observe a Simple System • Problem Solving Strategy 	
9. PERSONAL FINANCIAL LITERACY.		
The student applies mathematical process standards to manage one’s financial resources effectively for lifetime financial security.		
The student is expected to: A. Identify ways to earn income;		
B. Differentiate between money received as income and money received as gifts;		
C. List simple skills required for jobs; and		
D. Distinguish between wants and needs and identify income as a source to meet one’s wants and needs.		



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
FIRST GRADE KNOWLEDGE AND SKILLS		
1. MATHEMATICAL PROCESS STANDARDS.		
The student uses mathematical processes to acquire and demonstrate mathematical understanding.		
The student is expected to: A. Apply mathematics to problems arising in everyday life, society, and the workplace;	<ul style="list-style-type: none"> • Song: Problem Solving • Problem Solving Strategies • Story Problem Strategies 	
B. Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution;	<ul style="list-style-type: none"> • Song: Problem Solving • Problem Solving Strategies • Story Problem Strategies 	
C. Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems;	<ul style="list-style-type: none"> • Song: Problem Solving • Problem Solving Strategies • Story Problem Strategies • Mental Math • Number Recognition and Sense 	
D. Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate;	<ul style="list-style-type: none"> • Song: Problem Solving • Problem Solving Strategy 	
E. Create and use representations to organize, record, and communicate mathematical ideas;	<ul style="list-style-type: none"> • Song: Problem Solving • Problem Solving Strategy 	
F. Analyze mathematical relationships to connect and communicate mathematical ideas; and	<ul style="list-style-type: none"> • Addition • Subtraction • Act Out Addition • Act Out Subtraction 	



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
The student uses mathematical processes to acquire and demonstrate mathematical understanding <i>continued</i> .		
<p>G. Display, explain and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.</p>	<ul style="list-style-type: none"> • Song: Problem Solving • Problem Solving Strategies • Story Problem Strategies • Mental Math • You Be the Teacher 	
2. NUMBER AND OPERATIONS.		
The student applies mathematical process standards to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value.		
<p>The student is expected to: A. Recognize instantly the quantity of structured arrangements;</p>	<ul style="list-style-type: none"> • Make and Count Groups • Moving Target (Dots) 	
<p>B. Use concrete and pictorial models to compose and decompose numbers up to 120 in more than one way as so many hundreds, so many tens, and so many ones;</p>	<ul style="list-style-type: none"> • Place Value • Expanded Notation 	<ul style="list-style-type: none"> • 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"> - Toss It - Make a Number - Numbers 10-19 - More Numbers 10-19
<p>C. Use objects, pictures, and expanded and standard forms to represent numbers up to 120;</p>	<ul style="list-style-type: none"> • Math Books (See titles at end of document.) • Number Recognition and Sense • Count On • Place Value • Expanded Notation 	<ul style="list-style-type: none"> • Count to 120.pdf: Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral. <ul style="list-style-type: none"> - Mystery Numbers - I Can Write Numbers to 99 - Numbers 20-29 - Numbers 30-39 - Numbers 40-49 - Numbers 50-59 - Numbers 60-69 - Counting to 89 <p><i>Counting Charts:</i></p> <ul style="list-style-type: none"> - I Can Count to 50 - I Can Count to 100 - I Can Count to 99 - I Can Count to 120



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
The student applies mathematical process standards to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value <i>continued</i> .		
D. Generate a number that is greater than or less than a given whole number up to 120;	<ul style="list-style-type: none"> • Song: Greater Than, Less Than • Greater Than, Less Than • Number Line • Count On • Number Chart • Count Down • Place Value • You Be the Teacher: Greater Than, Less Than 	<ul style="list-style-type: none"> • Count to 120.pdf: Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral. <ul style="list-style-type: none"> - Mystery Numbers - I Can Write Numbers to 99 - Numbers 20-29 - Numbers 30-39 - Numbers 40-49 - Numbers 50-59 - Numbers 60-69 - Counting to 89 <i>Counting Charts:</i> <ul style="list-style-type: none"> - I Can Count to 50 - I Can Count to 100 - I Can Count to 99 - I Can Count to 120
E. Use place value to compare whole numbers up to 120 using comparative language;	<ul style="list-style-type: none"> • Place Value • Greater Than, Less Than • Expanded Notation • You Be the Teacher: Greater Than, Less Than 	
F. Order whole numbers up to 120 using place value and open number lines; and	<ul style="list-style-type: none"> • Place Value • Number Line • Number Chart • Order Numbers • Number Recognition and Sense 	<ul style="list-style-type: none"> • Count to 120.pdf: Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral. <ul style="list-style-type: none"> - Mystery Numbers - I Can Write Numbers to 99 - Numbers 20-29 - Numbers 30-39 - Numbers 40-49 - Numbers 50-59 - Numbers 60-69 - Counting to 89 <i>Counting Charts:</i> <ul style="list-style-type: none"> - I Can Count to 50 - I Can Count to 100 - I Can Count to 99 - I Can Count to 120



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>The student applies mathematical process standards to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value <i>continued</i>.</p>		
<p>G. Represent the comparison of two numbers to 100 using the symbols $>$, $<$, or $=$.</p>	<ul style="list-style-type: none"> • Song: Greater Than, Less Than • Greater Than, Less Than • You Be the Teacher 	
<p>3. NUMBER AND OPERATIONS.</p>		
<p>The student applies mathematical process standards to develop and use strategies for whole number addition and subtraction computations in order to solve problems.</p>		
<p>The student is expected to: A. Use concrete and pictorial models to determine the sum of a multiple of 10 and a one-digit number in problems up to 99;</p>	<ul style="list-style-type: none"> • Songs: Addition; Pirates Can Add; On the Bayou • Act Out Addition • Addition • Count On • Count On by 1 	<ul style="list-style-type: none"> • 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"> - Toss It
<p>B. Use objects and pictorial models to solve word problems involving joining, separating, and comparing sets within 20 and unknowns as any one of the terms in the problem such as $2 + 4 = []$; $3 + [] = 7$; and $5 = [] - 3$;</p>	<ul style="list-style-type: none"> • Story Problem Strategies • Missing Addends • Missing Minuends and Subtrahends • Mental Math Games • Addition and Subtraction Relationship • Commutative Property of Addition 	<ul style="list-style-type: none"> • Word Problems Using Addition and Subtraction within 20.pdf: Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions. <ul style="list-style-type: none"> - Guess and Check - Model the Story
<p>C. Compose 10 with two or more addends with and without concrete objects;</p>	<ul style="list-style-type: none"> • Make 10 Addition Strategy 	



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>The student applies mathematical process standards to develop and use strategies for whole number addition and subtraction computations in order to solve problems <i>continued</i>.</p>		
<p>D. Apply basic fact strategies to add and subtract within 20, including making 10 and decomposing a number leading to a 10;</p>	<ul style="list-style-type: none"> • Song: Fact Families • Book: Facts about Families • Addition and Subtraction Fact Families • Addition Patterns • Subtraction Patterns • Story Problems (Subtraction Patterns) • Story Problem Strategies (Fact Families) 	<ul style="list-style-type: none"> • Add and Subtract Within 20.pdf: Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. <ul style="list-style-type: none"> - The Three Little Bears - Fact Family Bingo - A Graph of Fact Families - Bean Facts - Draw a Picture - Addition - Number Pyramid - Subtraction Sentences - Model the Story - Fact Families - Add _ and 1-5 - Add _ and 6-10 - Order Property of Addition - Add Doubles +1 to 11 - Add Doubles to 20 - Add Doubles +1 to 21 - Make 10 - Subtract _ from - Subtract - Subtraction Patterns - Fact Families to 10 - Fact Families to 20 - Add and Subtract Doubles <i>Flashcards:</i> <ul style="list-style-type: none"> - Addition—horizontal and vertical - Subtraction—horizontal and vertical



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>The student applies mathematical process standards to develop and use strategies for whole number addition and subtraction computations in order to solve problems <i>continued</i>.</p>		
<p>E. Explain strategies used to solve addition and subtraction problems up to 20 using spoken words, objects, pictorial models, and number sentences; and</p>	<ul style="list-style-type: none"> • Song: Fact Families • Book: Facts about Families • Addition and Subtraction Fact Families • Addition Patterns • Subtraction Patterns • Act Out Addition • Act Out Subtraction • Story Problems (Subtraction Patterns) • Story Problem Strategies (Fact Families) • Logic Game (Addition Pyramid) 	<ul style="list-style-type: none"> • Add and Subtract Within 20.pdf: Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. <ul style="list-style-type: none"> - The Three Little Bears - Fact Family Bingo - A Graph of Fact Families - Bean Facts - Draw a Picture - Addition - Number Pyramid - Subtraction Sentences - Model the Story - Fact Families - Add _ and 1-5 - Add _ and 6-10 - Order Property of Addition - Add Doubles +1 to 11 - Add Doubles to 20 - Add Doubles +1 to 21 - Make 10 - Subtract _ from - Subtract - Subtraction Patterns - Fact Families to 10 - Fact Families to 20 - Add and Subtract Doubles <i>Flashcards:</i> <ul style="list-style-type: none"> - Addition—horizontal and vertical - Subtraction—horizontal and vertical



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>The student applies mathematical process standards to develop and use strategies for whole number addition and subtraction computations in order to solve problems <i>continued</i>.</p>		
<p>F. Generate and solve problem situations when given a number sentence involving addition or subtraction of numbers within 20.</p>	<ul style="list-style-type: none"> • Song: Fact Families • Book: Facts about Families • Addition and Subtraction Fact Families • Addition Patterns • Subtraction Patterns • Act Out Addition • Act Out Subtraction • Story Problems (Subtraction Patterns) • Story Problem Strategies (Fact Families) • Logic Game (Addition Pyramid) 	<ul style="list-style-type: none"> • Word Problems Using Addition and Subtraction within 20.pdf: Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions. <ul style="list-style-type: none"> - Guess and Check - Model the Story
<p>4. NUMBER AND OPERATIONS.</p>		
<p>The student applies mathematical process standards to identify coins, their values, and the relationships among them in order to recognize the need for monetary transactions.</p>		
<p>The student is expected to: A. Identify U.S. coins, including pennies, nickels, dimes, and quarters, by value and describe the relationships among them;</p>	<ul style="list-style-type: none"> • Song: Money • Book: Bugs For Sale • Count Nickels and Pennies or Dimes and Pennies • Count Dimes, Nickels, and Pennies • Count Quarters, Dimes, Nickels, and Pennies • Quarters • Equivalent Sums of Money 	
<p>B. Write a number with the cent symbol to describe the value of a coin; and</p>	<ul style="list-style-type: none"> • Song: Money • Book: Bugs For Sale • Count Nickels and Pennies or Dimes and Pennies • Count Dimes, Nickels, and Pennies • Count Quarters, Dimes, Nickels, and Pennies • Quarters • Equivalent Sums of Money 	
<p>C. Use relationships to count by twos, fives, and tens to determine the value of a collection of pennies, nickels, and/or dimes.</p>	<ul style="list-style-type: none"> • Songs: Money; Skip Counting • Books: Bugs For Sale; Jump Rope Rhymes; Navajo Beads • Skip Count • Count Nickels and Pennies or Dimes and Pennies • Count Dimes, Nickels, and Pennies • Count Quarters, Dimes, Nickels, and Pennies • Quarters • Equivalent Sums of Money 	



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
5. ALGEBRAIC REASONING.		
The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships.		
<p>The student is expected to:</p> <p>A. Recite numbers forward and backward from any given number between 1 and 120;</p>	<ul style="list-style-type: none"> • Songs: Counting Songs (See titles at end of document.) • Number Line • Number Chart • Song: Counting Backward 	<ul style="list-style-type: none"> • Count to 120.pdf: Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral. <ul style="list-style-type: none"> - Mystery Numbers - I Can Write Numbers to 99 - Numbers 20-29 - Numbers 30-39 - Numbers 40-49 - Numbers 50-59 - Numbers 60-69 - Counting to 89 <i>Counting Charts:</i> <ul style="list-style-type: none"> - I Can Count to 50 - I Can Count to 100 - I Can Count to 99 - I Can Count to 120
<p>B. Skip count by twos, fives, and tens to determine the total number of objects up to 120 in a set;</p>	<ul style="list-style-type: none"> • Song: Skip Counting • Books: Jump Rope Rhymes; Navajo Beads • Skip Count 	
<p>C. Use relationships to determine the number that is 10 more and 10 less than a given number up to 120;</p>	<ul style="list-style-type: none"> • Add Tens • Subtract Tens • Number Charts • Skip Count 	<ul style="list-style-type: none"> • Ten More or Less.pdf: Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used. <ul style="list-style-type: none"> - Ten-O - Toss It - Make a Number - Subtract 10 <i>Flashcards</i> <ul style="list-style-type: none"> - Bingo - Addition of Tens



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships <i>continued</i> .		
D. Represent word problems involving addition and subtraction of whole numbers up to 20 using concrete and pictorial models and number sentences;	<ul style="list-style-type: none"> • Song: Fact Families • Book: Facts about Families • Addition and Subtraction Fact Families • Addition Patterns • Subtraction Patterns • Act Out Addition • Act Out Subtraction • Story Problems (Subtraction Patterns) • Story Problem Strategies (Fact Families) • Logic Game (Addition Pyramid) 	<ul style="list-style-type: none"> • Add and Subtract Within 20.pdf: Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. <ul style="list-style-type: none"> - The Three Little Bears - Fact Family Bingo - A Graph of Fact Families - Bean Facts - Draw a Picture - Addition - Number Pyramid - Subtraction Sentences - Model the Story - Fact Families - Add _ and 1-5 - Add _ and 6-10 - Order Property of Addition - Add Doubles +1 to 11 - Add Doubles to 20 - Add Doubles +1 to 21 - Make 10 - Subtract _ from - Subtract - Subtraction Patterns - Fact Families to 10 - Fact Families to 20 - Add and Subtract Doubles <i>Flashcards:</i> <ul style="list-style-type: none"> - Addition—horizontal and vertical - Subtraction—horizontal and vertical
E. Understand that the equal sign represents a relationship where expressions on each side of the equal sign represent the same value(s);	<ul style="list-style-type: none"> • Greater Than, Less Than 	



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships <i>continued</i>.</p>		
<p>F. Determine the unknown whole number in an addition or subtraction equation when the unknown may be any one of the three or four terms in the equation; and</p>	<ul style="list-style-type: none"> • Story Problem Strategies • Missing Addends • Missing Minuends and Subtrahends • Mental Math Games • Addition and Subtraction Relationship • Commutative Property of Addition 	<ul style="list-style-type: none"> • Unknown Whole Numbers.pdf: Determine the unknown whole number in an addition or subtraction equation relating three whole numbers.
<p>G. Apply properties of operations to add and subtract two or three numbers.</p>	<ul style="list-style-type: none"> • Addition • Add With Regrouping • Subtraction • Subtract With Regrouping • Add 2-digit Numbers • Add 3 One-digit Numbers • Add 3 Two-digit Numbers • Add 3-digit Numbers • Subtract 2-digit Numbers • Subtract 3-digit Numbers • Add 2-digit and 1-digit Numbers • 2-digit Minus 1-digit Numbers 	<ul style="list-style-type: none"> • Unknown Whole Numbers.pdf: Determine the unknown whole number in an addition or subtraction equation relating three whole numbers.
<p>6. GEOMETRY AND MEASUREMENT.</p>		
<p>The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties.</p>		
<p>The student is expected to: A. Classify and sort regular and irregular two-dimensional shapes based on attributes using informal geometric language;</p>	<ul style="list-style-type: none"> • Songs: Shapes, Shapes, Shapes; All Sorts of Laundry; Kites; Corners and Sides • Book: Buttons, Buttons • Circle, Square, Triangle, Rectangle • Star, Semicircle, Octagon, Oval, Diamond • Simple Shapes • Sort 	
<p>B. Distinguish between attributes that define a two-dimensional or three-dimensional figure and attributes that do not define the shape;</p>	<ul style="list-style-type: none"> • Songs: Corners and Sides; Kites • Space Shapes • Simple Shapes 	



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties <i>continued</i>.</p>		
<p>C. Create two-dimensional figures, including circles, triangles, rectangles, and squares, as special rectangles, rhombuses, and hexagons;</p>	<ul style="list-style-type: none"> • Geoboard • Tangrams 	<ul style="list-style-type: none"> • Composite Shapes.pdf: 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, and compose new shapes from the composite shape.
<p>D. Identify two-dimensional shapes, including circles, triangles, rectangles, and squares, as special rectangles, rhombuses, and hexagons and describe their attributes using formal geometric language;</p>	<ul style="list-style-type: none"> • Songs: Shapes, Shapes, Shapes; All Sorts of Laundry; Kites; Corners and Sides • Book: Buttons, Buttons • Circle, Square, Triangle, Rectangle • Star, Semicircle, Octagon, Oval, Diamond • Simple Shapes 	
<p>E. Identify three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes), and triangular prisms, and describe their attributes using formal geometric language;</p>	<ul style="list-style-type: none"> • Song: Corners and Sides • Space Shapes 	
<p>F. Compose two-dimensional shapes by joining two, three, or four figures to produce a target shape in more than one way if possible;</p>	<ul style="list-style-type: none"> • Geoboard • Tangrams 	<ul style="list-style-type: none"> • Composite Shapes.pdf: 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, and compose new shapes from the composite shape.
<p>G. Partition two-dimensional figures into two and four fair shares or equal parts and describe the parts using words; and</p>	<ul style="list-style-type: none"> • Book: Halves and Fourths and Thirds • Geoboard • Tangrams • Equal Part Fractions 	
<p>H. Identify examples and non-examples of halves and fourths.</p>	<ul style="list-style-type: none"> • Song: Fractions • Book: Halves and Fourths and Thirds • Equal-part Fractions • Label Parts of Fractions 	



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
7. GEOMETRY AND MEASUREMENT.		
The student applies mathematical process standards to select and use units to describe length and time.		
<p>The student is expected to:</p> <p>A. Use measuring tools to measure the length of objects to reinforce the continuous nature of linear measurement;</p>	<ul style="list-style-type: none"> • Song: Measuring Plants • Length • Nonstandard Units of Length 	<ul style="list-style-type: none"> • Length Measurement.pdf: Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. <ul style="list-style-type: none"> - Measures of Me - Measure a Handful - Estimating Length - A Fruit and Vegetable - Measure Up! - Inches/Centimeters Rulers
<p>B. Illustrate that the length of an object is the number of same-size units of length that, when laid end-to-end with no gaps or overlaps, reach from one end of the object to the other;</p>	<ul style="list-style-type: none"> • Song: Measuring Plants • Length • Nonstandard Units of Length 	<ul style="list-style-type: none"> • Length Measurement.pdf: Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. <ul style="list-style-type: none"> - Measures of Me - Measure a Handful - Estimating Length - A Fruit and Vegetable - Measure Up! - Inches/Centimeters Rulers
<p>C. Measure the same object/distance with units of two different lengths and describe how and why the measurements differ;</p>	<ul style="list-style-type: none"> • Song: Measuring Plants • Length • Nonstandard Units of Length 	<ul style="list-style-type: none"> • Length Measurement.pdf: Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. <ul style="list-style-type: none"> - Measures of Me - Measure a Handful - Estimating Length - A Fruit and Vegetable - Measure Up! - Inches/Centimeters Rulers



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
The student applies mathematical process standards to select and use units to describe length and time <i>continued</i> .		
<p>D. Describe a length to the nearest whole unit using a number and a unit; and</p>	<ul style="list-style-type: none"> • Song: Measuring Plants • Length • Nonstandard Units of Length 	<ul style="list-style-type: none"> • Length Measurement.pdf: Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. <ul style="list-style-type: none"> - Measures of Me - Measure a Handful - Estimating Length - A Fruit and Vegetable - Measure Up! - Inches/Centimeters Rulers
<p>E. Tell time to the hour and half hour using analog and digital clocks.</p>	<ul style="list-style-type: none"> • Song: Clock Hands • Books: Mr. Romano’s Secret: A Time Story • Tell Time to the Hour • Tell Time to the Half-hour 	<ul style="list-style-type: none"> • Hours and Half Hours.pdf: Tell and write time in hours and half-hours using analog and digital clocks. <ul style="list-style-type: none"> - What Comes After, Before, Or Between? - Make Your Own Clock - Learning to Tell Time - Matching Time - What Numbers are Missing? - What Time Is It? - Time of Day - Clock flashcards
8. DATA ANALYSIS.		
The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems.		
<p>The student is expected to:</p> <p>A. Collect, sort, and organize data in up to three categories using models/ representations such as tally marks or T-charts;</p>	<ul style="list-style-type: none"> • Song: Tallying; Graphing • Book: One More Cat • Tally Marks • Graphs 	<ul style="list-style-type: none"> • Data Categorization.pdf: Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another. <ul style="list-style-type: none"> - Ice Cream Sundae - Make A Real Object Graph - Make a Weather Bar Graph - Weather Flashcards



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems <i>continued.</i>		
B. Use data to create picture and bar-type graphs; and	<ul style="list-style-type: none"> • Song: Graphing • Graphs • Problem Solving Strategy (Make a Graph) 	<ul style="list-style-type: none"> • Data Categorization.pdf: Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another. <ul style="list-style-type: none"> - Ice Cream Sundae - Make A Real Object Graph - Make a Weather Bar Graph - Weather Flashcards
C. Draw conclusions and generate and answer questions using information from picture and bar-type graphs.	<ul style="list-style-type: none"> • Song: Graphing • Graphs • Problem Solving Strategy (Make a Graph) 	<ul style="list-style-type: none"> • Data Categorization.pdf: Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another. <ul style="list-style-type: none"> - Ice Cream Sundae - Make A Real Object Graph - Make a Weather Bar Graph - Weather Flashcards
9. PERSONAL FINANCIAL LITERACY.		
The student applies mathematical process standards to manage one’s financial resources effectively for lifetime financial security.		
The student is expected to: A. Define money earned as income;		
B. Identify income as a means of obtaining goods and services, oftentimes making choices between wants and needs;		
C. Distinguish between spending and saving; and		
D. Consider charitable giving.		



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
SECOND GRADE KNOWLEDGE AND SKILLS		
1. MATHEMATICAL PROCESS STANDARDS.		
The student uses mathematical processes to acquire and demonstrate mathematical understanding.		
<p>The student is expected to:</p> <p>A. Apply mathematics to problems arising in everyday life, society, and the workplace;</p>	<ul style="list-style-type: none"> • Song: Problem Solving • Books: The Boonville Nine; Red Rock, River Rock • Problem Solving Strategies • Story Problem Strategies • Mental Math Games • You Be the Teacher 	
<p>B. Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution;</p>	<ul style="list-style-type: none"> • Song: Problem Solving • Books: The Boonville Nine; Red Rock, River Rock • Problem Solving Strategies • Story Problem Strategies • Mental Math Games • You Be the Teacher 	
<p>C. Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems;</p>	<ul style="list-style-type: none"> • Song: Problem Solving • Books: The Boonville Nine; Red Rock, River Rock • Problem Solving Strategies • Story Problem Strategies • Mental Math Games • You Be the Teacher 	
<p>D. Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate;</p>	<ul style="list-style-type: none"> • Song: Problem Solving • Story Problem Strategies • Problem Solving Strategies • Picture Graphs • Bar Graphs • Greater Than, Less Than 	<ul style="list-style-type: none"> • Explaining Addition and Subtraction Strategies.pdf: Explain why addition and subtraction strategies work, using place value and the properties of operations. <ul style="list-style-type: none"> - Cube Trails - Race for a Flat - High/Low Number Cube Throw - Lucky Five - Hundreds, Tens, Ones Chart - Numbers Cards



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
The student uses mathematical processes to acquire and demonstrate mathematical understanding <i>continued</i> .		
E. Create and use representations to organize, record, and communicate mathematical ideas;	<ul style="list-style-type: none"> • Song: Problem Solving • Story Problem Strategies • Problem Solving Strategies • Picture Graphs • Bar Graphs • Greater Than, Less Than 	
F. Analyze mathematical relationships to connect and communicate mathematical ideas; and	<ul style="list-style-type: none"> • Song: Problem Solving • Addition • Subtraction • Act Out Addition • Act Out Subtraction • Story Problem Strategies • Problem Solving Strategies 	<ul style="list-style-type: none"> • Explaining Addition and Subtraction Strategies.pdf: Explain why addition and subtraction strategies work, using place value and the properties of operations. <ul style="list-style-type: none"> - Cube Trails - Race for a Flat - High/Low Number Cube Throw - Lucky Five - Hundreds, Tens, Ones Chart - Numbers Cards
G. Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.	<ul style="list-style-type: none"> • Addition • Subtraction • Act Out Addition • Act Out Subtraction • Story Problem Strategies • Problem Solving Strategies • You Be the Teacher 	<ul style="list-style-type: none"> • Explaining Addition and Subtraction Strategies.pdf: Explain why addition and subtraction strategies work, using place value and the properties of operations. <ul style="list-style-type: none"> - Cube Trails - Race for a Flat - High/Low Number Cube Throw - Lucky Five - Hundreds, Tens, Ones Chart - Numbers Cards
2. NUMBER AND OPERATIONS.		
The student applies mathematical process standards to understand how to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value.		
The student is expected to: A. Use concrete and pictorial models to compose and decompose numbers up to 1,200 in more than one way as a sum of so many thousands, hundreds, tens, and ones;	<ul style="list-style-type: none"> • Place Value • Expanded Notation 	<ul style="list-style-type: none"> • 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"> - My Three-digit Numbers



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>The student applies mathematical process standards to understand how to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value <i>continued</i>.</p>		
<p>B. Use standard, word, and expanded forms to represent numbers up to 1,200;</p>	<ul style="list-style-type: none"> • Place Value • Expanded Notation 	
<p>C. Generate a number that is greater than or less than a given whole number up to 1,200;</p>	<ul style="list-style-type: none"> • Song: Greater Than, Less Than • Greater Than, Less Than • Number Line • Place Value • Number Patterns • Number Chart • Story Problem Strategies • Problem Solving Strategies • You Be the Teacher 	<ul style="list-style-type: none"> • Less Than, Equal To, or Greater Than.pdf: Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons. <ul style="list-style-type: none"> - More or Less - The Hands Have It! - Larger or Smaller? - Comparing Number Cards - Number Cards - $<$, $>$, $=$ Cards - Greater Than, Less Than, Equal To
<p>D. Use place value to compare and order whole numbers up to 1,200 using comparative language, numbers, and symbols ($>$, $<$, or $=$);</p>	<ul style="list-style-type: none"> • Song: Greater Than, Less Than • Greater Than, Less Than • Number Line • Place Value • Number Patterns • Story Problem Strategies • Problem Solving Strategies • You Be the Teacher 	<ul style="list-style-type: none"> • Less Than, Equal To, or Greater Than.pdf: Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons. <ul style="list-style-type: none"> - More or Less - The Hands Have It! - Larger or Smaller? - Comparing Number Cards - Number Cards - $<$, $>$, $=$ Cards - Greater Than, Less Than, Equal To
<p>E. Locate the position of a given whole number on an open number line; and</p>	<ul style="list-style-type: none"> • Number Line 	
<p>F. Name the whole number that corresponds to a specific point on a number line.</p>	<ul style="list-style-type: none"> • Number Line 	



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



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
4. NUMBER AND OPERATIONS.		
The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy.		
<p>The student is expected to:</p> <p>A. Recall basic facts to add and subtract within 20 with automaticity;</p>	<ul style="list-style-type: none"> • Songs: Fact Families; On the Bayou; Addition; Pirates Can Add; A Nice Addition; Bakery Subtraction; Circus Subtraction; Finding the Difference; Doubles • Subtraction Patterns • Mental Math Games • Speed Games 	<ul style="list-style-type: none"> • Adding and Subtracting Within 20.pdf: Fluently add and subtract within 20 using mental strategies. By end of grade 2, know from memory all sums of two one-digit numbers. <p><i>Flashcards:</i></p> <ul style="list-style-type: none"> - Addition—horizontal and vertical - Subtraction—horizontal and vertical
<p>B. Add up to four two-digit numbers and subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of operations;</p>	<ul style="list-style-type: none"> • Songs: Fact Families; On the Bayou; Addition; Pirates Can Add; A Nice Addition; Bakery Subtraction; Circus Subtraction; Finding the Difference; Doubles • Subtraction Patterns • Mental Math Games • Speed Games • Place Value 	<ul style="list-style-type: none"> • Adding 4-digit Numbers.pdf: Add up to four two-digit numbers using strategies based on place value and properties of operations. <ul style="list-style-type: none"> - Add Four Two-Digit Numbers
<p>C. Solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms; and</p>	<ul style="list-style-type: none"> • Story Problem Strategies • Problem Solving Strategies • Place Value 	<ul style="list-style-type: none"> • 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. <ul style="list-style-type: none"> - Animal Math - Picture Problems - Act it Out - Guess and Check



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>The student applies mathematical process standards to develop and use strategies and methods for whole number computations in order to solve addition and subtraction problems with efficiency and accuracy <i>continued</i>.</p>		
<p>D. Generate and solve problem situations for a given mathematical number sentence involving addition and subtraction of whole numbers within 1,000.</p>	<ul style="list-style-type: none"> • Book: Chloe’s Cracker Caper • Story Problem Strategies • Problem Solving Strategies • Missing Addends • Missing Minuends and Subtrahends • Mental Math Games • Addition and Subtraction Relationship 	<ul style="list-style-type: none"> • Add and Subtract Within 1000.pdf: Add and subtract within 1,000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds. <ul style="list-style-type: none"> - Choose and Add - Mix and Match Addition - Expanded Subtraction - Subtracting Repeats - 999 - Prediction - Up and Away - Regrouping Treasure Hunt - Play Ball - Squirrel Facts - Number Cards
<p>5. NUMBER AND OPERATIONS.</p>		
<p>The student applies mathematical process standards to determine the value of coins in order to solve monetary transactions.</p>		
<p>The student is expected to: A. Determine the value of a collection of coins up to one dollar; and</p>	<ul style="list-style-type: none"> • Songs: Money; Save Your Pennies • Money • Coin Identification • Quarters • Count Coins • Count Dimes, Nickels, and Pennies • Count Nickels and Pennies or Dimes and Pennies • Count Quarters, Dimes, Nickels, and Pennies • Coin Value • Equivalent Sums of Money 	<ul style="list-style-type: none"> • Money Word Problems.pdf: Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. <ul style="list-style-type: none"> - Supermarket Hunt - Shopping for My Family - Money Combinations - Money Sums - Pizza Parlor - How Much Back? - Coin Count - Bills and Coins - Let’s Count Coins - Money Addition - Change is Good! - Make 45¢



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
The student applies mathematical process standards to determine the value of coins in order to solve monetary transactions <i>continued</i> .		
<p>B. Use the cent symbol, dollar sign, and the decimal point to name the value of a collection of coins.</p>	<ul style="list-style-type: none"> • Songs: Money; Save Your Pennies • Money • Coin Identification • Count Bills and Coins • Quarters • Count Coins • Count Dimes, Nickels, and Pennies • Count Nickels and Pennies or Dimes and Pennies • Count Quarters, Dimes, Nickels, and Pennies • Coin Value • Equivalent Sums of Money 	<ul style="list-style-type: none"> • Money Word Problems.pdf: Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. <ul style="list-style-type: none"> - Supermarket Hunt - Shopping for My Family - Money Combinations - Money Sums - Pizza Parlor - How Much Back? - Coin Count - Bills and Coins - Let's Count Coins - Money Addition - Change is Good! - Make 45¢
6. NUMBER AND OPERATIONS.		
The student applies mathematical process standards to connect repeated addition and subtraction to multiplication and division situations that involve equal groupings and shares.		
<p>The student is expected to:</p> <p>A. Model, create, and describe contextual multiplication situations in which equivalent sets of concrete objects are joined; and</p>	<ul style="list-style-type: none"> • Songs: Multiplication; Multiply by 0 • Book: Tyrannosaurus X 1 • Multiplication • Multiply Using Arrays • Multiply Using Repeated Addition • Multiplication Fact Families • Multiplication and Division Fact Families • Multiply by (1-10) • Story Problem Strategies • Math Island Games • Mental Math Games • Speed Games 	



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>The student applies mathematical process standards to connect repeated addition and subtraction to multiplication and division situations that involve equal groupings and shares <i>continued</i>.</p>		
<p>B. Model, create and describe contextual division situations in which a set of concrete objects is separated into equivalent sets.</p>	<ul style="list-style-type: none"> • Book: The Snow Project • Division • Divide Using Repeated Subtraction • Divide Using Equal Sharing • Multiplication and Division Fact Families • Story Problem Strategies • Math Island Games • You Be the Teacher (Divide) 	
<p>7. ALGEBRAIC REASONING.</p>		
<p>The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships.</p>		
<p>The student is expected to: A. Determine whether a number up to 40 is even or odd using pairings of objects to represent the number;</p>	<ul style="list-style-type: none"> • Song: Odd Todd and Even Steven 	<ul style="list-style-type: none"> • Odd and Even Recognition.pdf: Determine whether a group of objects (up to 20) has an odd or even number of members. <ul style="list-style-type: none"> - Missing Patterns - Counting by 2's - What's My Number?
<p>B. Use an understanding of place value to determine the number that is 10 or 100 more or less than a given number up to 1,200; and</p>	<ul style="list-style-type: none"> • Place Value • Number Patterns • Number Chart • Skip Count 	<ul style="list-style-type: none"> • Mentally Adding or Subtracting 10 or 100.pdf: Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900. <ul style="list-style-type: none"> - Spin and Solve (with spinner and numbers cards)



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
<p>The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships <i>continued</i>.</p>		
<p>C. Represent and solve addition and subtraction word problems where unknowns may be any one of the terms in the problem.</p>	<ul style="list-style-type: none"> • Songs: Addition; A Nice Addition; On the Bayou; Pirates Can Add; Fact Families; Bakery Subtraction; Circus Subtraction; Finding the Difference - Addition - Subtraction - Act Out Addition - Act Out Subtraction - Subtraction Patterns - Missing Addends - Missing Subtrahends - Missing Minuends - Mental Math Games - Speed Games - Story Problem Strategies - Problem Solving Strategies - You Be the Teacher 	<ul style="list-style-type: none"> • 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. - Animal Math - Picture Problems - Act it Out - Guess and Check
<p>8. GEOMETRY AND MEASUREMENT.</p>		
<p>The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties.</p>		
<p>The student is expected to: A. Create two-dimensional shapes based on given attributes, including number of sides and vertices;</p>	<ul style="list-style-type: none"> • Songs: Shapes, Shapes, Shapes; Kites; Corners and Sides • Geoboard • Space Shapes • Tangrams 	
<p>B. Classify and sort three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes as special rectangular prisms), and triangular prisms, based on attributes using formal geometric language;</p>	<ul style="list-style-type: none"> • Songs: Shapes, Shapes, Shapes; Corners and Sides • Geoboard • Space Shapes • Tangrams 	



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties <i>continued</i> .		
C. Classify and sort polygons with 12 or fewer sides according to attributes, including identifying the number of sides and number of vertices;	<ul style="list-style-type: none"> Song: Corners and Sides 	
D. Compose two-dimensional shapes and three-dimensional solids with given properties or attributes; and	<ul style="list-style-type: none"> Geoboard Tangrams 	
E. Decompose two-dimensional shapes such as cutting out a square from a rectangle, dividing a shape in half, or partitioning a rectangle into identical triangles and identify the resulting geometric parts.	<ul style="list-style-type: none"> Songs: Symmetry; Fractions; Congruent Parts Book: Halves and Fourths and Thirds Fractions Fractions of Groups Fractions of Regions Geoboard 	
9. GEOMETRY AND MEASUREMENT		
The student applies mathematical process standards to select and use units to describe length, area, and time.		
The student is expected to: A. Find the length of objects using concrete models for standard units of length;	<ul style="list-style-type: none"> Book: Birds at My House Length Standard Units of Length Measurement Tools 	<ul style="list-style-type: none"> Measurement Tools.pdf: Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. <ul style="list-style-type: none"> Ready, Set, Measure Treasure Hunt Centimeter ruler Inch Ruler Let's Measure in Centimeters! Let's Measure in Inches!
B. Describe the inverse relationship between the size of the unit and the number of units needed to equal the length of an object;	<ul style="list-style-type: none"> Length Standard Units of Length Measurement Tools Nonstandard Units of Length 	<ul style="list-style-type: none"> Measuring the Same Object Two Ways.pdf: Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen. <ul style="list-style-type: none"> Ready, Set, Measure
C. Represent whole numbers as distances from any given location on a number line;	<ul style="list-style-type: none"> Number Line Addition Subtraction 	



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
The student applies mathematical process standards to select and use units to describe length, area, and time <i>continued</i> .		
D. Determine the length of an object to the nearest marked unit using rulers, yardsticks, meter sticks, or measuring tapes;	<ul style="list-style-type: none"> • Length • Standard Units of Length • Measurement Tools 	<ul style="list-style-type: none"> • Measurement Tools.pdf: Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. <ul style="list-style-type: none"> - Ready, Set, Measure - Treasure Hunt - Centimeter ruler - Inch Ruler - Let's Measure in Centimeters! - Let's Measure in Inches!
E. Determine a solution to a problem involving length, including estimating lengths;	<ul style="list-style-type: none"> • Length • Story Problem Strategies (Standard Units of Length) • Standard Units of Length • Measurement Tools 	<ul style="list-style-type: none"> • Estimating Lengths.pdf: Estimate lengths using units of inches, feet, centimeters, and meters. <ul style="list-style-type: none"> - Ready, Set, Measure - Treasure Hunt - Let's Measure in Centimeters! - Let's Measure in Inches! - Measuring Perimeter
F. Use concrete models of square units to find the area of a rectangle by covering it with no gaps or overlaps, counting to find the total number of square units, and describing the measurement using a number and the unit; and		
G. Read and write time to the nearest one-minute increment using analog and digital clocks and distinguish between a.m. and p.m.	<ul style="list-style-type: none"> • Songs: Telling Time; Clock Hands • Tell Time • Tell Time to the Minute 	



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
10. DATA ANALYSIS.		
The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems.		
The student is expected to: A. Explain that the length of a bar in a bar graph or the number of pictures in a pictograph represents the number of data points for a given category;	<ul style="list-style-type: none"> • Song: Graphing • Bar Graphs • Picture Graphs • Graphing 	
B. Organize a collection of data with up to four categories using pictographs and bar graphs with intervals of one or more;	<ul style="list-style-type: none"> • Song: Graphing • Bar Graphs • Picture Graphs • Graphing 	
C. Write and solve one-step word problems involving addition or subtraction using data represented within pictographs and bar graphs with intervals of one; and	<ul style="list-style-type: none"> • Song: Graphing • Bar Graphs • Picture Graphs • Graphing • Addition • Subtraction • Act Out Addition • Act Out Subtraction • Mental Math Games • Story Problem Strategies • Problem Solving Strategies 	
D. Draw conclusions and make predictions from information in a graph.	<ul style="list-style-type: none"> • Song: Graphing • Bar Graphs • Picture Graphs • Graphing 	



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
11. PERSONAL FINANCIAL LITERACY.		
The student applies mathematical process standards to manage one’s financial resources effectively for lifetime financial security.		
The student is expected to: A. Calculate how money saved can accumulate into a larger amount over time;	<ul style="list-style-type: none"> • Song: Save Your Pennies 	
B. Explain that saving is an alternative to spending;	<ul style="list-style-type: none"> • Song: Save Your Pennies 	
C. Distinguish between a deposit and a withdrawal;		
D. Identify examples of borrowing and distinguish between responsible and irresponsible borrowing;		
E. Identify examples of lending and use concepts of benefits and costs to evaluate lending decisions; and		
F. Differentiate between producers and consumers and calculate the cost to produce a simple item.		



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



ALBUMS

Beginning Math Songs: Volume 1

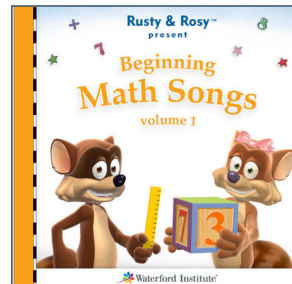
Odd Todd and Even Steven; Salsa Counting; On the Bayou—Addition; Subtract Those Cars; More Than, Fewer Than; A Nice Addition; Marching Band Counting; Doubles 1-5; Multiply by 0

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; Blicky Licky Land; Apostrophe Pig; Capital Letters—Days; Chip Chop; Adjectives Describe; Lazy Letter Q; Nouns; Verbs; Adverbs; Irregular Verbs; Preposition Ship; Verbs that Link; Consonants; Pronouns, Sneaky Magic E; Silent Letters—G-H; Silent Letters—W; Drop Magic E; Bossy Mr. R; P-H and G-H Say Fff; Schwa Sound; Double the Fun; Strange Spelling; More Than One; Reading Detective—Peek at the Story



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-Alongs
Traditional Tales
Sing-Along Songs
Nursery Rhymes

