

SEPTEMBER 2018

CURRICULUM Correlation



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

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9. Personal Financial Literacy

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TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
KINDERGARTEN KNOWLEDGE AN	D SKILLS	
1. MATHEMATICAL PROCESS STAN	DARDS.	
The student uses mathematical pro	cesses to acquire and demonstrate mathematical unde	erstanding.
The student is expected to: A. Apply mathematics to problems arising in everyday life, society, and the workplace;	 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;	 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;	 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;	 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;	 Book: Milton's Mittens Calendar/Graph Weather Observe a Simple System Problem Solving Strategy 	



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
The student uses mathematical pro	cesses to acquire and demonstrate mathematical unde	erstanding <i>continued</i> .
F. Analyze mathematical relationships to connect and communicate mathematical ideas; and	 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.	 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.		
	process standards to represent and compare whole nu he numeration system related to place value.	mbers, the relative position and magnitude of whole
The student is expected to: A. Count forward and backward to at least 20 with and without objects;	 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	
	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> .		
B. Read, write, and represent whole numbers from 0 to at least 20 with and without objects or pictures;	 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 	 Writing from 0 to 20.pdf: Write numbers from 0 to 20. Represent a number of objects with a written numeral. Numbers Practice: 1-20 Numbers 1-5 Add groups Count on by 1 Number Writing Practice: 0-20 	
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;	 Math Books Counting Songs (See titles at end of document.) Make and Count Groups One-to-one Correspondence Number Counting Match Numbers 	 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. Mixed Up Counting 	
D. Recognize instantly the quantity of a small group of objects in organized and random arrangements;	Make and Count GroupsMoving Target (Dots)		



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> .			
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;	 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 	 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. 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 		
F. Generate a number that is one more than or one less than another number up to at least 20;	 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 	 Object Counting Succession.pdf: Understand that each successive number name refers to a quantity that is one larger. One by One 		



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> .		
G. Compare sets of objects up to at least 20 in each set using comparative language.	 Book: For the Birds Make and Count Groups Greater Than, Less Than More Than, Fewer Than More Than Fewer Than Fewer Than Make a Math Story: More Than, Fewer Than 	 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. 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 	
H. Use comparative language to describe two numbers up to 20 presented as written numerals; and	 Book: For the Birds Make and Count Groups Greater Than, Less Than More Than, Fewer Than More Than Fewer Than Fewer Than Make a Math Story: More Than, Fewer Than Number Recognition and Sense 	 Comparing Numbers.pdf: Compare two numbers between 1 and 10 presented as written numerals. More or Less Spinner Catch Me If You Can! Greater or Less Less or Greater 	
I. Compose and decompose numbers up to 10 with objects and pictures.	 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.	3. NUMBER AND OPERATIONS.		
The student applies mathematical problems.	process standards to develop an understanding of add	ition and subtraction situations in order to solve	
The student is expected to: A. Model the action of joining to represent addition and the action of separating to represent subtraction;	 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 	 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. 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 	
B. Solve word problems using objects and drawings to find sums up to 10 and differences within 10; and	 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 	 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. 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
The student applies mathematical problems continued.	process standards to develop an understanding of add	ition and subtraction situations in order to solve
C. Explain the strategies used to solve problems involving adding and subtracting within 10 using spoken words, concrete an pictorial models, and number sentences.	 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 	 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. 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
4. NUMBER AND OPERATIONS.		
	process standards to identify coins in order to recogniz	ze the need for monetary transactions.
The student is expected to: identify U.S. coins by name, including pennies, nickels, dimes, and quarters.	Song: Save Your PenniesCoin Identification	
5. ALGEBRAIC REASONING.		
The student applies mathematical	process standards to identify the pattern in the numbe	r word list.
The student is expected to: recite numbers up to at least 100 by ones and tens beginning with any given number.	 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 Count On by 1 Order Numbers Skip Count by 10 Dot to Dot Counting Puzzle 	 Counting Forward.pdf: Count forward beginning from a given number within a known sequence. 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 MEASUREMEN	т.	
The student applies mathematical generalizations about their propert		sional shapes and three-dimensional solids to develop
The student is expected to: A. Identify two-dimensional shapes, including circles, triangles, rectangles, and squares as special rectangles;	 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 	 Shape Recognition.pdf: Correctly name shapes regardless of their orientations or overall size. Shapes Scavenger Hunt Shapes and Positioning Shapes Flashcard
B. Identify three-dimensional solids, including cylinders, cones, spheres, and cubes, in the real world;	Solid ShapesSpace ShapesWorld Shapes	 Shape Recognition.pdf: Correctly name shapes regardless of their orientations or overall size. Shapes Scavenger Hunt Shapes and Positioning Shapes Flashcard
C. Identify two-dimensional components of three-dimensional objects;	Song: Corners and SidesSimple ShapesSolid Shapes	
D. Identify attributes of two- dimensional shapes using informal and formal geometric language interchangeably;	 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 	 Shape Recognition.pdf: Correctly name shapes regardless of their orientations or overall size. 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	 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 	 Shape Recognition.pdf: Correctly name shapes regardless of their orientations or overall size. Shapes Scavenger Hunt Shapes and Positioning Shapes Flashcard



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
The student applies mathematical p generalizations about their propert		nsional shapes and three-dimensional solids to develop
F. Create two-dimensional shapes using a variety of materials and drawings.	GeoboardTangrams	
7. GEOMETRY AND MEASUREMEN	T.	
The student applies mathematical I	process standards to directly compare measurable at	tributes.
The student is expected to: A. Give an example of a measurable attribute of a given object, including length, capacity, and weight; and	 Song: Measuring Plants Length Capacity Order Size 	 Measurable Attributes.pdf: Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. 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.	 Songs: Measuring Plants; Savanna Size; Large, Larger, Largest Length Capacity Big and Little Tall and Short Heavy and Light Size 	 Measurable Attributes.pdf: Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. Filling Table Order It Up Straw Rulers Measuring Walk Heavy or Light? Make a Balance Measurable Attributes
8. DATA ANALYSIS.	1	
	process standards to collect and organize data to ma	nke it useful for interpreting information.
The student is expected to: A. Collect, sort, and organize data into two or three categories;	 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 p	process standards to collect and organize data to make	e it useful for interpreting information <i>continued</i> .
B. Use data to create real-object and picture graphs; and	 Book: Milton's Mittens Calendar/Graph Weather Observe a Simple System Problem Solving Strategy 	
C. Draw conclusions from real-object and picture graphs.	 Milton's Mittens Calendar/Graph Weather Observe a Simple System Problem Solving Strategy 	
9. PERSONAL FINANCIAL LITERAC	Υ.	
The student applies mathematical p	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 S	KILLS	
1. MATHEMATICAL PROCESS STAN	DARDS.	
The student uses mathematical pro	cesses to acquire and demonstrate mathematical unde	erstanding.
The student is expected to: A. Apply mathematics to problems arising in everyday life, society, and the workplace;	Song: Problem SolvingProblem Solving StrategiesStory 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;	 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;	 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;	Song: Problem SolvingProblem Solving Strategy	
E. Create and use representations to organize, record, and communicate mathematical ideas;	Song: Problem SolvingProblem Solving Strategy	
F. Analyze mathematical relationships to connect and communicate mathematical ideas; and	 Addition Subtraction Act Out Addition Act Out Subtraction 	



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
The student uses mathematical pro	cesses to acquire and demonstrate mathematical un	derstanding <i>continued</i> .
G. Display, explain and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.	 Song: Problem Solving Problem Solving Strategies Story Problem Strategies Mental Math You Be the Teacher 	
2. NUMBER AND OPERATIONS.		
	process standards to represent and compare whole n he numeration system related to place value.	numbers, the relative position and magnitude of whole
The student is expected to: A. Recognize instantly the quantity of structured arrangements;	Make and Count GroupsMoving Target (Dots)	
B. Use concrete and pictorial models to compose and decompose numbers up to 120 in more than one way as so many hundreds, so many tens, and so many ones;	Place ValueExpanded Notation	 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. Toss It Make a Number Numbers 10-19 More Numbers 10-19
C. Use objects, pictures, and expanded and standard forms to represent numbers up to 120;	 Math Books (See titles at end of document.) Number Recognition and Sense Count On Place Value Expanded Notation 	 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. 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 Counting Charts: I Can Count to 50 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;	 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 	 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. 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 Counting Charts: I Can Count to 50 I Can Count to 99 I Can Count to 120 	
E. Use place value to compare whole numbers up to 120 using comparative language;	 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	 Place Value Number Line Number Chart Order Numbers Number Recognition and Sense 	 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. 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 Counting Charts: I Can Count to 50 I Can Count to 99 I Can Count to 120 	



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
	process standards to represent and compare whole numeration system related to place value <i>continued</i>	
G. Represent the comparison of two numbers to 100 using the symbols >, <, or =.	Song: Greater Than, Less ThanGreater Than, Less ThanYou Be the Teacher	
3. NUMBER AND OPERATIONS.		
The student applies mathematical p in order to solve problems.	process standards to develop and use strategies for wh	nole number addition and subtraction computations
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;	 Songs: Addition; Pirates Can Add; On the Bayou Act Out Addition Addition Count On Count On by 1 	 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). Toss It
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;	 Story Problem Strategies Missing Addends Missing Minuends and Subtrahends Mental Math Games Addition and Subtraction Relationship Commutative Property of Addition 	 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. Guess and Check Model the Story
C. Compose 10 with two or more addends with and without concrete objects;	Make 10 Addition Strategy	



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
The student applies mathematical prices in order to solve problems continues	brocess standards to develop and use strategies for wheed.	hole number addition and subtraction computations
D. Apply basic fact strategies to add and subtract within 20, including making 10 and decomposing a number leading to a 10;	 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) 	 Add and Subtract Within 20.pdf: Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. 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 Subtract Subtract Add and Subtract Add and Subtract Subtract Subtract Subtract Subtract Subtract Add and Subtract Doubles <i>Flashcards:</i> Addition—horizontal and vertical Subtraction—horizontal and vertical



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
The student applies mathematical in order to solve problems <i>continue</i>	process standards to develop and use strategies for wheed.	nole number addition and subtraction computations
E. Explain strategies used to solve addition and subtraction problems up to 20 using spoken words, objects, pictorial models, and number sentences; and	 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) 	 Add and Subtract Within 20.pdf: Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. 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 +1 to 21 Make 10 Subtract Subtract Subtract Make 10 Subtract Subtract Add and Subtract Subtract Subtract Subtract Add and Subtract Doubles <i>Flashcards:</i> Addition—horizontal and vertical Subtraction—horizontal and vertical



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES	
The student applies mathematical in order to solve problems continue	The student applies mathematical process standards to develop and use strategies for whole number addition and subtraction computations in order to solve problems continued.		
F. Generate and solve problem situations when given a number sentence involving addition or subtraction of numbers within 20.	 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) 	 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. Guess and Check Model the Story 	
4. NUMBER AND OPERATIONS.			
The student applies mathematical the need for monetary transactions	process standards to identify coins, their values, and th s.	ne relationships among them in order to recognize	
The student is expected to: A. Identify U.S. coins, including pennies, nickels, dimes, and quarters, by value and describe the relationships among them;	 Song: Money Book: Bugs For Sale Count Nickels and Pennies or Dimes and Pennies Count Dimes, Nickels, and Pennies Count Quarters, Dimes, Nickels, and Pennies Quarters Equivalent Sums of Money 		
B. Write a number with the cent symbol to describe the value of a coin; and	 Song: Money Book: Bugs For Sale Count Nickels and Pennies or Dimes and Pennies Count Dimes, Nickels, and Pennies Count Quarters, Dimes, Nickels, and Pennies Quarters Equivalent Sums of Money 		
C. Use relationships to count by twos, fives, and tens to determine the value of a collection of pennies, nickels, and/or dimes.	 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 order to describe relationships.	process standards to identify and apply number pat	terns within properties of numbers and operations in
The student is expected to: A. Recite numbers forward and backward from any given number between 1 and 120;	 Songs: Counting Songs (See titles at end of document.) Number Line Number Chart Song: Counting Backward 	 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. 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 Counting Charts: I Can Count to 100 I Can Count to 99 I Can Count to 120
B. Skip count by twos, fives, and tens to determine the total number of objects up to 120 in a set;	Song: Skip CountingBooks: Jump Rope Rhymes; Navajo BeadsSkip Count	
C. Use relationships to determine the number that is 10 more and 10 less than a given number up to 120;	 Add Tens Subtract Tens Number Charts Skip Count 	 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. Ten-O Toss It Make a Number Subtract 10 Flashcards 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;	 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) 	 Add and Subtract Within 20.pdf: Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. 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 Subtract Subtract Add and Subtract Doubles Fact Families to 20 Add and Subtract Doubles Fact Families to 10 Fact Families to 20 Add and Subtract Doubles Fact Families to 20 Add and Subtract Doubles
E. Understand that the equal sign represents a relationship where expressions on each side of the equal sign represent the same value(s);	• Greater Than, Less Than	



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> .		
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	 Story Problem Strategies Missing Addends Missing Minuends and Subtrahends Mental Math Games Addition and Subtraction Relationship Commutative Property of Addition 	• Unknown Whole Numbers.pdf: Determine the unknown whole number in an addition or subtraction equation relating three whole numbers.	
G. Apply properties of operations to add and subtract two or three numbers.	 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 2-digit Numbers Subtract 3-digit Numbers Add 2-digit and 1-digit Numbers 2-digit Minus 1-digit Numbers 	 Unknown Whole Numbers.pdf: Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. 	
6. GEOMETRY AND MEASUREMEN	т.		
The student applies mathematical generalizations about their propert	process standards to analyze attributes of two-dimensi ies.	ional shapes and three-dimensional solids to develop	
The student is expected to: A. Classify and sort regular and irregular two-dimensional shapes based on attributes using informal geometric language;	 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 		
B. Distinguish between attributes that define a two-dimensional or three-dimensional figure and attributes that do not define the shape;	 Songs: Corners and Sides; Kites Space Shapes Simple Shapes 		



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
The student applies mathematical p generalizations about their propert		sional shapes and three-dimensional solids to develop
C. Create two-dimensional figures, including circles, triangles, rectangles, and squares, as special rectangles, rhombuses, and hexagons;	GeoboardTangrams	• 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.
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;	 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 	
E. Identify three-dimensional solids, including spheres, cones, cylinders, rectangular prisms (including cubes), and triangular prisms, and describe their attributes using formal geometric language;	Song: Corners and SidesSpace Shapes	
F. Compose two-dimensional shapes by joining two, three, or four figures to produce a target shape in more than one way if possible;	GeoboardTangrams	• 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.
G. Partition two-dimensional figures into two and four fair shares or equal parts and describe the parts using words; and	 Book: Halves and Fourths and Thirds Geoboard Tangrams Equal Part Fractions 	
H. Identify examples and non- examples of halves and fourths.	 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 MEASUREMEN	т.	
The student applies mathematical	process standards to select and use units to describe I	length and time.
The student is expected to: A. Use measuring tools to measure the length of objects to reinforce the continuous nature of linear measurement;	 Song: Measuring Plants Length Nonstandard Units of Length 	 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. Measures of Me Measure a Handful Estimating Length A Fruit and Vegetable Measure Up! Inches/Centimeters Rulers
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;	 Song: Measuring Plants Length Nonstandard Units of Length 	 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. Measures of Me Measure a Handful Estimating Length A Fruit and Vegetable Measure Up! Inches/Centimeters Rulers
C. Measure the same object/distance with units of two different lengths and describe how and why the measurements differ;	 Song: Measuring Plants Length Nonstandard Units of Length 	 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. 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 I	process standards to select and use units to describe l	ength and time <i>continued</i> .
D. Describe a length to the nearest whole unit using a number and a unit; and	 Song: Measuring Plants Length Nonstandard Units of Length 	 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. Measures of Me Measure a Handful Estimating Length A Fruit and Vegetable Measure Up! Inches/Centimeters Rulers
E. Tell time to the hour and half hour using analog and digital clocks.	 Song: Clock Hands Books: Mr. Romano's Secret: A Time Story Tell Time to the Hour Tell Time to the Half-hour 	 Hours and Half Hours.pdf: Tell and write time in hours and half-hours using analog and digital clocks. 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 fo	or interpreting information and solving problems.
The student is expected to: A. Collect, sort, and organize data in up to three categories using models/ representations such as tally marks or T-charts;	 Song: Tallying; Graphing Book: One More Cat Tally Marks Graphs 	 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. 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 <i>continued</i> .	process standards to organize data to make it useful fo	or interpreting information and solving problems
B. Use data to create picture and bar-type graphs; and	 Song: Graphing Graphs Problem Solving Strategy (Make a Graph) 	 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. 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.	 Song: Graphing Graphs Problem Solving Strategy (Make a Graph) 	 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. Ice Cream Sundae Make A Real Object Graph Make a Weather Bar Graph Weather Flashcards
9. PERSONAL FINANCIAL LITERAG	CY.	
The student applies mathematical	process standards to manage one's financial resources	s 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 AN	SECOND GRADE KNOWLEDGE AND SKILLS		
1. MATHEMATICAL PROCESS STAN	DARDS.		
The student uses mathematical pro	cesses to acquire and demonstrate mathematical unde	erstanding.	
The student is expected to: A. Apply mathematics to problems arising in everyday life, society, and the workplace;	 Song: Problem Solving Books: The Boonville Nine; Red Rock, River Rock Problem Solving Strategies Story Problem Strategies Mental Math Games You Be the Teacher 		
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;	 Song: Problem Solving Books: The Boonville Nine; Red Rock, River Rock Problem Solving Strategies Story Problem Strategies Mental Math Games You Be the Teacher 		
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;	 Song: Problem Solving Books: The Boonville Nine; Red Rock, River Rock Problem Solving Strategies Story Problem Strategies Mental Math Games You Be the Teacher 		
D. Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate;	 Song: Problem Solving Story Problem Strategies Problem Solving Strategies Picture Graphs Bar Graphs Greater Than, Less Than 	 Explaining Addition and Subtraction Strategies.pdf: Explain why addition and subtraction strategies work, using place value and the properties of operations. 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 pro	ocesses to acquire and demonstrate mathematical u	nderstanding <i>continued</i> .
E. Create and use representations to organize, record, and communicate mathematical ideas;	 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	 Song: Problem Solving Addition Subtraction Act Out Addition Act Out Subtraction Story Problem Strategies Problem Solving Strategies 	 Explaining Addition and Subtraction Strategies.pdf: Explain why addition and subtraction strategies work, using place value and the properties of operations. 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.	 Addition Subtraction Act Out Addition Act Out Subtraction Story Problem Strategies Problem Solving Strategies You Be the Teacher 	 Explaining Addition and Subtraction Strategies.pdf: Explain why addition and subtraction strategies work, using place value and the properties of operations. Cube Trails Race for a Flat High/Low Number Cube Throw Lucky Five Hundreds, Tens, Ones Chart Numbers Cards
2. NUMBER AND OPERATIONS.		
	process standards to understand how to represent a relationships within the numeration system related	and compare whole numbers, the relative position and 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;	Place ValueExpanded Notation	 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). My Three-digit Numbers



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
	process standards to understand how to represent and relationships within the numeration system related to p	
B. Use standard, word, and expanded forms to represent numbers up to 1,200;	Place ValueExpanded Notation	
C. Generate a number that is greater than or less than a given whole number up to 1,200;	 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 	 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. More or Less The Hands Have It! Larger or Smaller? Comparing Number Cards Number Cards <,>, = Cards Greater Than, Less Than, Equal To
D. Use place value to compare and order whole numbers up to 1,200 using comparative language, numbers, and symbols (>, <, or =);	 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 	 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. More or Less The Hands Have It! Larger or Smaller? Comparing Number Cards Number Cards
E. Locate the position of a given whole number on an open number line; and	Number Line	
F. Name the whole number that corresponds to a specific point on a number line.	• Number Line	



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
3. NUMBER AND OPERATIONS.		
The student applies mathematical name parts of a whole.	process standards to recognize and represent fractiona	I units and communicates how they are used to
The student is expected to: A. Partition objects into equal parts and name the parts, including halves, fourths, and eighths, using words;	 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 	
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;	 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 	
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	 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 	
D. Identify examples and non- examples of halves, fourths, and eighths.	 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 p solve addition and subtraction prob	process standards to develop and use strategies and molecess with efficiency and accuracy.	nethods for whole number computations in order to
The student is expected to: A. Recall basic facts to add and subtract within 20 with automaticity;	 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 	 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. <i>Flashcards:</i> Addition—horizontal and vertical Subtraction—horizontal and vertical
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;	 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 	 Adding 4-digit Numbers.pdf: Add up to four two-digit numbers using strategies based on place value and properties of operations. Add Four Two-Digit Numbers
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	 Story Problem Strategies Problem Solving Strategies Place Value 	 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



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
	process standards to develop and use strategies and blems with efficiency and accuracy <i>continued</i> .	methods for whole number computations in order to
D. Generate and solve problem situations for a given mathematical number sentence involving addition and subtraction of whole numbers within 1,000.	 Book: Chloe's Cracker Caper Story Problem Strategies Problem Solving Strategies Missing Addends Missing Minuends and Subtrahends Mental Math Games Addition and Subtraction Relationship 	 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. 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
5. NUMBER AND OPERATIONS.		
The student applies mathematical	process standards to determine the value of coins in	order to solve monetary transactions.
The student is expected to: A. Determine the value of a collection of coins up to one dollar; and	 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 	 Money Word Problems.pdf: Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. 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 ϕ	order to solve monetary transactions continued.
B. Use the cent symbol, dollar sign, and the decimal point to name the value of a collection of coins.	 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 	 Money Word Problems.pdf: Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. 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 that involve equal groupings and s	process standards to connect repeated addition and s hares.	subtraction to multiplication and division situations
The student is expected to: A. Model, create, and describe contextual multiplication situations in which equivalent sets of concrete objects are joined; and	 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
The student applies mathematical p that involve equal groupings and sh	process standards to connect repeated addition and sunares <i>continued</i> .	ubtraction to multiplication and division situations
B. Model, create and describe contextual division situations in which a set of concrete objects is separated into equivalent sets.	 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) 	
7. ALGEBRAIC REASONING.		
The student applies mathematical p order to describe relationships.	process standards to identify and apply number patter	ns within properties of numbers and operations in
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;	• Song: Odd Todd and Even Steven	 Odd and Even Recognition.pdf: Determine whether a group of objects (up to 20) has an odd or even number of members. Missing Patterns Counting by 2's What's My Number?
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	 Place Value Number Patterns Number Chart Skip Count 	 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. Spin and Solve (with spinner and numbers cards)



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> .				
C. Represent and solve addition and subtraction word problems where unknowns may be any one of the terms in the problem.	 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 	 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 		
8. GEOMETRY AND MEASUREMEN	Т.			
The student applies mathematical p generalizations about their propert	process standards to analyze attributes of two-dimensi ies.	ional shapes and three-dimensional solids to develop		
The student is expected to: A. Create two-dimensional shapes based on given attributes, including number of sides and vertices;	 Songs: Shapes, Shapes, Shapes; Kites; Corners and Sides Geoboard Space Shapes Tangrams 			
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;	 Songs: Shapes, Shapes, Shapes; Corners and Sides Geoboard Space Shapes Tangrams 			



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
The student applies mathematical p generalizations about their propert	brocess standards to analyze attributes of two-dimensies continued.	ional shapes and three-dimensional solids to develop
C. Classify and sort polygons with 12 or fewer sides according to attributes, including identifying the number of sides and number of vertices;	Song: Corners and Sides	
D. Compose two-dimensional shapes and three-dimensional solids with given properties or attributes; and	GeoboardTangrams	
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.	 Songs: Symmetry; Fractions; Congruent Parts Book: Halves and Fourths and Thirds Fractions Fractions of Groups Fractions of Regions Geoboard 	
9. GEOMETRY AND MEASUREMEN	T	
The student applies mathematical p	process standards to select and use units to describe le	ength, area, and time.
The student is expected to: A. Find the length of objects using concrete models for standard units of length;	 Book: Birds at My House Length Standard Units of Length Measurement Tools 	 Measurement Tools.pdf: Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. 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;	 Length Standard Units of Length Measurement Tools Nonstandard Units of Length 	 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. Ready, Set, Measure
C. Represent whole numbers as distances from any given location on a number line;	Number LineAdditionSubtraction	



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 continued.			
D. Determine the length of an object to the nearest marked unit using rulers, yardsticks, meter sticks, or measuring tapes;	 Length Standard Units of Length Measurement Tools 	 Measurement Tools.pdf: Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. 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;	 Length Story Problem Strategies (Standard Units of Length) Standard Units of Length Measurement Tools 	 Estimating Lengths.pdf: Estimate lengths using units of inches, feet, centimeters, and meters. 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.	Songs: Telling Time; Clock HandsTell TimeTell Time to the Minute		



TEXAS STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES		
10. DATA ANALYSIS.	10. DATA ANALYSIS.			
The student applies mathematical	process standards to organize data to make it useful fo	r 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;	 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;	 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	 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.	 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;	Song: Save Your Pennies			
B. Explain that saving is an alternative to spending;	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

SUPPORT



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WATERFORD Family Engagement Resources



SPANISH FAMILY ENGAGEMENT RESOURCES

All Waterford books and many of the resources available to families at mentor.waterford.org can be found in Spanish or with Spanish support.

SONGS

Beginning Math Songs

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

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 III; 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

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)

WATERFORD MENTOR

<u>Waterford Mentor</u> is a secure website where families can log in to see their child's usage and learning achievements. Waterford families also receive short messages with ideas on how to engage in their child's learning and have access to hundreds of resources and activities.

READING HOMELINK NEWSLETTERS

Alphabet Knowledge

Comprehension and Vocabulary

Sum Up: Remember Order, Sum Up: Remember Details, Peek at the Story, Guess and Check, Connect to Me, Build Knowledge

Readiness Skills Letters

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

Phonological Awareness Letters

What Is Rhyming?, Which Words Rhyme?, Sentences Are Made Up of Words, Making Compound Words, Breaking Compound Words, What Is a Syllable?, Put Syllables Together to Make Words, Break Words into Syllables, The First Sound in a Word, Words with the Same First Sound, Making Words from First Sounds and the Rest



Waterford Mentor is available online and in the Mentor app (for iOS and Android).