

JANUARY 2023

CURRICULUM Correlation



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

TABLE OF CONTENTS

| *** |
|---------------|
| Waterford.org |

.

| KINDERGARTEN |
|--|
| Number Sense & Operations1 |
| Algebraic Thinking6 |
| Geometry & Measurement |
| Data Analysis |
| FIRST GRADE |
| Number Sense & Operations 11 |
| Algebraic Thinking |
| Geometry & Measurement |
| Data Analysis |
| SECOND GRADE |
| Number Sense & Operations |
| Algebraic Thinking |
| Geometry & Measurement |
| Data Analysis |
| WATERFORD BOOKS AND RELATED ACTIVITIES |
| WATERFORD FAMILY ENGAGEMENT RESOURCES |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|---|--|---|
| KINDERGARTEN | | |
| Number Sense & Operations | | |
| Number Names and Count Sequen | ce | |
| Use cardinal and ordinal numbers. | Song: Ordinals Ordinal Numbers Number Songs Counting Songs Number Counting Number Instruction | |
| Count to 100 by 1's and 10's. | Number Songs Counting Songs Number Counting Number Instruction Skip Counting | Count to 100 by ones and tens.pdf: Count to 100 by ones and tens. Missing Numbers Count On By 1 Numbers 1-5 Numbers 6-10 Math Newsletters Count By 10s Numbers 60-69 I Can Count to 100 |
| Count forward beginning from a given number between 1 and 20. | Count OnCounting Songs | Count forward.pdf: Count forward beginning with a given number within the known sequence. Let's Count On Toss and Count Count On by 1 |
| Count backward from a given number between 10 and 1. | Song: Counting BackwardBook: A Space AdventureCounting Back | |
| Read and write numerals form 0 to 20. | Math Books Counting Songs Number Songs Number Counting Number Instruction | Write numbers 0-20.pdf: Write numbers from 0 to 20. Represent a number of objects with a written numeral. Numbers Practice Numbers Add groups Count on by 1 Number Writing Practice |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|--|--|--|
| Relationships Between Numbers a | nd Quantities | |
| Subitize. Without counting, recognize the number of objects of up to five objects. | Moving Target (Dots)Dominoes | |
| Demonstrate one-to- one correspondence when counting objects. | Counting Songs Number Songs Number Counting Order Numbers One-to-one Correspondence Make and Count Groups Number Instruction | Object Counting Basics.pdf: When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object. Number Walk |
| Count up to 20 objects in a set, regardless of their arrangement. | Make and Count Groups Number Counting Number Instruction One-to-One Correspondence | 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 |
| Use concrete models to create a set with a given number of objects (up to 20). | Make and Count GroupsNumber Instruction | |
| Use numbers to represent quantities up to 20. | Math Books Counting Songs Number Songs Number Counting Number Instruction | Write numbers 0-20.pdf: Write numbers from 0 to 20. Represent a number of objects with a written numeral. Numbers Practice Numbers Add groups Count on by 1 Number Writing Practice |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|---|--|--|
| Relationships Between Numbers a | and Quantities <i>continued</i> | |
| Compare and order sets and numbers | Song: Greater Than, Less Than Book: For the Birds Greater Than, Less Than More Than, Fewer Than More Than Fewer Than Fewer Than Make and Count Groups | 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 Compare two numbers.pdf: Compare two numbers between 1 and 10 presented as written numerals. More or Less Spinner Catch Me If You Can! Less or Greater |
| Compare and order using the terms fewer, more, and less. | Song: Greater Than, Less Than Book: For the Birds Greater Than, Less Than More Than, Fewer Than More Than Fewer Than Make and Count Groups | 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 |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|--|---|--|
| Place Value | | |
| Compose and decompose numbers from 11 to 19 into sets of ten with additional ones. | • Place Value | Tens and ones.pdf: Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation; understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones. Place Value 11-19 |
| Whole Number Addition, Subtraction | on | |
| Model joining and separating sets. | Songs: Addition; On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction Book: Five Delicious Muffins Add Groups Subtract Groups | |
| Compose and decompose numbers to ten and record results using a drawing or equation. | Make and Count Groups Make 10 Add Groups Subtract Groups Act Out Subtraction | Decompose numbers.pdf: Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation. Addition Cubes Fact Families |
| For any number from 1-9, find the number that makes 10 when added to the given number. | Make 10 Missing Addends Count On Act Out Addition | Numbers that make 10.pdf: For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation. How Many More? |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|--|--|--|
| Whole Number Addition, Subtracti | on <i>continued</i> | |
| Represent addition and subtraction within 10 using a variety of strategies. | Songs: Addition; On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction Book: Five Delicious Muffins Make and Count Groups Add Groups Subtract Groups Act Out Addition Act Out Subtraction | Represent addition and subtraction with objects. pdf: Represent addition and subtraction with objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, expressions, or equations. Addition Cubes Addition Stories Going Fishing Let's Count On Act it out Stories Manipulative Stories |
| Demonstrate fluency for addition and subtraction within 5. (Note: Fluency refers to accuracy and efficiency and does not equate to memorization.) | Songs: Addition; On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction Book: Five Delicious Muffins Add Groups Subtract Groups Minuends Sums Act Out Addition Act Out Subtraction | |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|---|--|---|
| Algebraic Thinking | | |
| Number Sentences, Equations & Ine | equalities | |
| Model addition and subtraction stories with addition and subtraction number sentences. | Songs: Addition; On the Bayou; Bakery Subtraction; Subtract Those Cars; Circus Subtraction Book: Five Delicious Muffins Add Groups Subtract Groups Minuends Sums Act Out Addition Act Out Subtraction | 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. Additions Stories Act It Out Stories Manipulative Stories Edible Stories One, Two, Three, Show Circus Subtraction Partner Subtraction Farmer's Market Green and Speckled Frogs Cars and Trucks Subtraction Yummy Subtraction Act Out Addition Act Out Subtraction |
| Understand the meaning of the = sign in a number sentence. | Addition Sentences Subtraction Sentences | Equal sign.pdf: Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. Show Me! Tricky Total Domino Addition Domino Subtraction Playground Fact Snake |
| Use +, -, and = to write number sentences (equations) for addition and subtraction stories. | Addition SentencesSubtraction Sentences | |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|---|---|---|
| Geometry & Measurement | | |
| Time & Money | | |
| Identify pennies, nickels, dimes, and quarters. | Song: Save Your PenniesCoin Identification | |
| Name and order the days of the week. | Song: Days of the WeekSing Around the World Song: Days of the Week | |
| Use language that demonstrates an understanding of time (morning, afternoon, evening, today, yesterday, tomorrow, week, year). | Book: Mr. Romano's Secret: A Time Story Calendar Yesterday Today/Tomorrow | |
| Understand tools that measure time (clock, calendar). | Songs: Clock Hands; Months of the YearCalendar | |
| Length & Distance | | |
| Compare lengths & heights using non-standard units using appropriate language, such as longer, taller, shorter, and the same length. | Songs: Savanna Size, Measuring Plants Length Big and Little Tall and Short Heavy and Light Size Big Little Animals Large Small Toys Nonstandard Units of Length | Comparing objects.pdf: Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. Filling Table Order It Up Straw Rulers Measuring Walk Heavy or Light Make A Balance Size Scavenger Hunt Big and Little Sort Boxes in a Line Teddy Bear Line-Up Magazine Sorting Tall and Short |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|---|--|---|
| Liquid Volume, Weight & Mass | | |
| Compare capacities (volumes) using non-standard units using appropriate language, such as holds more, holds less, holds the same amount. | Song: Measuring Plants Book: Birds At My House Capacity Capacity (Liters) | Comparing objects.pdf: Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. Filling Table Order It Up Straw Rulers Measuring Walk Heavy or Light Make A Balance Size Scavenger Hunt Big and Little Sort Boxes in a Line Teddy Bear Line-Up Magazine Sorting Tall and Short |
| Compare weights using non-standard units using appropriate language, such as lighter, or heavier. | Heavy and Light Size Big Little Animals Weight | Comparing objects.pdf: Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. Filling Table Order It Up Straw Rulers Measuring Walk Heavy or Light Make A Balance Size Scavenger Hunt Big and Little Sort Boxes in a Line Teddy Bear Line-Up Magazine Sorting Tall and Short |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|---|--|--|
| Size & Position | | |
| Describe and compare objects by size and position using terms such as above, below, beside, in front of, behind, and next to, smaller, and larger. | Songs: Savanna Size, Measuring Plants; Position Cat; Get Over the Bugs Book: Up In the Air Order Size Length Big and Little Tall and Short Heavy and Light Size Position Over, Under, Above, Below Inside, Outside, Between Above, Below, Next to, On | |
| Reason with shapes and their Attril | outes | |
| Describe objects in the environment using names of shapes. | Songs: Marmot Shapes; Shapes, Shapes, Shapes Books: The Shape of Things; Imagination Shapes Circle, Square, Triangle, Rectangle Star, Semicircle, Octagon, Oval, Rhombus Simple Shapes Solid Shapes World Shapes | Describing objects.pdf: Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to. Shapes Scavenger Hunt |
| Identify, describe, sort, and classify two-dimensional shapes. | Songs: Same and Different; All Sorts of Laundry; Marmot Shapes; Shapes, Shapes, Shapes Book: Buttons, Buttons Sort Make and Count Groups Circle, Square, Triangle, Rectangle Similar Figures | Shape recognition.pdf: Correctly name shapes regardless of their orientations or overall size. Shapes Scavenger Hunt Shapes and Positioning |
| Identify similarities and differences of two-dimensional shapes. | Songs: Same and Different; Corners and Sides; Marmot Shapes; Shapes, Shapes, Shapes Circle, Square, Triangle, Rectangle Similar Figures | |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|--|---|--|
| Reason with shapes and their Att | ributes <i>continued</i> | |
| Make flat shape pictures. | GeoboardTangrams | Model shapes.pdf: Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. Building Shapes |
| Sort & classify objects using one or two attributes. | Song; All Sorts of Laundry Book: Buttons, Buttons Sort Similar Figures | Classifying objects.pdf: Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. Let's Sort Sort |
| Name and sort three- dimensional shapes. | Song: Same and Different Sort Star, Semicircle, Octagon, Oval, Rhombus Solid Shapes Space Shapes Simple Shapes | Shape recognition.pdf: Correctly name shapes regardless of their orientations or overall size. Shapes Scavenger Hunt Shapes and Positioning |
| Understand that three-dimensional shapes are made up of two- dimensional shapes. | Song: Corners and Sides Simple Shapes Solid Shapes Space Shapes Similar Figures | Compare shapes.pdf: Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length). Comparing Shapes |
| Recognize that the name of a shape stays the same regardless of orientation or size. | Songs: Kites; Shapes, Shapes, Shapes Books: The Shape of Things; Imagination Shapes Circle, Square, Triangle, Rectangle Star, Semicircle, Octagon, Oval, Rhombus Simple Shapes Solid Shapes World Shapes Similar Figures | Shape recognition.pdf: Correctly name shapes regardless of their orientations or overall size. Shapes Scavenger Hunt Shapes and Positioning |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|---|--|---|
| Data Analysis | | |
| Collect, Classify, Organize, Represe | ent, Interpret & Analyze Data | |
| Sort and classify using one or two attributes and count the number of objects in each category. | Songs: Same and Different; All Sorts of Laundry Book: Buttons, Buttons Sort Make and Count Groups | Classifying objects.pdf: Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. Let's Sort Sort |
| Compare category counts from a graphical representation using mathematical language (greater than, less than, equal to, etc.). | Song: Greater Than, Less Than Book: For the Birds Greater Than, Less Than More Than, Fewer Than More Than Fewer Than Fewer Than Make and Count Groups | 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 |
| FIRST GRADE | | |
| Number Sense & Operations | | |
| Number Names and Count Sequen | ce | |
| Use cardinal and ordinal numbers. | Song: Ordinals Ordinal Numbers Number Songs Counting Songs Number Counting Number Instruction | |
| Count forward to 120 beginning from a given number less than 120. | Song: Counting On Count On Number Chart | 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; 30-39; 40-49; 50-59; 60-69 Counting to 89 Counting Charts: I Can Count to 50; 100; 99; 120 |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|---|--|--|
| Number Names and Count Sequen | ce continued | |
| Count backward from a given number between 20 and 1. | Song: Counting BackwardBook: A Space AdventureCounting Back | |
| Read and write numerals from 0 to 120. | Song: Counting On Count On Number Chart | 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; 30-39; 40-49; 50-59; 60-69 Counting to 89 Counting Charts: I Can Count to 50; 100; 99; 120 |
| Count to 100 by 5s starting at any multiple of 5. | Song: Skip Counting Books: Jump Rope Rhymes; Navajo Beads Skip Count by 5s Number Sequences and Patterns | |
| Count to 120 by 10s starting at any number. | Song: Skip Counting Books: Jump Rope Rhymes; Navajo Beads Skip Count by 10s Number Sequences and Patterns | |
| Express numbers to 100 in standard and word forms. | Song: Counting On Count On Number Chart | 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; 30-39; 40-49; 50-59; 60-69 Counting to 89 Counting Charts: I Can Count to 50; 100; 99; 120 |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|--|--|---|
| Relationships Between Numbers ar | d Quantities | |
| Use concrete and pictorial models to create a set with a given number of objects (to 120). | • Book: Hooray, Hooray for the One Hundredth Day! | |
| Represent numbers to 100 on a number line. | Number Line | |
| Compare two two-digit numbers using the symbols > , < or =. | Place Value Greater Than, Less Than (2-digit Numbers) | Compare two-digit numbers.pdf: Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <. More or Less Spinner Catch Me if You Can! What Are You Looking For? Two-Pile Sort |
| Compare and order using the terms same, more, fewer, greater than, less than, equal to, greatest, and least. | Song: Greater Than, Less Than Book: For the Birds Greater Than, Less Than More Than, Fewer Than More Than Fewer Than Fewer Than Make and Count Groups | 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 |
| Place Value | | |
| Understand that 10 can be thought of as a bundle of 10 ones, called a "ten". | Song: Place ValuePlace Value of 2-digit NumbersAdd with Manipulatives | Tens as a bundle of ones.pdf: 10 can be thought of as a bundle of ten ones—called a "ten." Popsicles to Ten |
| Group objects and numbers up to 100 in tens and ones. | Song: Place Value Place Value of 2-digit Numbers Add with Manipulatives | 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 |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|--|---|---|
| Place Value <i>continued</i> | | |
| Use place value models, place value charts, and a 100 chart to represent numbers to 100. | Song: Place ValuePlace ValueNumber Chart | |
| Calculate 10 more or 10 less than a given number mentally without having to count. | Song: Skip Counting Book: Navajo Beads Add Subtract Add Tens Subtract Tens Skip Count by 10 Number Chart | 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 |
| Whole Number Addition & Subtrac | tion | |
| Use number bonds to represent number combinations. | Make and Count Groups Add Groups Subtract Groups Act Out Subtraction | Decompose numbers.pdf: Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation. Addition Cubes Fact Families |
| Demonstrate fluency with addition and subtraction within 10. | Songs: Fact Families; Counting On Books: Facts about Families Addition and Subtraction Fact Families Addition Sentences Subtraction Sentences Commutative Property of Addition Addition and Subtraction Relationship Missing Addends Missing Minuends and Subtrahends | 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 |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|---|---|---|
| Whole Number Addition & Subtrac | tion <i>continued</i> | |
| Use models, numbers, and symbols for addition and subtraction facts to 20. | Songs: Fact Families; Counting On Books: Facts about Families Addition and Subtraction Fact Families Addition Sentences Subtraction Sentences Commutative Property of Addition Addition and Subtraction Relationship Missing Addends Missing Minuends and Subtrahends Subtraction Patterns | 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 |
| Develop and use addition and subtraction fact strategies. | Addition and Subtraction Relationship Addition and Subtraction Fact Families Subtraction Patterns Commutative Property of Addition | Strategies to add and subtract.pdf: Apply properties of operations as strategies to add and subtract. Adding and Subtracting Bugs Concentration Related Facts |
| Add or subtract a multiple of 10 from another two-digit number. | Addition Subtraction Add Tens Subtract Tens Addition Patterns Subtraction Patterns Add Subtract Place Value Addition and Subtraction Relationship | Subtracting in 10s.pdf: Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90. Ten-O Bingo Subtract Multiples of 10 |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|--|---|--|
| Whole Number Addition & Subtr | action <i>continued</i> | |
| Add within 100. | Addition Add Tens Add with Manipulatives Add Vertical Squares Add with Beads Addition and Subtraction Relationship Add with Regrouping Concept Add 2-digit and 1-digit Numbers with Regrouping Add 2-digit Numbers without Regrouping Add 2-digit Numbers with Regrouping Add 2-digit Numbers with Regrouping | Adding within 100.pdf: The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones). Drawing Tens Beans, Beans, and More Beans The Kingdom of Popsicle Stick-Filled Purses Straws and Macaroni Bean Addition Newsletter Adding Tens and Ones Color Adds Up Cookies and Milk! Addition of Two-Digit Numbers Addition and Subtraction of Large Numbers |
| Create addition and subtraction stories. | Make a Math Story | |
| Fraction Concepts & Operations | | |
| Partition circles and rectangles into two or four equal shares. | Song: Fractions Books: Halves and Fourths and Thirds; Half For You and Half For Me Equal-part Fractions Label Parts of Fractions | Equal shares.pdf: Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares. Make It Equal Fraction Friends Fraction Train Halves, Thirds, Fourths Equal Parts |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|--|---|---|
| Fraction Concepts & Operations co | ntinued | |
| Describe the shares using the words halves, fourths, and quarters and use the phrases half of, fourth of, and a quarter of. | Song: Fractions Books: Halves and Fourths and Thirds; Half For You and Half For Me Equal-part Fractions Label Parts of Fractions | Equal shares.pdf: Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares. Make It Equal Fraction Friends Fraction Train Halves, Thirds, Fourths Equal Parts |
| Describe the whole as two of, or four of the shares. | Song: Fractions Books: Halves and Fourths and Thirds; Half For You and Half For Me Equal-part Fractions Label Parts of Fractions | Equal shares.pdf: Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares. Make It Equal Fraction Friends Fraction Train Halves, Thirds, Fourths Equal Parts |
| Understand that decomposing a shape into more equal shares creates smaller shares. | Song: Fractions Books: Halves and Fourths and Thirds; Half For You and Half For Me Equal-part Fractions Label Parts of Fractions | Equal shares.pdf: Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares. Make It Equal Fraction Friends Fraction Train Halves, Thirds, Fourths Equal Parts |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|---|--|---|
| Algebraic Thinking | | |
| Properties of Operations | | |
| Model addition and subtraction situations and use these representations to solve problems within 20. | Addition Sentences Subtraction Sentences Addition and Subtraction Fact Families Missing Addends Missing Minuends and Subtrahends | |
| Solve problems involving three whole numbers whose sum is within 20. | Addition Sentences Subtraction Sentences Addition and Subtraction Fact Families Add 3 One-digit Numbers Missing Addends Missing Minuends and Subtrahends | |
| Understand the relationship between the numbers in fact families. | Songs: Fact Families; Counting On Books: Facts about Families Addition and Subtraction Fact Families Addition Sentences Subtraction Sentences Commutative Property of Addition Addition and Subtraction Relationship Missing Addends Missing Minuends and Subtrahends Add 3 One-digit Numbers Subtraction Patterns | |
| Use the associative and commutative properties as strategies to add and subtract. | Addition and Subtraction Relationship Addition and Subtraction Fact Families Addition Patterns Subtraction Patterns Commutative Property of Addition | Strategies to add and subtract.pdf: Apply properties of operations as strategies to add and subtract. Adding and Subtracting Bugs Concentration Related Facts |
| Demonstrate that subtraction can be solved as an unknown- addend problem. | Missing Addends Subtraction Patterns Addition and Subtraction Fact Families | Understand subtraction as an unknown addend problem.pdf: Understand subtraction as an unknown- addend problem. Add and subtract within 20. Write each subtraction problem as an addition problem and solve it. |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|--|--|--|
| Number Sentences, Equations & Ine | equalities | |
| Develop the meaning of the equal sign and determine if equations involving addition and subtraction are true or false. | Song: Fact Families Book: Facts About Families Addition and Subtraction Fact Families Addition and Subtraction Relationship Commutative Property of Addition Addition Sentences Subtraction Sentences Greater Than, Less Than More Than, Fewer Than | Equal sign.pdf: Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. Show Me! Tricky Total Domino Addition Domino Subtraction Playground Fact Snake |
| Model addition and subtraction situations by writing addition and subtraction number sentences. | Addition Sentences Subtraction Sentences Addition and Subtraction Fact Families Missing Addends Missing Minuends and Subtrahends | |
| Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. | Addition Sentences Subtraction Sentences Addition and Subtraction Fact Families Missing Addends Missing Minuends and Subtrahends | |
| Solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions. | Addition Sentences Subtraction Sentences Addition and Subtraction Fact Families Missing Addends Missing Minuends and Subtrahends | |
| Geometry & Measurement | | |
| Time & Money | | |
| Identify and know coin values (penny, nickel, dime, quarter). | Songs: Money; Save Your Pennies Book: Bugs For Sale Coin Identification Coin Value Quarters Count Dimes, Nickels, and Pennies Count Quarters, Dimes, Nickels, and Pennies Count Nickels and Pennies or Dimes and Pennies Count Coins Equivalent Sums of Money | |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|--|--|--|
| Time & Money continued | | |
| Read a calendar to identify the days of the week, months, and seasons of the year. | Songs: Seasons; Days of the Week; Months of the Year Book: That's What I Like: A Book About Seasons Calendar Spring Summer Fall Winter | |
| Tell time to the hour and half hour. | 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 |
| Length & Distance | | |
| Use a start line to measure length. | Number LineLength | |
| Measure lengths, using non- standard units. | 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 |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|---|---|--|
| Length & Distance continued | | |
| Compare two lengths by comparing each with a third length (transitivity). | Length Nonstandard Units of Length | Order by length.pdf: Order three objects by length; compare the lengths of two objects indirectly by using a third object. Estimating Length A Fruit and Vegetable Measure |
| Order three or more objects by length. | LengthNonstandard Units of Length | Order by length.pdf: Order three objects by length; compare the lengths of two objects indirectly by using a third object. Estimating Length A Fruit and Vegetable Measure |
| Understand the need for equal-length units to measure. | 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 |
| Compare measurements made using different units. | Length Standard Units of Length Measurement Tools | 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 |
| Size & Position | | |
| Describe position with left and right. | Song: Position CatPositionRight, Left | |
| Use positional words to describe location. | Songs: Position Cat; Get Over the Bugs Book: Up In the Air Position Over, Under, Above, Below Inside, Outside, Between Above, Below, Next to, On | Describing objects.pdf: Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to. Shapes Scavenger Hunt |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|---|--|--|
| Reason with Shapes and their Attri | butes | |
| Identify two-dimensional shapes in three-dimensional shapes. | Song: Kites Books: The Shape of Things; Imagination Shapes World Shapes Similar Figures | |
| Recognize two- and three-dimensional shapes from different perspectives and orientations. | Song: Corners and Sides Simple Shapes Solid Shapes Space Shapes Congruence Tangrams Similar Figures | Compare shapes.pdf: Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length). Comparing Shapes |
| Identify real-world two- and three- dimensional shapes. | Song: Kites Books: The Shape of Things; Imagination Shapes World Shapes | |
| Identify and describe attributes & properties of two-dimensional shapes. | Songs: Corners and Sides; Marmot Shapes Simple Shapes Circle, Square, Triangle, Rectangle Congruence Tangrams Similar Figures | Compare shapes.pdf: Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length). Comparing Shapes |
| Sort & classify two- and three- dimensional shapes. | Songs: Same and Different; All Sorts of Laundry Book: Buttons, Buttons Sort Make and Count Groups | Classifying objects.pdf: Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. Let's Sort Sort |
| Compose and decompose two- and three-dimensional shapes. | GeoboardTangrams | Form larger shapes.pdf: Compose simple shapes to form larger shapes. Combining Shapes |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|--|---|--|
| Reason with Shapes and their Attr | ibutes <i>continued</i> | |
| Understand the inverse relationship between the size of a unit and the number of units needed to measure the same length. | 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 |
| Data Analysis | | |
| Collect, Classify, Organize, Repres | ent, Interpret & Analyze Data | |
| Sort and classify data in order to make graphs. | Song: Graphing Book: Buttons, Buttons Sort Make and Count Groups | Classifying objects.pdf: Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. Let's Sort Sort |
| Collect and organize data in different ways. | Song: Graphing Graphing Bar Graphs Picture Graphs Use Graphs and Tables | Graphs.pdf: Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph. Questions and Answers Library Book Survey Playground Survey Rock Collections Use Graphs and Tables |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|--|---|---|
| Collect, Classify, Organize, Repres | ent, Interpret & Analyze Data continued | |
| Represent measurements and data in picture graphs, tally charts, and bar graphs. | Song: Graphing Graphing Bar Graphs Picture Graphs Use Graphs and Tables | Graphs.pdf: Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph. Questions and Answers Library Book Survey Playground Survey Rock Collections Use Graphs and Tables |
| Interpret data in picture graphs, tally charts, and bar graphs. | Song: Graphing Graphing Bar Graphs Picture Graphs Use Graphs and Tables | Graphs.pdf: Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph. Questions and Answers Library Book Survey Playground Survey Rock Collections Use Graphs and Tables |
| Read bar graphs with scales. | Song: Graphing Bar Graphs Graphing Use Graphs and Tables | |
| Solve problems involving data. | Song: Graphing Graphing Bar Graphs Picture Graphs Use Graphs and Tables | Graphs.pdf: Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph. Questions and Answers Library Book Survey Playground Survey Rock Collections Use Graphs and Tables |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|--|---|--|
| SECOND GRADE | | |
| Number Sense & Operations | | |
| Number Names and Count Sequen | ce | |
| Read and write numerals to 1,000 using number names, base-ten numerals, and expanded form. | Sequences of 2-digit Numbers Sequences of 3-digit Numbers Number Chart Place Value | Read and write numbers to 1000.pdf: Read and write numbers to 1000 using base-ten numerals, number names, and expanded form. Cube Trails Race for a Flat High/Low Number Cube Throw Lucky Five |
| Count to 1,000 by 1's, 10's and 100's starting with any number. | Song: Skip Counting Book: Jump Rope Rhymes Skip Count Skip Count by 10 Skip Count by 5 Number Sequences and Patterns | Counting within 1000.pdf: Count within 1,000; skip-count by 5s, 10s, and 100s. Chart Patterns My 199; 200; 299; 300; 399; 400; 499; 500; 599; 600; 699; and 700 Picture 900 Chart |
| Count by 2's to 100 starting with any even number. | Songs: Skip Counting; Odd Todd and Even Steven Skip Count by 2 | 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 2s What's My Number? |
| Count by multiples of ones, tens, and hundreds starting from various values. | Song: Skip Counting Book: Jump Rope Rhymes Skip Count Skip Count by 10 Skip Count by 5 Number Sequences and Patterns | Counting within 1000.pdf: Count within 1,000; skip-count by 5s, 10s, and 100s. Chart Patterns My 199; 200; 299; 300; 399; 400; 499; 500; 599; 600; 699; and 700 Picture 900 Chart |
| Relationships Between Numbers ar | nd Quantities | |
| Use concrete and pictorial models to create a set with a given number of objects (to 1,000). | Place Value CountingMake and Count GroupsNumber Recognition and Sense | |
| Represent numbers to 1,000 on a number line. | Number LineNumber Sequences and Patterns | |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|--|--|--|
| Relationships Between Numbers an | d Quantities continued | |
| Compare numbers to 1,000 using the symbols > , < or =. | • Greater Than, Less Than (3-digit Numbers) | 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 <,>, = Cards Greater Than, Less Than, Equal To |
| Order whole numbers to 1,000. | Number Sequences and PatternsNumber Chart | |
| Determine if a set of objects has an odd or even number of members. | Song: Odd Todd and Even Steven Skip Count by 2 Addition Facts | 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 2s What's My Number? |
| Place Value | | |
| Use place-value models to create equivalent representations of numbers. | Song: Place Value Place Value of 2-digit Numbers Place Value of 3-digit Numbers Greater Than, Less Than (3-digit Numbers) | 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 <,>, = Cards Greater Than, Less Than, Equal To |
| Understand that 100 can be thought of as 10 tens, called a "hundred". | Song: Place ValuePlace ValuePlace Value of 3-digit Numbers | Thinking of 100 as a bundle of ten 10s.pdf: 100 can be thought of as a bundle of ten tens—called a "hundred." The Kingdom of Popsicle Stick-Filled Purses |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|---|---|--|
| Place Value <i>continued</i> | | |
| Group objects and numbers up to 1,000 into hundreds, tens, and ones. | Song: Place Value Place Value Place Value of 3-digit Numbers | 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 |
| Use place value models, place value charts, and a 100 chart to represent numbers to 1,000. | Song: Place Value Number Chart Place Value Place Value of 3-digit Numbers | |
| Express numbers to 1000 in standard and word forms. | | Read and write numbers to 1000.pdf: Read and write numbers to 1000 using base-ten numerals, number names, and expanded form. Cube Trails Race for a Flat High/Low Number Cube Throw Lucky Five |
| Calculate 10 or 100 more or less than a given number within 1,000 mentally without having to count. | Skip Count Place Value Number Chart Number Patterns Mental Math Games | 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 |
| Whole Number Addition & Subtrac | tion | |
| Use number bonds to represent number combinations. | | Decompose numbers.pdf: Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation. Addition Cubes Fact Families |
| Compose and decompose multi- digit numbers. | • Place Value | Tens and ones.pdf: Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation; understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones. Place Value 11-19 |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|--|--|---|
| Whole Number Addition & Subtra | ction <i>continued</i> | |
| Recall addition and subtraction fact strategies. | Place Value Addition and Subtraction Relationship Commutative Properties of Addition Addition Subtraction Add without Regrouping Add with Regrouping Subtract without regrouping Subtract with Regrouping Act Out Addition Act Out Subtraction | 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 |
| Know all sums of two one-digit numbers. Automaticity for basic facts is desired. | Songs: Fact Families; Doubles Subtraction Patterns Addition Facts to 20 | 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. Sets of flashcards: Addition—horizontal Subtraction—horizontal Addition—vertical Subtraction—vertical Addition and subtraction—horizontal and vertical |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|---|---|---|
| Whole Number Addition & Subtract | tion continued | |
| Fluency within 20: Use mental strategies to demonstrate fluency with sums and differences (Sums within 20 and the starting point for subtraction problems within 20). (Note: Fluency refers to accuracy and efficiency and does not equate to memorization.) | Songs: Fact Families; Doubles Subtraction Patterns Addition Facts to 20 | 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. Sets of flashcards: Addition—horizontal Subtraction—horizontal Addition—vertical Subtraction—vertical Addition and subtraction—horizontal and vertical |
| Fluency within 100: Use strategies based on place value (including composing and decomposing tens), properties of operations, and/or the relationship between addition and subtraction to demonstrate fluency with addition and subtraction within 100. (Note: Fluency refers to accuracy and efficiency and does not equate to memorization.) | Place Value Addition and Subtraction Relationship Commutative Properties of Addition Addition Subtraction Add without Regrouping Add with Regrouping Subtract without regrouping Subtract with Regrouping | Add and subtract within 100.pdf: Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. Addition of Two-Digit Numbers Tic Tac Toe Subtraction of Two-Digit Numbers |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|--|--|---|
| Whole Number Addition & Subtrac | tion <i>continued</i> | |
| Add and subtract within 1,000 and justify answers using concrete models, drawings, or symbols that convey strategies connected to place value understanding. | Place Value Addition and Subtraction Relationship Commutative Properties of Addition Addition Subtraction Add without Regrouping Add with Regrouping Subtract without regrouping Subtract with Regrouping Act Out Addition Act Out Subtraction | 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 |
| Whole Number Multiplication & Div | ision | |
| Find the total number of objects arranged in a rectangular array with up to five rows and 5 columns. | AdditionMultiply Using Repeated AdditionMultiply Using Arrays | |
| Write an equation to represent the total number of objects arranged in a rectangular array as a sum of equal addends. | Addition Multiply Using Repeated Addition Multiply Using Arrays | |
| Partition a rectangle into rows and columns of same-size squares and count to find the total number of squares. | Song: FractionsFractions of Regions | |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|--|---|---|
| Fraction Concepts & Operations | 1 | |
| Partition circles and rectangles into two, three, or four equal shares. | Song: Fractions Books: Halves and Fourths and Thirds; The Fraction Twins Fractions Label Parts of Fractions Fractions of Regions Fractions of Groups | Fractions.pdf: Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape. Frenzied Fraction Fun Fabulous Fractions |
| Describe the shares using the words halves, thirds, fourths, and quarters and use the phrases half of, third of, fourth of, and a quarter of. | Song: Fractions Books: Halves and Fourths and Thirds; The Fraction Twins Fractions Label Parts of Fractions Fractions of Regions Fractions of Groups | Fractions.pdf: Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape. Frenzied Fraction Fun Fabulous Fractions |
| Describe the whole as two of, three of, or four of the shares | Song: Fractions Books: Halves and Fourths and Thirds; Half For You and Half For Me Equal-part Fractions Label Parts of Fractions | Equal shares.pdf: Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares. Make It Equal Fraction Friends Fraction Train Halves, Thirds, Fourths Equal Parts |
| Demonstrate that there are various ways to divide identical wholes into equal shares. | Song: Fractions Books: Halves and Fourths and Thirds; The Fraction Twins Fractions Label Parts of Fractions Fractions of Regions Fractions of Groups | Fractions.pdf: Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape. Frenzied Fraction Fun Fabulous Fractions |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|---|---|--|
| Algebraic Thinking | | |
| Properties of Operations | | |
| Use the relationship between addition and subtraction to solve problems. | Place Value Addition and Subtraction Relationship Commutative Properties of Addition Addition Subtraction Add without Regrouping Add with Regrouping Subtract without regrouping Subtract with Regrouping Subtract with Regrouping | Add and subtract within 100.pdf: Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. Addition of Two-Digit Numbers Tic Tac Toe Subtraction of Two-Digit Numbers |
| Use the associative and commutative properties as strategies to add and subtract. | Place Value Addition and Subtraction Relationship Commutative Properties of Addition Addition Subtraction Add without Regrouping Add with Regrouping Subtract without regrouping Subtract with Regrouping Subtract with Regrouping | Add and subtract within 100.pdf: Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. Addition of Two-Digit Numbers Tic Tac Toe Subtraction of Two-Digit Numbers |
| Number Sentences, Equations & Inc | equalities | |
| 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. | Book: Painting by Number Addition Subtraction Missing Addends and Subtrahends Subtraction Sentences Addition and Subtraction Facts | One- and two-step word problems within 100. pdf: Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. Animal Math Picture Problems Color the Chart Think About it Differently Act it Out Guess and Check |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|---|---|--|
| Number Sentences, Equations & In | equalities <i>continued</i> | |
| Express even numbers as being composed of equal groups and write a number sentence to represent the number with 2 equal addends. | Song: DoublesDoubles | |
| Express even numbers as pairings/ groups of 2, and write a number sentence to represent the number using addends of 2. | Songs: Doubles; Odd Todd and Even StevenDoubles | |
| Geometry & Measurement | | |
| Time & Money | | |
| Find and represent the value of combinations of dollar bills, quarters, dimes, nickels, and pennies using \$ and ¢ appropriately. | Songs: Money; Save Your Pennies Book: Bugs For Sale Coin Identification Coin Value Quarters Count Dimes, Nickels, and Pennies Count Quarters, Dimes, Nickels, and Pennies Count Quarters, Dimes, Nickels, and Pennies Count Nickels and Pennies or Dimes and Pennies Make Change Count Coins Count Bills and Coins Equivalent Sums of Money | Solve 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 Combinations Money Sums Pizza Parlor How Much Back? Coin Count Bills and Coins Let's Count Coins Money Addition Change is Good! Make 45¢ |
| Find combinations of coins that equal a given amount. | Book: Bugs For Sale Coin Value Count Nickels and Pennies or Dimes and Pennies Equivalent Sums of Money | |
| Tell and write time to the nearest 5 minutes. | Songs: Telling Time; Clock Hands Tell Time Tell Time to Five Minutes Tell Time to the Quarter Hour Tell Time to the Minute Tell Time to the Hour Tell Time to the Half-hour | Tell and write time.pdf: Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. Matching Clocks Cartoon Captions Time to 5 Minutes |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|---|--|---|
| Time & Money continued | | |
| Use A.M and P.M. to write time. | • Book: Mr. Romano's Secret: A Time Story | Tell and write time.pdf: Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. Matching Clocks Cartoon Captions Time to 5 Minutes |
| Length & Distance | | |
| Measure lengths by selecting and using an appropriate tool. | Song: Measuring Plants Book: Birds at My House Length Measurement Tools Standard Units of Length | 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! |
| Analyze the results of measuring the same object with different units. | Length Standard Units of Length Measurement Tools | 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 |
| Estimate lengths. | Song: Measuring Plants 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 |
| Recognize that the size of the unit used affects the number of units required to measure an object. | Length Standard Units of Length Measurement Tools | 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 |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES |
|--|---|--|
| Length & Distance continued | | |
| Estimate and measure to compare lengths and express the difference in standard units. | Length Standard Units of Length Measurement Tools | Measure length.pdf: Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit. Ready, Set, Measure Treasure Hunt |
| Reason with Shapes and their Attri | butes | |
| Identify triangles, quadrilaterals, pentagons, hexagons, circles, cubes, prisms, and pyramids. | Songs: Shapes, Shapes, Shapes; Corners and Sides; Kites Book: The Shape of Things Space Shapes World Shapes Geoboard | Draw shapes.pdf: Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. Making Shapes Shapes Review |
| Describe attributes & properties of two- and three-dimensional shapes. | Songs: Shapes, Shapes, Shapes; Corners and Sides; Kites Book: The Shape of Things Space Shapes World Shapes Geoboard | Draw shapes.pdf: Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. Making Shapes Shapes Review |
| Draw shapes with specified attributes such as the number of angles or sides. | Songs: Shapes, Shapes, Shapes; Corners and Sides; Kites Book: The Shape of Things Space Shapes World Shapes Geoboard | Draw shapes.pdf: Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes. Making Shapes Shapes Review |
| Sort & classify two- and three- dimensional shapes. | Songs: Same and Different; All Sorts of Laundry; Shapes, Shapes, Shapes Books: Buttons, Buttons; The Shape of Things Sort Space Shapes World Shapes | |
| Compose and decompose two- and three-dimensional shapes. | GeoboardTangrams | Form larger shapes.pdf: Compose simple shapes to form larger shapes. Combining Shapes |
| Identify the faces of three- dimensional shapes. | Song: Corners and SidesSpace ShapesWorld Shapes | |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES | | |
|---|---|---|--|--|
| Data Analysis | | | | |
| Collect, Classify, Organize, Represent, Interpret & Analyze Data | | | | |
| Create a line plot to represent a set of numeric data with a whole number scale. | • Measurement Tools | Generating measurement data.pdf: Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units. Measuring Inches Ready, Set, Measure Let's Measure in Centimeters! Let's Measure in Inches! | | |
| Generate measurement data and display it on a line plot. | Measurement Tools | Generating measurement data.pdf: Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units. Measuring Inches Ready, Set, Measure Let's Measure in Centimeters! Let's Measure in Inches! | | |
| Draw picture graphs and/or bar graphs to represent data with up to four categories. | Song: Graphing Graphing Bar Graphs Picture Graphs Use Graphs and Tables | Graphs.pdf: Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph. Questions and Answers Library Book Survey Playground Survey Rock Collections Use Graphs and Tables | | |



| NWEA MAP SKILLS | WATERFORD DIGITAL RESOURCES | WATERFORD TEACHER RESOURCES | | |
|---|---|---|--|--|
| Collect, Classify, Organize, Represent, Interpret & Analyze Data <i>continued</i> | | | | |
| Solve problems using information presented in line plots, picture graphs, and bar graphs. | Song: Graphing Graphing Bar Graphs Picture Graphs Use Graphs and Tables | Graphs.pdf: Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph. Questions and Answers Library Book Survey Playground Survey Rock Collections Use Graphs and Tables | | |
| Draw conclusions from line plots, picture graphs, and bar graphs. | Song: Graphing Graphing Bar Graphs Picture Graphs Use Graphs and Tables | Graphs.pdf: Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph. Questions and Answers Library Book Survey Playground Survey Rock Collections Use Graphs and Tables | | |



PRE-MATH & SCIENCE

Math Books

Zero In My Toybox; 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; Zero Is a Big Round Hole

BASIC MATH & SCIENCE

Math & Science Books

One More Cat: Can You Guess? A Story for Two Voices: I Want to Be a Scientist Like Carl Linnaeus: I Want to Be a Scientist Like Antoni van Leeuwenhoek; Whatever the Weather; I Want to Be a Mathematician Like Sophie Germain: Water Is All Around; Mr. Romano's Secret: A Time Story; A Seed Grows; How Long is a Minute?; Marty's Mixed-up Mom: I Want to Be a Scientist Like Louis Pasteur; Pancakes Matter; Jump Rope Rhymes; Facts About Families: Fifteen Bayou Band: Hooray. Hooray for the One Hundredth Day!; Symmetry and Me: Animal Bodies: Everybody Needs to Eat: The Circus Came to Town: I Want to Be a Mathematician Like Thales: Bugs for Sale: Heads or Tails; Your Backyard; The Birds, the Beasts and the Bat: Halves and Fourths and Thirds: We All Exercise; Circus 20; Red Rock, River Rock; Painting by Number: I Want to Be a Scientist Like Joanne Simpson; Navajo Beads; Where in the World Would You Go Today?: I Want to Be a Scientist Like Wilbur and Orville Wright

FLUENT MATH & SCIENCE

Math & Science Books

The Snow Project; Chloe's Cracker Caper; What Sounds Say; Fossils Under Our Feet; The Boonville Nine; I Want to Be a Scientist Like Alexander von Humboldt: I Want to Be a Scientist Like Marie Curie; I Want to Be a Scientist Like Stephen Hawking; George and Jack; The Old Maple Tree; A Dinosaur's First Day; I Want to Be a Scientist Like Isaac Newton; My Family Campout; I Want to Be a Scientist Like Thomas Edison; Warm Soup for Dedushka; How Did the Chicken Cross the Road?: Inventions All Around: The Beginning of Numbers: I Want to Be a Mathematician Like Ada Byron Lovelace; Lightning Bells; Tyrannosaurus X 1; Halves and Fourths and Thirds; Navajo Beads; Red Rock, River Rock; I Want to Be a Mathematician Like Srinivasa Ramanujan; The Fraction Twins; Yangshi's Perimeter; I Want to Be a Mathematician Like Archimedes; Birds at My House; Painting by Number; The Fable Fair

SUPPORT



Professional Services offers a continuum of customizable services. Learn more <u>here</u>.

CONTINUAL DEVELOPMENT

As a nonprofit research institute, <u>Waterford.org</u> is continually developing resources with the latest research findings. Please note that this correlation is accurate as of the date on the cover.

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).