

FEBRUARY 2023

CURRICULUM Correlation

Waterford Reading Academy:

Waterford.org

Math & Science

100%

Pennsylvania Academic Standards for Mathematics 2014 & Science 2022

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

TABLE OF CONTENTS



MATHEMATICS 1
KINDERGARTEN 1
2.1 Numbers and Operations
2.2 Algebraic Concepts2
2.3 Geometry3
2.4 Measurement, Data, and Probability
GRADE 14
2.1 Numbers and Operations
2.2 Algebraic Concepts5
2.3 Geometry5
2.4 Measurement, Data, and Probability
GRADE 2
2.1 Numbers and Operations
2.2 Algebraic Concepts8
2.3 Geometry9
2.4 Measurement, Data, and Probability

SCIENCE
KINDERGARTEN 12
Earth and Space Sciences
Life Science
Physical Science
GRADE I
Earth and Space Sciences
Life Science
Physical Science
GRADE 215
Earth and Space Sciences
Life Science
Physical Science
WATERFORD BOOKS AND RELATED ACTIVITIES
WATERFORD FAMILY ENGAGEMENT RESOURCES



PENNSYLVANIA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
	MATHEMATICS	
KINDERGARTEN		
2.1 Numbers and Operations		
A. Counting and Cardinality		
CC.2.1.K.A.1 Know number names and write and recite the count sequence.	 Counting Songs Number Songs Math Books Number Instruction Number Counting 	 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
CC.2.1.K.A.2 Apply one-to-one correspondence to count the number of 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
CC.2.1.K.A.3 Apply the concept of magnitude to compare numbers and quantities.	 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



PENNSYLVANIA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
B. Numbers and Operations in Base	e Ten	
CC.2.1.K.B.1 Use place value to compose and decompose numbers within 19.	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
2.2 Algebraic Concepts		
A. Operations and Algebraic Think	ing	
CC.2.2.K.A.1 Extend the concepts of putting together and taking apart to add and subtract within 10.	 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



PENNSYLVANIA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
2.3 Geometry		
A. Geometry		
CC.2.3.K.A.1 Identify and describe two- and three-dimensional shapes.	 Songs: Kites; Shapes, Shapes Books: The Shape of Things; Imagination Shapes Circle, Square, Triangle, Rectangle Star, Semicircle, Octagon, Oval, Rhombus Simple Shapes Solid Shapes World Shapes 	 Two-dimensional shapes.pdf: Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid"). Shapes and Positioning
CC.2.3.K.A.2 Analyze, compare, create, and compose two- and three-dimensional shapes.	 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
2.4 Measurement, Data, and Proba	oility	
A. Measurement and Data		
CC.2.4.K.A.1 Describe and compare attributes of length, area, weight, and capacity of everyday objects.	 Song: Measuring Plants Length 	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
CC.2.4.K.A.4 Classify objects 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



PENNSYLVANIA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
GRADE 1		
2.1 Numbers and Operations		
B. Numbers and Operations in Base	e Ten	
CC.2.1.1.B.1 Extend the counting sequence to read and write numerals to represent objects.	 Counting Songs Number Songs Make and Count Groups Number Counting Number Instruction Numbers Review One-to-one Correspondence 	 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
CC.2.1.1.B.2 Use place-value concepts to represent amounts of tens and ones and to compare two digit numbers.	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
CC.2.1.1.B.3 Use place-value concepts and properties of operations to add and subtract 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



PENNSYLVANIA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
2.2 Algebraic Concepts		
A. Operations and Algebraic Think	ing	
CC.2.2.1.A.1 Represent and solve problems involving addition and subtraction within 20	 Songs: Fact Families; Counting On Books: Facts about Families; Circus 20; Painting by Number 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 	 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
CC.2.2.1.A.2 Understand and apply properties of operations and the relationship between addition and subtraction	 Songs: Fact Families; Counting On Book: 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 	 Relate counting to addition and subtraction.pdf: Relate counting to addition and subtraction. Skip Counting Chant Jump Rope Counting Related Facts Count by 2s; 5s; 10s
2.3 Geometry		
A. Geometry		
CC.2.3.1.A.1 Compose and distinguish between two- and three-dimensional shapes based on their attributes.	Song: KitesSpace ShapesGeoboardTangrams	 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



PENNSYLVANIA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
A. Geometry continued		
CC.2.3.1.A.2 Use the understanding of fractions to partition shapes into halves and quarters.	 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
2.4 Measurement, Data, and Probal	pility	
A. Measurement and Data		
CC.2.4.1.A.1 Order lengths and measure them both indirectly and by repeating length units	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
CC.2.4.1.A.2 Tell and write time to the nearest half hour using both analog and digital clocks.	 Song: Clock Hands Books: Mr. Romano's Secret: A Time Story; How Long Is a Minute? 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



PENNSYLVANIA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
A. Measurement and Data <i>continue</i>	ed	
CC.2.4.1.A.4 Represent and interpret data using tables/charts.	 Songs: Tallying; Graphing Books: Painting by Number; One More Cat; The Booneville Nine Tally Marks Graphs Make a Table 	 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 Our Favorite Foods Make a Graph Make a Table How Many? Bugs! Use Graphs and Tables How Big Is Your Family?
GRADE 2		
2.1 Numbers and Operations		
3. Numbers and Operations in Bas	e Ten	
CC.2.1.2.B.1 Use place-value concepts to represent amounts of tens and ones and to compare three digit number	 Song: Place Value Greater Than, Less Than (3-digit Numbers) Place Value Place Value of 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



PENNSYLVANIA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
B. Numbers and Operations in Bas	e Ten <i>continued</i>	
CC.2.1.2.B.2 Use place-value concepts to read, write, and skip count to 1000.	 Songs: Skip Counting; Place Value Book: Jump Rope Rhymes Skip Count Skip Count by 10 Skip Count by 5 Number Sequences and Patterns Place Value Number Chart 	 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 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
CC.2.1.2.B.3 Use place-value understanding and properties of operations to add and subtract within 1000.	 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
2.2 Algebraic Concepts		
A. Operations and Algebraic Think	ing	
CC.2.2.A.1 Represent and solve problems involving addition and subtraction within 100	 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



PENNSYLVANIA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
A. Operations and Algebraic Think	ing continued	
CC.2.2.A.2 Use mental strategies to add and subtract within 20	 Add Subtract Add Tens Subtract Tens 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
CC.2.2.2.A.3 Work with equal groups of objects to gain foundations for multiplication.	AdditionMultiply Using Repeated AdditionMultiply Using Arrays	
2.3 Geometry		
A. Geometry		
CC.2.3.2.A.1 Analyze and draw two- and three-dimensional shapes having specified attributes.	 Songs: 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
CC.2.3.2.A.2 Use the understanding of fractions to partition shapes into halves, quarters, and thirds.	 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



PENNSYLVANIA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
2.4 Measurement, Data, and Probak	pility	
A. Measurement and Data		
CC.2.4.2.A.1 Measure and estimate lengths in standard units using appropriate tools.	 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! 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
CC.2.4.2.A.2 Tell and write time to the nearest five minutes using both analog and digital clocks.	 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



PENNSYLVANIA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
A. Measurement and Data <i>continued</i>		
CC.2.4.2.A.3 Solve problems and make change using coins and paper currency with appropriate symbols.	 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 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 Sums Pizza Parlor How Much Back? Coin Count Bills and Coins Let's Count Coins Money Addition Change is Good! Make 45¢
CC.2.4.2.A.4 Represent and interpret data using line plots, picture graphs, and bar graphs.	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!
CC.2.4.2.A.6 Extend the concepts of addition and subtraction to problems involving length.	 Book: Yangshi's Perimeter Addition Subtraction Length Standard Units of Length 	One- and two-step word problems within 100. pdf: Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, 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



PENNSYLVANIA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
	SCIENCE	
KINDERGARTEN		
Earth and Space Sciences		
Earth and Human Activity		
1. Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.	 Song: Four Ecosystems Book: Where in the World Would You Go Today? Oceans Mountains Deserts Rainforests 	Learning Together: Our Earth
2. Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.	 Songs: Precipitation; Storms Book: Whatever the Weather Weather Tools Calendar/Graph Weather 	
3. Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.	 Songs: Conservation; Pollution Rap Pollution and Recycling Care of Water Care of Earth 	 More to Explore Experiment: Recycling Learning Together: Our Earth
Earth's Systems		
Use AND SHARE observations of local weather conditions to describe patterns over time	 Song: Seasons Book: That's What I Like: A Book About Seasons Weather Calendar/Graph Weather Weather Patterns Clouds Spring Summer Fall Winter 	 Learning Together: Weather; The Weather Around Us Weather Cards
2. Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.	Books: Winter Snoozers; Birds at my House; The Old Maple Tree; Turtle's Pond	



PENNSYLVANIA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Life Science		
From Molecules to Organisms: Stru	uctures and Processes	
Use observations to describe patterns of what plants and animals (including humans) need to survive.	 Songs: Water; Food From Plants Books: Mela's Water Pot; Everybody Needs to Eat Sun Plants Water Plants and Animals Need Air Healthy Plants' Needs 	 More to Explore Experiment: Water for Plants Learning Together: Green and Growing
Physical Science		
Motion and Stability: Forces and ir	teractions	
1. Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.	Song: Push and PullBook: Mr. Mario's NeighborhoodPush and Pull	Learning Together: How It Works
2. Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull	Song: Push and PullPush and Pull	
Energy		
1. Make observations to determine the effect of sunlight on Earth's surface	Songs: Water; Plants Are Growing; Sun BluesSunWaterRocks	
2. Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area	Waterford encourages everyone to have writing, drawing, and art materials available for children's creations.	



PENNSYLVANIA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
GRADE I		
Earth and Space Sciences		
Earth's Place in the Universe		
1. Use observations of the sun, moon, and stars to describe patterns that can be predicted.	 Songs: The Moon; Sun Blues Books: Moon Song; Star Pictures; My Family Campout Sun Moon Constellations 	 More to Explore Experiment: The Moon Learning Together: The Sky Above Us
2. Make observations at different times of year to relate the amount of daylight to the time of year.	SunSpringSummerFallWinter	
Life Science		
From Molecules to Organisms: Stru	ctures and Processes	
1. Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.	 Books: I Wish I Had Ears Like a Bat; Animal Bodies; Fawn Eyes Deserts 	
2. Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.	Song: Animal BodiesAnimal BehaviorAnimal Bodies	
Heredity: Inheritance and Variation	of Traits	
1. Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.	Books: George and Jack; A Seed GrowsBuild Knowledge: Mine	More to Explore Experiment: Traits



PENNSYLVANIA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Physical Science		
Waves and Their Applications in Te	chnologies for Information Transfer	
1. Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.	Song: SoundBook: What Sounds SaySound Waves	More to Explore Experiment: Sound
2. Make observations to construct an evidence-based account that objects can be seen only when illuminated	Books: My Family Campout; Lightning BugsLight PropertiesProperties of Light	
3. Plan and conduct an investigation to determine the effect of placing objects made with different materials in the path of a beam of light.		
4. Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance.	Song: Inventing Books: I Want to Be a Scientist Like Thomas Edison; Inventions All Around	
GRADE 2		
Earth and Space Sciences		
Earth's Place in the Universe		
1. Use information from several sources to provide evidence that Earth events can occur quickly or slowly.	 Songs: The Four Seasons; Rock Cycle Books: That's What I Like: A Book About Seasons; Whatever the Weather; Fossils Under Our Feet Rock Cycle Fossils Spring Summer Fall Winter Water 	More to Explore Experiment: Rocks



PENNSYLVANIA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Earth's Systems		
1. Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land.	Waterford encourages everyone to have writing, drawing, and art materials available for children's creations.	
2. Develop a model to represent the shapes and kinds of land and bodies of water in an area.	 Songs: Water; Precipitation; Water Is All Around Water Sources Water Water Cycle Care of Water Oceans 	
3. Obtain information to identify where water is found on Earth and that it can be solid or liquid	 Songs: Water; Uses of Water; Precipitation; Water Is All Around Water Sources Water Water Cycle Care of Water States of Water Heat Changes Water 	
Life Science		
Ecosystems: Interactions, Energy, a	nd Dynamics	
1. Plan and conduct an investigation to determine if plants need sunlight and water to grow.	 Song: Plants Are Growing Sun Water Plant Experiment Healthy Plants' Needs 	More to Explore Experiment: Light for Plants
2. Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.	Books: The Bee's Secret; The Old Maple Tree	
Biological Evolution: Unity and Dive	ersity	
1. Make observations of plants and animals to compare the diversity of life in different habitats	 Songs: Animal Bodies; Four Ecosystems Books: Animal Bodies; Where in the World Would You Go Today? Ecosystems Animal Bodies Animal Behavior 	Learning Together: Places on Earth



PENNSYLVANIA STANDARDS	WATERFORD DIGITAL RESOURCES	WATERFORD TEACHER RESOURCES
Physical Science		
Matter and its Interactions		
1. Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties	 Book: Warm Soup for Dedushka Changes in Matter Movement of Heat States of Water Materials 	
2. Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose	Book: Warm Soup for DedushkaHeat MovementMovement of HeatHeat Experiment	
3. Make observations to construct an evidence-based account of how an object made of a small set of pieces can be disassembled and made into a new object.	 Books: I Want to Be a Scientist Like Wilbur and Orville Wright; Inventions All Around Geoboard Tangrams 	
4. Construct an argument with evidence that some changes caused by heating or cooling can be reversed and some cannot	 Books: Warm Soup for Dedushka; Pancakes Matter Changes in Matter Movement of Heat 	

WATERFORD Books and Related Activities



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; Zero Is a Big Round; Hole Poor Wandering 1; Snowy Twos Day; 1, 2, 3, 4 in the Jungle; Give Me 5; Suzy Ladybug; 7 Train; 8 Octopus Legs; Highway 9; 10 Astronauts; When I Saw 11; I Love the Number 12; 13 Clues; 14 Camels; Fun 15; 16 Ants; Counting to 17; 18 Carrot Stew; 19 Around the World; 20 Fingers and Toes

BASIC MATH & SCIENCE

Math & Science Books

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

FLUENT MATH & SCIENCE

Math & Science Books

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

SUPPORT



Professional Services offers a continuum of customizable services. Learn more here.

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 Ill; J: Jack and Jill; K: Three Little Kittens; L: Mary Had a Little Lamb; M: Little Miss Muffett; N: I Touch My Nose Like This (Spanish); O: Polly, Put the Kettle On; P: This Little Pig; Q: Quack, Quack, Quack; R: Little Rabbit (Chinese); S: Eensy, Weensy Spider; T: Tortillas, Tortillas (Spanish); U: The Bus; V: My Valentine; W: Wee Willie Winkie; X: A-hunting We Will Go; Y: Yankee Doodle

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; Charley Chick; Adjectives Describe; Lazy Letter Q; Nouns; Verbs; Adverbs; Irregular Verbs; Preposition Cat; 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

Waterford Mentor 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).