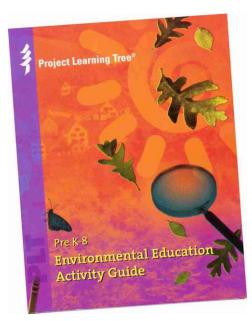
Project Learning Tree PreK-8 Environmental Education Activity Guide



Correlation to the Virginia Standards of Learning



Funding for this correlation was provided by the Virginia Forestry Educational Foundation and the United States Environmental Protection Agency, Office of Environmental Education.



TABLE OF CONTENTS:

Mathematics Standards of Learning	3
Science Standards of Learning	
English Standards of Learning	
History and Social Science Standards of Learning	44

Note: The SOLs referred to in this document are the 2009 SOLs for math, 2010 SOLs for science, 2010 SOLs for English, and the 2008 SOLs for history/social science.

Abbreviations and Symbol Key:

- CE = Civics and Economics
- HSS = History and Social Science
- LS = Life Science
- PS = Physical Science
- USI = United States History to 1877
- USII = United States History: 1877 to the Present
- VS = Virginia Studies
- WG = World Geography
- WHI = World History and Geography to 1500 A.D.
- Teaches the concept; main focus of the activity
- Includes some teaching of the concept; reinforces the concept; concept is part of the focus of the activity
- Reinforces, supports, or addresses the concept; connects concept to an environmental issue

MATHEMATICS STANDARDS OF LEARNING

Math K.8 The student will identify the instruments used to measure length (ruler), weight (scale), time (clock: digital and analog; calendar: day, month, and season), and temperature (thermometer).

•	Θ	0
	#21 Adopt a Tree	

Math K.10 The student will compare two objects or events, using direct comparisons or nonstandard units of measure, according to one or more of the following attributes: length (shorter, longer), height (taller, shorter), weight (heavier, lighter), temperature (hotter, colder). Examples of nonstandard units include foot length, hand span, new pencil, paper clip, and block.

•	۲	0
	#21 Adopt a Tree	
	#41 How Plants Grow	
	#43 Have Seeds Will Travel	

Math K.11 The student will a) identify, describe, and trace plane geometric figures (circle, triangle, square, and rectangle); and b) compare the size (larger, smaller) and shape of plane geometric figures (circle, triangle, square, and rectangle).

•	\odot	0
#1 The Shape of Things		

Math K.12 The student will describe the location of one object relative to another (above, below, next to) and identify representations of plane geometric figures (circle, triangle, square, and rectangle) regardless of their positions and orientation in space.

bquare; and restangle) regardless of their positions and enertation in space.		
•	۲	0
#1 The Shape of Things		

Math K.13 The student will gather data by counting and tallying.

•	· · · · · · · · · · · · · · · · · · ·	0
	#4 Sounds Around	

Math K.14 The student will display gathered data in object graphs, picture graphs, and tables, and will answer questions related to the data.

•	•	0
	#22 Trees As Habitats	#4 Sounds Around
	#25 Birds and Worms	#6 Picture This
	#27 Every Tree for Itself	#13 We All Need Trees
	#41 How Plants Grow	
	#43 Have Seeds Will Travel	
	#67 How Big Is Your Tree?	

Math K.15 The student will sort and classify objects according to attributes.

	oon and olacony objects accord	ang to attributeo.
•	۲	0
#6 Picture This	#1 The Shape of Things	
#13 We All Need Trees	#2 Get In Touch With Trees	
#36 Pollution Search		
#43 Have Seeds Will Travel		

Math 1.1 The student will a) count from 0 to 100 and write the corresponding numerals; and b) group a collection of up to 100 objects into tens and ones and write the corresponding numeral to develop an understanding of place value.

conceptinaling numeral to develop an anderetarialing of place value.		
•	۲	0
	#22 Trees As Habitats	
	#76 Tree Cookies	

Math 1.9 The student will use nonstandard units to measure length, weight/mass, and volume.

•	۲	0
#67 How Big Is Your Tree?	#21 Adopt a Tree	
_	#41 How Plants Grow	
	#77 Trees In Trouble	

Math 1.12 The student will identify and trace, describe, and sort plane geometric figures (triangle, square, rectangle, and circle) according to number of sides, vertices, and right angles.

•	۲	0
#1 The Shape of Things		

Math 1.13 The student will construct, model, and describe objects in the environment as geometric shapes (triangle, rectangle, square, and circle) and explain the reasonableness of each choice.

•	۲	0
#1 The Shape of Things		

Math 1.15 The student will interpret information displayed in a picture or object graph, using the vocabulary *more, less, fewer, greater than, less than,* and *equal to*.

•	۲	0
	#27 Every Tree for Itself	#22 Trees As Habitats
	#41 How Plants Grow	#25 Birds and Worms
	#67 How Big Is Your Tree?	

Math 1.16 The student will sort and classify concrete objects according to one or more attributes, including color, size, shape, and thickness.

•	۲	0
#6 Picture This	#1 The Shape of Things	
#13 We All Need Trees	#2 Get In Touch With Trees	
#36 Pollution Search		
#43 Have Seeds Will Travel		

Math 2.2 The student will a) identify the ordinal positions first through twentieth, using an ordered set of objects; and b) write the ordinal numbers.

•	۲	0
#3 Peppermint Beetle		#4 Sounds Around

Math 2.10 The student will a) count and compare a collection of pennies, nickels, dimes and quarters whose total value is \$2.00 or less; and b) correctly use the cent symbol (ϕ), dollar symbol (\$), and decimal point (.).

•	۲	0
		#31 Plant a Tree

Math 2.11 The student will estimate and measure a) length to the nearest centimeter and inch; b) weight/mass of objects in pounds/ounces and kilograms/grams, using a scale; and c) liquid volume in cups, pints, quarts, gallons, and liters.

•	۲	0
#67 How Big Is Your Tree?	#21 Adopt a Tree #41 How Plants Grow #77 Trees In Trouble	#51 Make Your Own Paper

Math 2.16 The student will identify, describe, compare, and contrast plane and solid geometric figures (circle/sphere, square/cube, and rectangle/rectangular prism).

•	۲	0
		#1 The Shape of Things
		#2 Get In Touch With Trees

Math 2.19 The student will analyze data displayed in picture graphs, pictographs, and bar graphs.

•	\odot	0
	#22 Trees As Habitats	
	#25 Birds and Worms	
	#36 Pollution Search	
	#41 How Plants Grow	
	#77 Trees In Trouble	

Math 3.1 The student will c) compare two whole numbers between 0 and 9,999, using symbols (>, <, or =) and words (*greater than, less than*, or *equal to*).

•	\odot	0
		#67 How Big Is Your Tree?

Math 3.4 The student will estimate solutions to and solve single-step and multistep problems involving the sum or difference of two whole numbers, each 9,999 or less, with or without regrouping.

•	\odot	0
#67 How Big Is Your Tree?		

Math 3.8 The student will determine, by counting, the value of a collection of bills and coins whose total value is \$5.00 or less, compare the value of the bills and coins, and make change.

•	۲	0
		#31 Plant a Tree

Math 3.9 The student will estimate and use U.S. Customary and metric units to measure a) length to the nearest $\frac{1}{2}$ -inch, inch, foot, yard, centimeter, and meter; b) liquid volume in cups, pints, quarts, gallons, and liters; c) weight/mass in ounces, pounds, grams, and kilograms; and d) area and perimeter.

•	۲	0
	#21 Adopt a Tree	#80 Nothing Succeeds Like
	#41 How Plants Grow	Succession
	#67 How Big Is Your Tree?	
	#70 Soil Stories	
	#76 Tree Cookies	
	#77 Trees In Trouble	

Math 3.12 The student will identify equivalent periods of time, including relationships among days, months, and years, as well as minutes and hours.

•	۲	0
		#80 Nothing Succeeds Like
		Succession

Math 3.17 The student will a) collect and organize data, using observations, measurements, surveys, or experiments; b) construct a line plot, a picture graph, or a bar graph to represent the data; and c) read and interpret the data represented in line plots, bar graphs, and picture graphs and write a sentence analyzing the data.

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#9 Planet Diversity	#22 Trees As Habitats	#1 The Shape of Things
#67 How Big Is Your Tree?	#25 Birds and Worms	#6 Picture This
_	#36 Pollution Search	#13 We All Need Trees
	#41 How Plants Grow	#14 Renewable or Not?
	#77 Trees In Trouble	#88 Life on the Edge

Math 3.19 The student will recognize and describe a variety of patterns formed using numbers, tables, and pictures, and extend the patterns, using the same or different forms.

•	•	0
		#80 Nothing Succeeds Like
		Succession

Math 4.1 The student will a) identify (orally and in writing) the place value for each digit in a whole number expressed through millions; b) compare two whole numbers expressed through millions, using symbols (>, <, or =); and c) round whole numbers expressed through millions to the nearest thousand, ten thousand, and hundred thousand.

•	۲	0
	#67 How Big Is Your Tree?	#66 Germinating Giants

Math 4.3 The student will a) read, write, represent, and identify decimals expressed through thousandths; b) round decimals to the nearest whole number, tenth, and hundredth; c) compare and order decimals; and d) given a model, write the decimal and fraction equivalents.

•	۲	0
	#70 Soil Stories	#28 Air Plants
		#38 Every Drop Counts
		#67 How Big Is Your Tree?

Math 4.4 The student will a) estimate sums, differences, products, and quotients of whole numbers; b) add, subtract, and multiply whole numbers.

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	#38 Every Drop Counts	#28 Air Plants
	#66 Germinating Giants	#53 On the Move
	#67 How Big Is Your Tree?	#73 Waste Watchers

Math 4.6 The student will a) estimate and measure weight/mass and describe the results in U.S. Customary and metric units as appropriate; and b) identify equivalent measurements between units within the U.S. Customary system (ounces, pounds, and tons) and between units within the metric system (grams and kilograms).

•	۲	0
#66 Germinating Giants	#76 Tree Cookies	

Math 4.7 The student will a) estimate and measure length, and describe the result in both metric and U.S. Customary units; and b) identify equivalent measurements between units within the U.S. Customary system (inches and feet; feet and yards; inches and yards; yards and miles) and between units within the metric system (millimeters and centimeters; centimeters and meters).

•	۲	0
#66 Germinating Giants	#21 Adopt a Tree	#9 Planet Diversity
#67 How Big Is Your Tree?	#41 How Plants Grow	
	#47 Are Vacant Lots Vacant?	
	#77 Trees In Trouble	
	#80 Nothing Succeeds Like	
	Succession	

Math 4.8 The student will a) estimate and measure liquid volume and describe the results in U.S. Customary units; and b) identify equivalent measurements between units within the U.S. Customary system (cups, pints, guarts, and gallons).

•	۲	0
	#16 Pass the Plants, Please	#51 Make Your Own Paper
	#38 Every Drop Counts	

Math 4.10 The student will a) identify and describe representations of points, lines, line segments, rays, and angles, including endpoints and vertices; and b) identify representations of lines that illustrate intersection, parallelism, and perpendicularity.

•	۲	0
		#67 How Big Is Your Tree?

Math 4.14 The student will collect, organize, display, and interpret data from a variety of graphs.

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#16 Pass the Plants, Please	#9 Planet Diversity	#13 We All Need Trees
#25 Birds and Worms	#37 Reduce, Reuse, Recycle	#14 Renewable or Not?
#67 How Big Is Your Tree?	#41 How Plants Grow	#22 Trees As Habitats
	#45 Web of Life	#88 Life on the Edge
	#66 Germinating Giants	Ũ
	#77 Trees In Trouble	
	#80 Nothing Succeeds Like	
	Succession	

Math 5.4 The student will create and solve single-step and multistep practical problems involving addition, subtraction, multiplication, and division with and without remainders of whole numbers.

•	۲	0
#66 Germinating Giants	#38 Every Drop Counts	#12 Invasive Species
#67 How Big Is Your Tree?	#85 In the Driver's Seat	#28 Air Plants
#70 Soil Stories		#31 Plant a Tree
		#52 A Look at Aluminum
		#53 On the Move
		#73 Waste Watchers

Math 5.8 The student will a) find perimeter, area, and volume in standard units of measure; b) differentiate among perimeter, area, and volume and identify whether the application of the concept of perimeter, area, or volume is appropriate for a given situation; c) identify equivalent measurements within the metric system; d) estimate and then measure to solve problems, using U.S. Customary and metric units; and e) choose an appropriate unit of measure for a given situation involving measurement using U.S. Customary and metric units.

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 ● #38 Every Drop Counts #41 How Plants Grow #47 Are Vacant Lots Vacant? #48 Field, Forest, and Stream #67 How Big Is Your Tree? #70 Soil Stories #77 Trees In Trouble #80 Nothing Succeeds Like Succession 	O #21 Adopt a Tree #66 Germinating Giants
#85 In the Driver's Seat	

Math 5.9 The student will identify and describe the diameter, radius, chord, and circumference of a circle.

•	\odot	0
#66 Germinating Giants	#21 Adopt a Tree	
#67 How Big Is Your Tree?	#76 Tree Cookies	

Math 5.15 The student, given a problem situation, will collect, organize, and interpret data in a variety of forms, using stem-and-leaf plots and line graphs.

•	۲	0
#70 Soil Stories	#22 Trees As Habitats	#67 How Big Is Your Tree?
	#37 Reduce, Reuse, Recycle	#88 Life on the Edge
	#41 How Plants Grow	
	#47 Are Vacant Lots Vacant?	
	#77 Trees In Trouble	
	#80 Nothing Succeeds Like	
	Succession	

Math 5.16 The student will a) describe mean, median, and mode as measures of center; b) describe mean as fair share; c) find the mean, median, mode, and range of a set of data; and d) describe the range of a set of data as a measure of variation

and d) describe the range of a set of data as a measure of variation.		
•	\odot	0
		#85 In the Driver's Seat

Math 5.17 The student will describe the relationship found in a number pattern and express the relationship.

•	۲	0
		#12 Invasive Species

Math 6.1 The student will describe and compare data, using ratios, and will use appropriate notations, such as *a/b*, *a* to *b*, and *a*:*b*.

•	۲	0
		#70 Soil Stories

Math 6.2 The student will a) investigate and describe fractions, decimals, and percents as ratios; b) identify a given fraction, decimal, or percent from a representation; c) demonstrate equivalent relationships among fractions, decimals, and percents; and d) compare and order fractions, decimals, and percents.

•	۲	0
	#66 Germinating Giants #70 Soil Stories	#28 Air Plants

Math 6.6 The student will a) multiply and divide fractions and mixed numbers; and b) estimate solutions and then solve single-step and multistep practical problems involving addition, subtraction, multiplication, and division of fractions.

addition, bubilabilon, maliphedition, and ambien of nabilono.		
•	۲	0
	#21 Adopt a Tree	#52 A Look at Aluminum
	#37 Reduce, Reuse, Recycle	#53 On the Move
	#38 Every Drop Counts	#84 The Global Climate
	#66 Germinating Giants	
	#70 Soil Stories	
	#85 In the Driver's Seat	

Math 6.7 The student will solve single-step and multistep practical problems involving addition, subtraction, multiplication, and division of decimals.

•	•	0
	#85 In the Driver's Seat	#31 Plant a Tree #67 How Big Is Your Tree?
		#73 Waste Watchers

Math 6.8 The student will evaluate whole number numerical expressions, using the order of operations.

•	۲	0
	#50 400-Acre Wood	

Math 6.9 The student will make ballpark comparisons between measurements in the U.S. Customary System of measurement and measurements in the metric system.

•	۲	0
	#38 Every Drop Counts	#29 Rain Reasons
	#41 How Plants Grow	#66 Germinating Giants
	#67 How Big Is Your Tree?	
	#76 Tree Cookies	
	#80 Nothing Succeeds Like	
	Succession	

Math 6.10 The student will a) define π (pi) as the ratio of the circumference of a circle to its diameter; b) solve practical problems involving circumference and area of a circle, given the diameter or radius; c) solve practical problems involving area and perimeter...

\odot	0
#21 Adopt a Tree	
#27 Every Tree for Itself	
#47 Are Vacant Lots Vacant?	
#66 Germinating Giants	
#67 How Big Is Your Tree?	

Math 6.14 The student, given a problem situation, will a) construct circle graphs; b) draw conclusions and make predictions, using circle graphs.

•	•	0
	#16 Pass the Plants, Please #25 Birds and Worms	
	#37 Reduce, Reuse, Recycle	
	#50 400-Acre Wood	

Math 6.15 The student will a) describe mean as balance point; and b) decide which measure of center is appropriate for a given purpose.

•	<u> </u>	0
		#85 In the Driver's Seat

Math 6.17 The student will identify and extend geometric and arithmetic sequences.

. •	\odot	0
		#12 Invasive Species

Math 6.19 The student will investigate and recognize a) the identity properties for addition and multiplication; b) the multiplicative property of zero; and c) the inverse property for multiplication.

•	۲	0
		#50 400-Acre Wood

Math 7.3 The student will a) model addition, subtraction, multiplication, and division of integers; and b) add, subtract, multiply, and divide integers.

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	#38 Every Drop Counts	#12 Invasive Species
	#50 400-Acre Wood	#73 Waste Watchers
	#84 The Global Climate	

Math 7.4 The student will solve single-step and multistep practical problems, using proportional reasoning.

•	۲	0
#67 How Big Is Your Tree?	#50 400-Acre Wood	#37 Reduce, Reuse, Recycle
#70 Soil Stories		

Math 7.11 The student, given data for a practical situation, will

a) construct and analyze histograms; and b) compare and contrast histograms with other types of graphs presenting information from the same data set.

•	۲	0
	#41 How Plants Grow	#12 Invasive Species
	#50 400-Acre Wood	#85 In the Driver's Seat

Math 7.13 The student will a) write verbal expressions as algebraic expressions and sentences as equations and vice versa; and b) evaluate algebraic expressions for given replacement values of the variables.

•	۲	0
	#50 400-Acre Wood	

Math 8.3 The student will a) solve practical problems involving rational numbers, percents, ratios, and proportions; and b) determine the percent increase or decrease for a given situation.

•	۲	0
#67 How Big Is Your Tree?	#37 Reduce, Reuse, Recycle	#12 Invasive Species
#70 Soil Stories	#38 Every Drop Counts	#31 Plant a Tree
	#50 400-Acre Wood	#53 On the Move
	#84 The Global Climate	#69 Forest for the Trees
	#85 In the Driver's Seat	

Math 8.4 The student will apply the order of operations to evaluate algebraic expressions for given replacement values of the variables.

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	#50 400-Acre Wood	

Math 8.13 The student will a) make comparisons, predictions, and inferences, using information displayed in graphs; and b) construct and analyze scatterplots

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#84 The Global Climate	#35 Loving It Too Much #41 How Plants Grow #50 400-Acre Wood #77 Trees In Trouble	#88 Life on the Edge

Math 8.14 The student will make connections between any two representations (tables, graphs, words, and rules) of a given relationship.

•	· · · · · · · · · · · · · · · · · · ·	0
#67 How Big Is Your Tree?	#22 Trees As Habitats #25 Birds and Worms #50 400-Acre Wood	

Math 8.15 The student will a) solve multistep linear equations in one variable with the variable on one and two sides of the equation...

•	۲	0
	#50 400-Acre Wood	

SCIENCE STANDARDS OF LEARNING

Science K.1	The student will demonstrate an understanding of scientific reasoning, logic,
and the nature	e of science by planning and conducting investigations.

۲	0
#1 The Shape of Things	
#2 Get In Touch With Trees	
#3 Peppermint Beetle	
#21 Adopt a Tree	
#27 Every Tree for Itself	
#43 Have Seeds Will Travel	
#64 Looking At Leaves	
#78 Signs of Fall	
	 #2 Get In Touch With Trees #3 Peppermint Beetle #21 Adopt a Tree #27 Every Tree for Itself #43 Have Seeds Will Travel #64 Looking At Leaves

Science K.2 The student will investigate and understand that humans have senses that allow them to seek, find, take in and react or respond to information in order to learn about their surroundings.

•	۲	0
#21 Adopt a Tree	#1 The Shape of Things	#16 Pass the Plants, Please
#46 School Yard Safari	#2 Get In Touch With Trees	#51 Make Your Own Paper
#47 Are Vacant Lots Vacant?	#3 Peppermint Beetle	
	#4 Sounds Around	
	#6 Picture This!	
	#43 Have Seeds Will Travel	

Science K.4 The student will investigate and understand that the position, motion, and physical properties of an object can be described.

•	•	0
#1 The Shape of Things #2 Get In Touch With Trees	#51 Make Your Own Paper #78 Signs of Fall	#4 Sounds Around
#48 Field, Forest, and Stream		
#64 Looking At Leaves		
#65 Bursting Buds		

Science K.5 The student will investigate and understand that water flows and has properties that can be observed and tested.

•	۲	0
		#51 Make Your Own Paper

Science K.6 The student will investigate and understand the differences between living organisms and nonliving objects.

•	۲	0
	#4 Sounds Around	
	#21 Adopt a Tree	
	#22 Trees as Habitats	

Science K.7 The student will investigate and understand basic needs and life processes of plants and animals.

•	•	0
#21 Adopt a Tree	#16 Pass the Plants, Please	#8 The Forest of S. T. Shrew
#24 Nature's Recyclers	#22 Trees as Habitats	#25 Birds and Worms
#27 Every Tree for Itself	#62 To Be a Tree	#46 School Yard Safari
#41 How Plants Grow	#78 Signs of Fall	#47 Are Vacant Lots Vacant?
#79 Tree Lifecycle	_	#61 The Closer You Look
		#95 Did You Notice?

Science K.9 The student will investigate and understand that there are simple repeating patterns in his/her daily life.

•	\odot	0
#1 The Shape of Things	#78 Signs of Fall	#41 How Plants Grow
#61 The Closer You Look	#79 Tree Lifecycle	#46 School Yard Safari
#64 Looking At Leaves		#47 Are Vacant Lots Vacant?
_		#49 Tropical Treehouse

Science K.10 The student will investigate and understand that change occurs over time, and rates may be fast or slow.

•	۲	0
#21 Adopt a Tree	#18 Tale of the Sun	#41 How Plants Grow
#65 Bursting Buds		#46 School Yard Safari
#78 Signs of Fall		#47 Are Vacant Lots Vacant?

Science K.11 The student will investigate and understand that materials can be reused, recycled, and conserved.

•	\odot	0
#13 We All Need Trees	#36 Pollution Search	#20 Environmental Exchange Box
#51 Make Your Own Paper	#87 Earth Manners	

Science 1.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.

•	۲	0
#22 Trees As Habitats	#1 The Shape of Things	
#24 Nature's Recyclers	#2 Get In Touch With Trees	
#47 Are Vacant Lots Vacant?	#3 Peppermint Beetle	
#48 Field, Forest, and Stream	#21 Adopt a Tree	
#76 Tree Cookies	#27 Every Tree for Itself	
#77 Trees In Trouble	#43 Have Seeds Will Travel	
	#46 School Yard Safari	
	#64 Looking At Leaves	
	#65 Bursting Buds	
	#78 Signs of Fall	

•	•	0
#21 Adopt a Tree	#2 Get In Touch With Trees	#22 Trees As Habitats
#31 Plant a Tree	#6 Picture This	#42Sunlight and Shades of Green
#41 How Plants Grow	#16 Pass the Plants, Please	#67 How Big Is Your Tree?
#43 Have Seeds Will Travel	#27 Every Tree for Itself	#87 Earth Manners
#62 To Be a Tree	#61 The Closer You Look	
#64 Looking At Leaves	#63 Tree Factory	
#78 Signs of Fall	#65 Bursting Buds	
	#76 Tree Cookies	
	#77 Trees In Trouble	
	#79 Tree Lifecycle	

Science 1.4 The student will investigate and understand that plants have basic life needs and functional parts and can be classified according to certain characteristics.

Science 1.5 The student will investigate and understand that animals, including humans, have basic needs and certain distinguishing characteristics.

•	۲	0
#20 Environmental Exchange Box	#6 Picture This!	#3 Peppermint Beetle
#24 Nature's Recyclers #46 School Yard Safari #47 Are Vacant Lots Vacant? #87 Earth Manners	#8 The Forest of S. T. Shrew #25 Birds and Worms #74 People, Places, Things	#76 Tree Cookies

Science 1.6 The student will investigate and understand the basic relationships between the sun and Earth.

•	۲	0
#18 Tale of the Sun		

Science 1.7 The student will investigate and understand weather and seasonal changes.

•	۲	0
#21 Adopt a Tree	#3 Peppermint Beetle	#6 Picture This!
#65 Bursting Buds	#20 Environmental Exchange Box	#18 Tale of the Sun
#76 Tree Cookies	#77 Trees In Trouble	#41 How Plants Grow
#78 Signs of Fall		#43 Have Seeds Will Travel
		#46 School Yard Safari
		#47 Are Vacant Lots Vacant?
		#48 Field, Forest, and Stream
		#61 The Closer You Look
		#79 Tree Lifecycle

Science 1.8 The student will investigate and understand that natural resources are limited.

•	۲	0
#13 We All Need Trees	#21 Adopt a Tree	#20 Environmental Exchange Box
#89 Trees for Many Reasons	#22 Trees As Habitats	#77 Trees In Trouble
	#30 Three Cheers for Trees	
	#32 A Forest of Many Uses	
	#36 Pollution Search	
	#51 Make Your Own Paper	
	#54 I'd Like to Visit a Place	
	Where	
	#74 People, Places, Things	
	#87 Earth Manners	

•	۲	0
#22 Trees As Habitats	#27 Every Tree for Itself	#3 Peppermint Beetle
#24 Nature's Recyclers	#43 Have Seeds Will Travel	#42 Sunlight and Shades of Green
#41 How Plants Grow	#46 School Yard Safari	
#47 Are Vacant Lots Vacant?	#65 Bursting Buds	
#48 Field, Forest, and Stream	#78 Signs of Fall	
#76 Tree Cookies		
#77 Trees In Trouble		

Science 2.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.

Science 2.3 The student will investigate and understand basic properties of solids, liquids, and gases.

•	۲	0
	#51 Make Your Own Paper	

Science 2.4 The student will investigate and understand that plants and animals undergo a series of orderly changes as they mature and grow.

•	•	0
#21 Adopt a Tree	#65 Bursting Buds	#46 School Yard Safari
#24 Nature's Recyclers	#68 Name That Tree	#47 Are Vacant Lots Vacant?
#43 Have Seeds Will Travel	#76 Tree Cookies	
#61 The Closer You Look	#77 Trees In Trouble	
#79 Tree Lifecycle	#78 Signs of Fall	

Science 2.5 The student will investigate and understand that living things are part of a system.

•	۲	0
#18 Tale of the Sun	#10 Charting Diversity	#3 Peppermint Beetle
#22 Trees As Habitats	#27 Every Tree for Itself	#49 Tropical Treehouse
#24 Nature's Recyclers	#30 Three Cheers for Trees	#79 Tree Lifecycle
#31 Plant a Tree	#36 Pollution Search	
#41 How Plants Grow	#43 Have Seeds Will Travel	
#46 School Yard Safari	#74 People, Places, Things	
#47 Are Vacant Lots Vacant?	#76 Tree Cookies	
#48 Field, Forest, and Stream	#77 Trees In Trouble	
#89 Trees for Many Reasons		

Science 2.7 The student will investigate and understand that weather and seasonal changes affect plants, animals, and their surroundings.

•	\odot	0
#21 Adopt a Tree	#3 Peppermint Beetle	#24 Nature's Recyclers
#76 Tree Cookies	#23 The Fallen Log	#27 Every Tree for Itself
#78 Signs of Fall	#25 Birds and Worms	#41 How Plants Grow
	#77 Trees In Trouble	#43 Have Seeds Will Travel
		#46 School Yard Safari
		#47 Are Vacant Lots Vacant?
		#48 Field, Forest, and Stream
		#49 Tropical Treehouse
		#61 The Closer You Look
		#68 Name That Tree

•	۲	0
#13 We All Need Trees	#16 Pass the Plants, Please	#5 Poet-Tree
#31 Plant a Tree	#20 Environmental Exchange Box	#18 Tale of the Sun
#32 A Forest of Many Uses	#30 Three Cheers for Trees	#43 Have Seeds Will Travel
#42 Sunlight and Shades of	#41 How Plants Grow	#61 The Closer You Look
Green	#51 Make Your Own Paper	#68 Name That Tree
	#87 Earth Manners	#76 Tree Cookies
	#89 Trees for Many Reasons	#77 Trees In Trouble

Science 2.8 The student will investigate and understand that plants produce oxygen and food, are a source of useful products, and provide benefits in nature.

Science 3.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.

•	\odot	0
#22 Trees As Habitats	#27 Every Tree for Itself	#3 Peppermint Beetle
#23 The Fallen Log	#46 School Yard Safari	#16 Pass the Plants, Please
#24 Nature's Recyclers	#65 Bursting Buds	#42 Sunlight and Shades of
#25 Birds and Worms	#67 How Big Is Your Tree?	Green
#47 Are Vacant Lots Vacant?	#78 Signs of Fall	#44 Water Wonders
#48 Field, Forest, and Stream	-	

Science 3.3 The student will investigate and understand that objects are made of materials that can be described by their physical properties.

•	۲	0
#51 Make Your Own Paper		

Science 3.4 The student will investigate and understand that adaptations allow animals to satisfy life needs and respond to the environment.

•	۲	0
#10 Charting Diversity	#21 Adopt a Tree	#3 Peppermint Beetle
#25 Birds and Worms	#88 Life on the Edge	#4 Sounds Around
#46 School Yard Safari		#20 Environmental Exchange Box
#47 Are Vacant Lots Vacant?		#48 Field, Forest, and Stream

Science 3.5 The student will investigate and understand relationships among organisms in aquatic and terrestrial food chains.

•	\odot	0
#22 Trees As Habitats	#63 Tree Factory	#49 Tropical Treehouse
#23 The Fallen Log	#79 Tree Lifecycle	#62 To Be a Tree
#24 Nature's Recyclers		#76 Tree Cookies
#25 Birds and Worms		

Science 3.6 The student will investigate and understand that ecosystems support a diversity of plants and animals that share limited resources.

•	۲	0
#7 Habitat Pen Pals	#8 The Forest of S. T. Shrew	#22 Trees As Habitats
#9 Planet Diversity	#31 Plant a Tree	#36 Pollution Search
#46 School Yard Safari	#32 A Forest of Many Uses	#77 Trees In Trouble
#47 Are Vacant Lots Vacant?	#49 Tropical Treehouse	#80 Nothing Succeeds Like
#48 Field, Forest, and Stream	#65 Bursting Buds	Succession
#88 Life on the Edge	#67 How Big Is Your Tree?	#87 Earth Manners

Science 3.7	The student will investigate and understand the major components of soil, its	
origin, and im	ortance to plants and animals including humans.	

•	•	0
#24 Nature's Recyclers	#23 The Fallen Log	#20 Environmental Exchange Box
#48 Field, Forest, and Stream	#27 Every Tree for Itself	#46 School Yard Safari
#70 Soil Stories	#41 How Plants Grow	#47 Are Vacant Lots Vacant?
	#63 Tree Factory	#62 To Be a Tree
		#79 Tree Lifecycle

Science 3.8 The student will investigate and understand basic patterns and cycles occurring in nature.

•	۲	0
#65 Bursting Buds	#44 Water Wonders	#41 How Plants Grow
#79 Tree Lifecycle	#63 Tree Factory	#43 Have Seeds Will Travel
	#78 Signs of Fall	#48 Field, Forest, and Stream
	#80 Nothing Succeeds Like	#68 Name That Tree
	Succession	

Science 3.9 The student will investigate and understand the water cycle and its relationship to life on Earth.

•	۲	0
#44 Water Wonders	 #20 Environmental Exchange Box #27 Every Tree for Itself #41 How Plants Grow #42 Sunlight and Shades of Green #62 To Be a Tree #63Tree Factory 	#77 Trees in Trouble

Science 3.10 The student will investigate and understand that natural events and human influences can affect the survival of species.

•	\odot	0
#81 Living With Fire	#30 Three Cheers for Trees	#34 Who Works in This Forest?
#88 Life on the Edge	#31 Plant a Tree	#41 How Plants Grow
#89 Trees for Many Reasons	#32 A Forest of Many Uses	#44 Water Wonders
	#36 Pollution Search	#46 School Yard Safari
	#49 Tropical Treehouse	#47 Are Vacant Lots Vacant?
	#76 Tree Cookies	#51 Make Your Own Paper
	#87 Earth Manners	#74 People, Places, Things
		#80 Nothing Succeeds Like
		Succession
		#82 Resource-Go-Round
		#95 Did You Notice?

Science 3.11 The student will investigate and understand different sources of energy.

•	\odot	0
#14 Renewable or Not?	#13 We All Need Trees	#16 Pass the Plants, Please
#15 A Few of My Favorite Things #39 Energy Sleuths #82 Resource-Go-Round	#42 Sunlight and Shades of Green	#18 Tale of the Sun #20 Environmental Exchange Box #44 Water Wonders #89 Trees for Many Reasons

and the nature of science by planning and conducting investigations.		
•	۲	0
#9 Planet Diversity	#27 Every Tree for Itself	#16 Pass the Plants, Please
#22 Trees As Habitats	#37 Reduce, Reuse, Recycle	#28 Air Plants
#41 How Plants Grow	#38 Every Drop Counts	#42 Sunlight and Shades of
#48 Field, Forest, and Stream	#43 Have Seeds Will Travel	Green
#77 Trees In Trouble	#47 Are Vacant Lots Vacant?	#44 Water Wonders
	#65 Bursting Buds	#46 School Yard Safari
	#66 Germinating Giants	
	#67 How Big Is Your Tree?	
	#78 Signs of Fall	
	#80 Nothing Succeeds Like	
	Succession	
	#81 Living With Fire	

Science 4.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.

Science 4.4	The student will investigate and understand basic plant anatomy and life
processes.	

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•	\odot	0
#21 Adopt a Tree	#16 Pass the Plants, Please	#22 Trees As Habitats
#28 Air Plants	#27 Every Tree for Itself	#49 Tropical Treehouse
#41 How Plants Grow	#64 Looking At Leaves	
#42 Sunlight and Shades of Green	#65 Bursting Buds	
#43 Have Seeds Will Travel	#66 Germinating Giants #77 Trees In Trouble	
#43 Have Seeds Will Have	#79 Tree Lifecycle	
#62 To Be a Tree		
#63 Tree Factory		
#68 Name That Tree		
#76 Tree Cookies		
#78 Signs of Fall		

Science 4.5 The student will investigate and understand how plants and animals, including
humans, in an ecosystem interact with one another and with the nonliving components in
the ecosystem.

•	۲	0
#6 Picture This	#17 People of the Forest	#37 Reduce, Reuse, Recycle
#7 Habitat Pen Pals	#18 Tale of the Sun	#54 I'd Like to Visit a Place
#8 The Forest of S. T. Shrew	#20 Environmental Exchange Box	Where
#9 Planet Diversity	#24 Nature's Recyclers	#64 Looking At Leaves
#11 Can It Be Real?	#25 Birds and Worms	#67 How Big Is Your Tree?
#21 Adopt a Tree	#26 Dynamic Duos	#76 Tree Cookies
#22 Trees As Habitats	#28 Air Plants	#77 Trees In Trouble
#23 The Fallen Log	#36 Pollution Search	#79 Tree Lifecycle
#45 Web of Life	#38 Every Drop Counts	#80 Nothing Succeeds Like
#46 School Yard Safari	#40 Then and Now	Succession
#47 Are Vacant Lots Vacant?	#41 How Plants Grow	#95 Did You Notice?
#48 Field, Forest, and Stream	#43 Have Seeds Will Travel	
#88 Life on the Edge	#49 Tropical Treehouse	
	#56 We Can Work It Out	
	#62 To Be a Tree	
	#63 Tree Factory	
	#65 Bursting Buds	
	#69 Forest for the Trees	
	#75 Tipi Talk	
	#81 Living With Fire	
	#90 Native Ways	

Science 4.6 The student will investigate and understand how weather conditions and phenomena occur and can be predicted.

•	۲	0
		#81 Living With Fire

Science 4.9 The student will investigate and understand important Virginia natural resources.

•	۲	0
#13 We All Need Trees	#21 Adopt a Tree	#5 Poet-Tree
#14 Renewable or Not?	#22 Trees As Habitats	#17 People of the Forest
#15 A Few of My Favorite Things #20 Environmental Exchange Box	#30 Three Cheers for Trees	#31 Plant a Tree
-	#32 A Forest of Many Uses	#34 Who Works in This Forest?
#51 Make Your Own Paper	#38 Every Drop Counts	#35 Loving It Too Much
#69 Forest for the Trees	#56 We Can Work It Out	#37 Reduce, Reuse, Recycle
#88 Life on the Edge	#68 Name That Tree	#44 Water Wonders
	#73 Waste Watchers	#46 School Yard Safari
	#89 Trees For Many Reasons	#54 I'd Like to Visit a Place
		Where
		#77 Trees In Trouble
		#80 Nothing Succeeds Like
		Succession
		#82 Resource-Go-Round
		#87 Earth Manners
		#90 Native Ways
		#91 In the Good Old Days
		#93 Paper Civilizations
		#94 By the Rivers of Babylon #95 Did You Notice?

Science 5.1	The student will demonstrate an understanding of scientific reasoning, logic,
and the natur	e of science by planning and conducting investigations.

•	۲	0
#24 Nature's Recyclers	#65 Bursting Buds	#28 Air Plants
	#80 Nothing Succeeds Like Succession	#37 Reduce, Reuse, Recycle

Science 5.2 The student will investigate and understand how sound is created and transmitted, and how it is used.

•	۲	0
		#4 Sounds Around

Science 5.5 The student will investigate and understand that organisms are made of one or more cells and have distinguishing characteristics that play a vital role in the organism's ability to survive and thrive in its environment.

•	۲	0
	#23 The Fallen Log	#9 Planet Diversity
	#24 Nature's Recyclers	#61 The Closer You Look
	#28 Air Plants	#80 Nothing Succeeds Like
	#63 Tree Factory	Succession
	#65 Bursting Buds	
	#68 Name That Tree	

Science 5.6 The student will investigate and understand characteristics of the ocean environment.

•	۲	0
	#7 Habitat Pen Pals	#20 Environmental Exchange Box
	#88 Life on the Edge	#45 Web of Life
		#86 Our Changing World

Science 5.7 The student will investigate and understand how Earth's surface is constantly changing.

•	۲	0
	#70 Soil Stories	#37 Reduce, Reuse, Recycle
		#52 A Look at Aluminum

Science 6.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.

•	۲	0
#70 Soil Stories	#37 Reduce, Reuse, Recycle	#28 Air Plants
#71 Watch on Wetlands	#38 Every Drop Counts	#42 Sunlight and Shades of
#72 Air We Breathe	#48 Field, Forest, and Stream	Green
#84 The Global Climate	#73 Waste Watchers	#44 Water Wonders
#85 In the Driver's Seat		

Science 6.2 The student will investigate and understand basic sources of energy, their origins, transformations and uses.

•	۲	0
#14 Renewable or Not?	#28 Air Plants	#51 Make Your Own Paper
#73 Waste Watchers	#39 Energy Sleuths	#52 A Look at Aluminum
#82 Resource-Go-Round	#53 On the Move	
#85 In the Driver's Seat		

Science 6.3 The student will investigate and understand the role of solar energy in driving most natural processes within the atmosphere, the hydrosphere, and on the Earth's surface.

•	\odot	0
	#28 Air Plants	
	#41 How Plants Grow	
	#42 Sunlight and Shades of	
	Green	
	#73 Waste Watchers	

Science 6.5 The student will investigate and understand the unique properties and characteristics of water and its roles in the natural and human-made environment.

•	۲	0
#44 Water Wonders	#38 Every Drop Counts	
	#70 Soil Stories	
	#71 Watch on Wetlands	

Science 6.6 The student will investigate and understand the properties of air and the structure and dynamics of the Earth's atmosphere.

•	۲	0
#73 Waste Watchers	#31 Plant a Tree	#28 Air Plants
#84 The Global Climate	#72 Air We Breathe #86 Our Changing World	#85 In the Driver's Seat

Science 6.7 The student will investigate and understand the natural processes and human interactions that affect watershed systems.

•	۲	0
#38 Every Drop Counts	#12 Invasive Species	
#44 Water Wonders	#70 Soil Stories	
#48 Field, Forest, & Stream		
#71 Watch on Wetlands		

Science 6.8 The student will investigate and understand the organization of the solar system and the interactions among the various bodies that comprise it.

•	•	0
	#86 Our Changing World	#18 Tale of the Sun

the environment.		
•	۲	0
#19 Viewpoints on the Line	#12 Invasive Species	#5 Poet-Tree
#32 A Forest of Many Uses	#14 Renewable or Not?	#13 We All Need Trees
#49 Tropical Treehouse	#33 Forest Consequences	#15 A Few of My Favorite Things
#50 400-Acre Wood	#35 Loving It Too Much	#17 People of the Forest
#56 We Can Work It Out	#37 Reduce, Reuse, Recycle	#20 Environmental Exchange Box
#69 Forest for the Trees	#38 Every Drop Counts	#34 Who Works in This Forest?
	#52 A Look at Aluminum	#36 Pollution Search
	#57 Democracy in Action	#39 Energy Sleuths
	#59 Power of Print	#40 Then and Now
	#60 Publicize It!	#51 Make Your Own Paper
	#71 Watch on Wetlands	#53 On the Move
	#73 Waste Watchers	#58 There Ought To Be a Law
	#84 The Global Climate	#70 Soil Stories
	#88 Life on the Edge	#72 Air We Breathe
	#89 Trees for Many Reasons	#75 Tipi Talk
	#91 In the Good Old Days	#77 Trees In Trouble
	#92 A Look at Lifestyles	#82 Resource-Go-Round
	#94 By the Rivers of Babylon	#86 Our Changing World
	#96 Improve Your Place	#90 Native Ways
		#95 Did You Notice?

Science 6.9 The student will investigate and understand public policy decisions relating to the environment.

Life Science LS.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations..

- 3 - 3	<u> </u>	5
•	\odot	0
#9 Planet Diversity	#27 Every Tree for Itself	#28 Air Plants
#22 Trees As Habitats	#48 Field, Forest, and Stream	#38 Every Drop Counts
#23 The Fallen Log	#67 How Big Is Your Tree?	#42 Sunlight and Shades of
#24 Nature's Recyclers	#78 Signs of Fall	Green
#29 Rain Reasons	#80 Nothing Succeeds Like	#44 Water Wonders
#71 Watch on Wetlands	Succession	#47 Are Vacant Lots Vacant?
#77 Trees In Trouble	#81 Living With Fire	#65 Bursting Buds
		#73 Waste Watchers

Life Science LS.3 The student will investigate and understand that living things show patterns of cellular organization.

•	۲	0
#76 Tree Cookies		#61 The Closer You Look

Life Science LS.4 The student will investigate and understand how organisms can be classified.

•	۲	0
#64 Looking At Leaves	#21 Adopt a Tree	#12 Invasive Species
#68 Name That Tree	#43 Have Seeds Will Travel	
	#61 The Closer You Look	
	#65 Bursting Buds	
	#67 How Big Is Your Tree?	
	#71 Watch on Wetlands	
	#78 Signs of Fall	

Life Science LS.5 The student will investigate and understand the basic physical and chemical processes of photosynthesis and its importance to plant and animal life.

•	۲	0
#28 Air Plants	#21 Adopt a Tree	#49 Tropical Treehouse
#42 Sunlight and Shades of	#27 Every Tree for Itself	#70 Soil Stories
Green	#41 How Plants Grow	#78 Signs of Fall
	#84 The Global Climate	-

Life Science LS.6 The student will investigate and understand that organisms within an ecosystem are dependent on one another and on nonliving components of the environment.

•	۲	0
#22 Trees As Habitats	#12 Invasive Species	#70 Soil Stories
#23 The Fallen Log	#31 Plant a Tree	#80 Nothing Succeeds Like
#24 Nature's Recyclers	#41 How Plants Grow	Succession
#29 Rain Reasons	#43 Have Seeds Will Travel	
#44 Water Wonders	#49 Tropical Treehouse	
#45 Web of Life	#71 Watch on Wetlands	
#48 Field, Forest, and Stream	#86 Our Changing World	
#84 The Global Climate		

Life Science LS.7 The student will investigate and understand that interactions exist among members of a population.

•	•	0
#12 Invasive Species	#49 Tropical Treehouse	#67 How Big Is Your Tree?
#26 Dynamic Duos	#71 Watch on Wetlands	#69 Forest for the Trees
#27 Every Tree for Itself	#76 Tree Cookies	#80 Nothing Succeeds Like
	#77 Trees in Trouble	Succession
		#90 Native Ways

Life Science LS.8 The student will investigate and understand interactions among populations in a biological community.

•	۲	0
#12 Invasive Species	#25 Birds and Worms	#7 Habitat Pen Pals
#22 Trees As Habitats	#27 Every Tree for Itself	#9 Planet Diversity
#23 The Fallen Log	#33 Forest Consequences	#48 Field, Forest, and Stream
#24 Nature's Recyclers	#47 Are Vacant Lots Vacant?	#61 The Closer You Look
#26 Dynamic Duos	#49 Tropical Treehouse	#71 Watch on Wetlands
#45 Web of Life	#67 How Big Is Your Tree?	#76 Tree Cookies
#50 400-Acre Wood	#69 Forest for the Trees	
#88 Life on the Edge	#86 Our Changing World	

Life Science LS.9 The student will investigate and understand how organisms adapt to biotic and abiotic factors in an ecosystem.

•	•	0
#7 Habitat Pen Pals	#12 Invasive Species	#9 Planet Diversity
#10 Charting Diversity	#22 Trees As Habitats	#69 Forest for the Trees
#71 Watch on Wetlands	#25 Birds and Worms	#70 Soil Stories
	#26 Dynamic Duos	#86 Our Changing World
	#48 Field, Forest, and Stream	
	#49 Tropical Treehouse	

Life Science LS.10 The student will investigate and understand that ecosystems, communities, populations, and organisms are dynamic, change over time, and respond to daily, seasonal, and long-term changes in their environment.

•	۲	0
#50 400-Acre Wood	#12 Invasive Species	#67 How Big Is Your Tree?
#71 Watch on Wetlands	#23 The Fallen Log	#77 Trees In Trouble
#84 The Global Climate	#24 Nature's Recyclers	#78 Signs of Fall
#86 Our Changing World	#25 Birds and Worms	_
	#49 Tropical Treehouse	
	#69 Forest for the Trees	
	#76 Tree Cookies	
	#80 Nothing Succeeds Like	
	Succession	
	#81 Living With Fire	
	#88 Life on the Edge	

Life Science LS.11 The student will investigate and understand the relationships between ecosystem dynamics and human activity.

	•	0
 #14 Renewable or Not? #19 Viewpoints on the Line #49 Tropical Treehouse #50 400-Acre Wood #69 Forest for the Trees #71 Watch on Wetlands 	 ● #12 Invasive Species #15 A Few of My Favorite Things #29 Rain Reasons #31 Plant a Tree #32 A Forest of Many Uses #33 Forest Consequences 	O #5 Poet-Tree #21 Adopt a Tree #22 Trees As Habitats #30 Three Cheers for Trees #37 Reduce, Reuse, Recycle #55 Planning the Ideal
#73 Waste Watchers #84 The Global Climate #86 Our Changing World #88 Life on the Edge	 #38 Every Drop Counts #40 Then and Now #52 A Look at Aluminum #54 I'd Like to Visit a Place Where #80 Nothing Succeeds Like Succession #81 Living With Fire #83 A Peek at Packaging #89 Trees for Many Reasons #90 Native Ways 	Community #57 Democracy in Action #58 There Ought To Be a Law #70 Soil Stories #75 Tipi Talk #77 Trees in Trouble #85 In the Driver's Seat #95 Did You Notice? #96 Improve Your Place
	#91 In the Good Old Days #92 A Look at Lifestyles #94 By the Rivers of Babylon	

Life Science LS.13 The student will investigate and understand that populations of organisms change over time.

•	۲	0
	#20 Environmental Exchange Box	#50 400-Acre Wood
	#86 Our Changing World	
	#88 Life on the Edge	

Physical Science PS.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations.

•	0	0
		#85 In the Driver's Seat

Physical Science PS.5 The student will investigate and understand changes in matter and the relationship of these changes to the Law of Conservation of Matter and Energy.

•	\odot	0
		#84 The Global Climate
		#85 In the Driver's Seat

Physical Science PS.7 The student will investigate and understand temperature scales, heat, and thermal energy transfer.

•	۲	0
		#84 The Global Climate

Physical Science PS.10 The student will investigate and understand the scientific principles of work, force, and motion.

•	۲	0
		#53 On the Move
		#85 In the Driver's Seat

ENGLISH STANDARDS OF LEARNING

English K.1	The student will demonstrate growth in the use of oral language.
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•	۲	0
	#4 Sounds Around	#13 We All Need Trees
	#8 The Forest of S.T. Shrew	#54 I'd Like to Visit a Place
	#18 Tale of the Sun	Where
	#22 Trees as Habitats	
	#24 Nature's Recyclers	
	#36 Pollution Search	
	#78 Signs of Fall	
	#87 Earth Manners	
	#95 Did You Notice?	

English K.2 The student will expand understanding and use of word meanings.

•	۲	0
#1 The Shape of Things	#4 Sounds Around	#2 Get in Touch with Trees
	#18 Tale of the Sun	#8 The Forest of S.T. Shrew
	#22 Trees as Habitats	#21 Adopt a Tree
	#24 Nature's Recyclers	#54 I'd Like to Visit a Place
	#41 How Plants Grow	Where
	#51 Make Your Own Paper	
	#78 Signs of Fall	
	#87 Earth Manners	
	#95 Did You Notice?	

English K.3 The student will build oral communication skills.

•	۲	0
#1 The Shape of Things	#6 Picture This! #51 Make Your Own Paper #87 Earth Manners #95 Did You Notice?	#2 Get in Touch with Trees #18 Tale of the Sun #41 How Plants Grow #43 Have Seeds, Will Travel #46 School Yard Safari #47 Are Vacant Lots Vacant? #54 I'd Like to Visit a Place
		Where

English K.7 The student will develop an understanding of basic phonetic principles.

•	۲	0
	#54 I'd Like to Visit a Place Where	

English K.8 The student will expand vocabulary.

•	· · · · · · · · · · · · · · · · · · ·	0
#1 The Shape of Things		
#18 Tale of the Sun		
#36 Pollution Search		

English K.9 The student will demonstrate comprehension of fictional texts.

•	۲	0
#18 Tale of the Sun #36 Pollution Search	#87 Earth Manners	

English K.10 The student will demonstrate comprehension of nonfiction texts.

•	\odot	0
#1 The Shape of Things		

English K.11 The student will print in manuscript.

•	\odot	0
		#20 Environmental Exchange Box
		#22 Trees as Habitats

English K.12 The student will write to communicate ideas for a variety of purposes.

•	۲	0
	#21 Adopt a Tree #24 Nature's Recyclers	#22 Trees as Habitats
	#46 School Yard Safari #78 Signs of Fall	
	#95 Did You Notice?	

English 1.1 The student will continue to demonstrate growth in the use of oral language.

•	\odot	0
	#8 The Forest of S.T. Shrew	#41 How Plants Grow
	#18 Tale of the Sun	#43 Have Seeds, Will Travel
	#22 Trees as Habitats	#46 School Yard Safari
	#24 Nature's Recyclers	#47 Are Vacant Lots Vacant?
	#31 Plant a Tree	#48 Field, Forest & Stream
	#32 A Forest of Many Uses	#54 I'd Like to Visit a Place
	#36 Pollution Search	Where
	#51 Make Your Own Paper	
	#55 Planning the Ideal	
	Community	
	#78 Signs of Fall	
	#87 Earth Manners	
	#89 Trees for Many Reasons	
	#95 Did You Notice?	

English 1.2 The student will expand understanding and use of word meanings.

\odot	0
#1 The Shape of Things	#8 The Forest of S.T. Shrew
#4 Sounds Around	#43 Have Seeds, Will Travel
#18 Tale of the Sun	#54 I'd Like to Visit a Place
#22 Trees as Habitats	Where
#24 Nature's Recyclers	#77 Trees in Trouble
#87 Earth Manners	
#95 Did You Notice?	

•	•	0
	#1 The Shape of Things	#2 Get in Touch with Trees
	#32 A Forest of Many Uses	#6 Picture This!
	#51 Make Your Own Paper	#13 We All Need Trees
	#87 Earth Manners	#18 Tale of the Sun
	#95 Did You Notice?	#41 How Plants Grow
		#43 Have Seeds, Will Travel
		#46 School Yard Safari
		#47 Are Vacant Lots Vacant?
		#48 Field, Forest & Stream
		#54 I'd Like to Visit a Place
		Where

English 1.3 The student will adapt or change oral language to fit the situation.

English 1.6 The student will apply phonetic principles to read and spell.

•	۲	0
	#54 I'd Like to Visit a Place	
	Where	

English 1.8 The student will expand vocabulary.

<u> </u>		
	\odot	0
	#1 The Shape of Things	#2 Get in Touch with Trees
	#18 Tale of the Sun	
	#22 Trees as Habitats	
	#31 Plant a Tree	

English 1.9 The student will read and demonstrate comprehension of a variety of fictional texts.

•	۲	0
	#18 Tale o f the Sun	
	#36 Pollution Search	
	#87 Earth Manners	
	#89 Trees for Many Reasons	

English 1.10 The student will read and demonstrate comprehension of a variety of nonfiction texts.

•	۲	0
	#18 Tale of the Sun	
	#36 Pollution Search	

English 1.11 The student will use simple reference materials.

•	•	0
	#22 Trees as Habitats #54 I'd Like to Visit a Place Where	

English 1.12 The student will print legibly.

•	۲	0
		#8 The Forest of S.T. Shrew
		#22 Trees as Habitats
		#76 Tree Cookies
		#78 Signs of Fall

English 1.13	The student will write to communicate ideas for a variety of purpose	s.
	The stadent will write to commandate lacas for a valiety of parpose	<i>.</i>

•	۲	0
	#4 Sounds Around	#2 Get in Touch with Trees
	#18 Tale of the Sun	#20 Environmental Exchange Box
	#21 Adopt a Tree	
	#24 Nature's Recyclers	

•	۲	0
	#22 Trees as Habitats	#18 Tale of the Sun
	#24 Nature's Recyclers	
	#87 Earth Manners	

English 2.2	The student will expand understanding and use of word meanings.

.•	•	0
	#22 Trees as Habitats#24 Nature's Recyclers#87 Earth Manners#95 Did You Notice?	 #8 The Forest of S.T. Shrew #13 We All Need Trees #18 Tale of the Sun #54 I'd Like to Visit a Place Where #77 Trees in Trouble

English 2.3 The student will use oral communication skills.

•	۲	0
	#6 Picture This!	#2 Get in Touch with Trees
	#22 Trees as Habitats	#41 How Plants Grow
	#24 Nature's Recyclers	#42 Sunlight & Shades of Green
	#31 Plant a Tree	#43 Have Seeds, Will Travel
	#32 A Forest of Many Uses	#46 School Yard Safari
	#51 Make Your Own Paper	#47 Are Vacant Lots Vacant?
	#55 Planning the Ideal	#48 Field, Forest & Stream
	Community	#54 I'd Like to Visit a Place
	#78 Signs of Fall	Where
	#87 Earth Manners	
	#89 Trees for Many Reasons	
	#95 Did You Notice?	

English 2.5 The student will use phonetic strategies when reading and spelling.

•	۲	0
		#18 Tale of the Sun

English 2.6 The student will use semantic clues and syntax to expand vocabulary when reading.

•	۲	0
		#18 Tale of the Sun

English 2.7 The student will expand vocabulary when reading.

•	۲	0
		#18 Tale of the Sun

English zie The stadent mi	rioda ana domonorato compr	
•	۲	0
	#8 The Forest of S.T. Shrew	
	#18 Tale of the Sun	
	#36 Pollution Search	
	#87 Earth Manners	
	#89 Trees for Many Reasons	

English 2.8 The student will read and demonstrate comprehension of fictional texts.

English 2.9 The student will read and demonstrate comprehension of nonfiction texts.

•	۲	0
	#13 We All Need Trees #18 Tale of the Sun	#8 The Forest of S.T. Shrew

English 2.10 The student will demonstrate comprehension of information in reference materials.

•	۲	0
		#21 Adopt a Tree
		#46 School Yard Safari

English 2.12 The student will write stories, letters, and simple explanations.

•	۲	0
	#18 Tale of the Sun	#20 Environmental Exchange Box
	#21 Adopt a Tree	#22 Trees as Habitats
	#24 Nature's Recyclers	
	#31 Plant a Tree	

English 2.13 The student will edit writing for correct grammar, capitalization, punctuation, and spelling.

•	۲	0
	#18 Tale of the Sun	

English 3.1 The student will use effective communication skills in group activities.

•	۲	0
	#4 Sounds Around	#2 Get in Touch with Trees
	#6 Picture This!	#13 We All Need Trees
	#18 Tale of the Sun	#41 How Plants Grow
	#22 Trees as Habitats	#42 Sunlight & Shades of Green
	#23 The Fallen Log	#43 Have Seeds, Will Travel
	#24 Nature's Recyclers	#44 Water Wonders
	#31 Plant a Tree	#46 School Yard Safari
	#32 A Forest of Many Uses	#47 Are Vacant Lots Vacant?
	#34 Who Works in this Forest?	#48 Field, Forest & Stream
	#51 Make Your Own Paper	#54 I'd Like to Visit a Place
	#55 Planning the Ideal	Where
	Community	#58 There Ought To Be a Law
	#87 Earth Manners	#78 Signs of Fall
	#89 Trees for Many Reasons	#79 Tree Lifecycle
	#95 Did You Notice?	

•	•	0
	#6 Picture This!	
	#22 Trees as Habitats	
	#23 The Fallen Log	
	#24 Nature's Recyclers	

English 3.3 The student will apply word-analysis skills when reading.

•	۲	0
	#54 I'd Like to Visit a Place Where …	#18 Tale of the Sun

English 3.4 The student will expand vocabulary when reading.

•	•	0
	#7 Habitat Pen Pals	#18 Tale of the Sun
	#8 The Forest of S.T. Shrew	

English 3.5 The student will read and demonstrate comprehension of fictional text and poetry.

•	۲	0
	#78 Signs of Fall	#4 Sounds Around
	#80 Nothing Succeeds Like	#18 Tale of the Sun
	Succession	#77 Trees in Trouble
	#87 Earth Manners	
	#89 Trees for Many Reasons	

English 3.6 The student will continue to read and demonstrate comprehension of nonfiction texts.

•	۲	0
	#8 The Forest of S.T. Shrew	#4 Sounds Around
	#34 Who Works in this Forest?	#18 Tale of the Sun
	#49 Tropical Treehouse	
	#54 I'd Like to Visit a Place	
	Where	
	#59 Power of Print	

English 3.7 The student will demonstrate comprehension of information from a variety of print and electronic resources.

•	۲	0
	#49 Tropical Treehouse	#2 Get in Touch with Trees
	#76 Tree Cookies	#21 Adopt a Tree
	#95 Did You Notice?	#46 School Yard Safari
		#58 There Ought To Be a Law
		#59 Power of Print
		#88 Life on the Edge

English 3.9	The student will write for a variety of purposes.
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•	۲	0
	#5 Poet-Tree	#2 Get in Touch with Trees
	#21 Adopt a Tree	#8 The Forest of S.T. Shrew
	#23 The Fallen Log	#20 Environmental Exchange Box
	#24 Nature's Recyclers	#22 Trees as Habitats
	#31 Plant a Tree	#46 School Yard Safari
	#44 Water Wonders	#78 Signs of Fall
	#49 Tropical Treehouse	,

English 3.10 The student will edit writing for correct grammar, capitalization, punctuation, and spelling.

•	\odot	0
#7 Habitat Pen Pals		#59 Power of Print

English 3.11 The student will write a short report.

•	۲	0
#7 Habitat Pen Pals	#31 Plant a Tree	#20 Environmental Exchange Box #22 Trees as Habitats

English 3.12 The student will use available technology for reading and writing.

•	•	0
#7 Habitat Pen Pals		

English 4.1 The student will use effective oral communication skills in a variety of settings.

•	۲	0
	#4 Sounds Around	#13 We All Need Trees
	#11 Can It Be Real?	#41 How Plants Grow
	#13 We All Need Trees	#42 Sunlight & Shades of Green
	#18 Tale of the Sun	#43 Have Seeds, Will Travel
	#22 Trees as Habitats	#44 Water Wonders
	#23 The Fallen Log	#46 School Yard Safari
	#24 Nature's Recyclers	#47 Are Vacant Lots Vacant?
	#31 Plant a Tree	#48 Field, Forest & Stream
	#32 A Forest of Many Uses	#53 On the Move
	#34 Who Works in this Forest?	#54 I'd Like to Visit a Place
	#45 Web of Life	Where
	#51 Make Your Own Paper	#58 There Ought To Be a Law
	#55 Planning the Ideal	#78 Signs of Fall
	Community	#79 Tree Lifecycle
	#87 Earth Manners	
	#89 Trees for Many Reasons	
	#90 Native Ways	
	#92 A Look at Lifestyles	
	#95 Did You Notice?	

•	۲	0
	#9 Planet Diversity	#53 On the Move
	#11 Can It Be Real?	#54 I'd Like to Visit a Place
	#13 We All Need Trees	Where
	#39 Energy Sleuths	
	#47 Are Vacant Lots Vacant?	
	#48 Field, Forest & Stream	
	#59 Power of Print	
	#91 In the Good Old Days	

English 4.2 The student will make and listen to oral presentations and reports.

English 4.4 The student will expand vocabulary when reading.

V		3
•	\odot	0
	#7 Habitat Pen Pals #42 Sunlight & Shades of Green	#4 Sounds Around #8 The Forest of S.T. Shrew #59 Power of Print #69 Forest for the Trees

English 4.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction texts, and poetry.

•	•	0
	#7 Habitat Pen Pals	#4 Sounds Around
	#18 Tale of the Sun	#13 We All Need Trees
	#31 Plant a Tree	#18 Tale of the Sun
	#90 Native Ways	

English 4.6 The student will read and demonstrate comprehension of nonfiction texts.

•	\odot	0
#90 Native Ways	#9 Planet Diversity	#8 The Forest of S.T. Shrew
	#11 Can It Be Real?	#34 Who Works in this Forest?
	#26 Dynamic Duos	#59 Power of Print
	#39 Energy Sleuths	#69 Forest for the Trees
	#45 Web of Life	#77 Trees in Trouble
	#49 Tropical Treehouse	
	#80 Nothing Succeeds Like	
	Succession	
	#92 A Look at Lifestyles	
	#93 Paper Civilizations	

English 4.7 The student will write cohesively for a variety of purposes.

•	\odot	0
#7 Habitat Pen Pals	#5 Poet-Tree	#2 Get in Touch with Trees
	#21 Adopt a Tree	#4 Sounds Around
	#23 The Fallen Log	#8 The Forest of S.T. Shrew
	#24 Nature's Recyclers	#11 Can It Be Real?
	#31 Plant a Tree	#18 Tale of the Sun
	#39 Energy Sleuths	#20 Environmental Exchange Box
	#44 Water Wonders	#22 Trees as Habitats
	#91 In the Good Old Days	#46 School Yard Safari
		#54 I'd Like to Visit a Place
		Where
		#59 Power of Print
		#78 Signs of Fall
		#90 Native Ways

English 4.8	The student will edit writing for correct grammar, capitalization, spelling,	
punctuation,	sentence structure, and paragraphing.	

•	۲	0
#7 Habitat Pen Pals	#5 Poet-Tree	#2 Get in Touch with Trees
		#20 Environmental Exchange Box

English 4.9 The student will demonstrate comprehension of information resources to research a topic.

•	۲	0
#7 Habitat Pen Pals	#10 Charting Diversity	#2 Get in Touch with Trees
	#39 Energy Sleuths	#18 Tale of the Sun
	#45 Web of Life	#21 Adopt a Tree
	#76 Tree Cookies	#46 School Yard Safari
	#91 In the Good Old Days	#58 There Ought To Be a Law
	#92 A Look at Lifestyles	#81 Living With Fire
	#95 Did You Notice?	#82 Resource-Go-Round
		#88 Life on the Edge

English 5.1	The student will listen, draw conclusions, and share responses in subject-
related grou	learning activities.

•	۲	0
#5 Poet-Tree	#4 Sounds Around	#2 Get in Touch with Trees
#70 Soil Stories	#9 Planet Diversity	#13 We All Need Trees
	#10 Charting Diversity	#17 People of the Forest
	#11 Can It Be Real?	#41 How Plants Grow
	#13 We All Need Trees	#42 Sunlight & Shades of Green
	#18 Tale of the Sun	#43 Have Seeds, Will Travel
	#22 Trees as Habitats	#44 Water Wonders
	#23 The Fallen Log	#46 School Yard Safari
	#24 Nature's Recyclers	#47 Are Vacant Lots Vacant?
	#31 Plant a Tree	#48 Field, Forest & Stream
	#32 A Forest of Many Uses	#52 A Look at Aluminum
	#34 Who Works in this Forest?	#53 On the Move
	#45 Web of Life	#54 I'd Like to Visit a Place
	#51 Make Your Own Paper	Where
	#55 Planning the Ideal	#58 There Ought To Be a Law
	Community	#78 Signs of Fall
	#56 We Can Work It Out	#79 Tree Lifecycle
	#89 Trees for Many Reasons	
	#90 Native Ways	
	#92 A Look at Lifestyles	
	#94 By the Rivers of Babylon	
	#96 Improve Your Place	

•	۲	0
#17 People of the Forest	#9 Planet Diversity	#52 A Look at Aluminum
#70 Soil Stories	#12 Invasive Species	#53 On the Move
	#39 Energy Sleuths	#70 Soil Stories
	#47 Are Vacant Lots Vacant?	
	#48 Field, Forest & Stream	
	#56 We Can Work It Out	
	#91 In the Good Old Days	
	#94 By the Rivers of Babylon	
	#96 Improve Your Place	

English 5.2 The student will use effective verbal and nonverbal communication skills to deliver planned oral presentations.

English 5.4 The student will expand vocabulary while reading.

•	•	0
#17 People of the Forest	#26 Dynamic Duos #42 Sunlight & Shades of Green	#18 Tale of the Sun #57 Democracy in Action #60 Publicize It! #69 Forest for the Trees

English 5.5 The student will read and demonstrate comprehension of fictional texts, narrative nonfiction, and poetry.

•	•	0
	#5 Poet-Tree	#4 Sounds Around
	#26 Dynamic Duos	#8 The Forest of S.T. Shrew
	#31 Plant a Tree	#13 We All Need Trees
	#92 A Look at Lifestyles	#17 People of the Forest
	,	#18 Tale of the Sun
		#70 Soil Stories

English 5.6 The student will read and demonstrate comprehension of nonfiction texts.

•	\odot	0
#17 People of the Forest	#5 Poet-Tree	#4 Sounds Around
#90 Native Ways	#7 Habitat Pen Pals	#8 The Forest of S.T. Shrew
	#12 Invasive Species	#34 Who Works in this Forest?
	#39 Energy Sleuths	#36 Pollution Search
	#59 Power of Print	#70 Soil Stories
	#60 Publicize It!	#77 Trees in Trouble
	#80 Nothing Succeeds Like	
	Succession	
	#89 Trees for Many Reasons	
	#93 Paper Civilizations	
	#94 By the Rivers of Babylon	

•	•	0
#5 Poet-Tree	#11 Can It Be Real?	#2 Get in Touch with Trees
#7 Habitat Pen Pals	#21 Adopt a Tree	#8 The Forest of S.T. Shrew
#17 People of the Forest	#23 The Fallen Log	#20 Environmental Exchange Box
	#24 Nature's Recyclers	#22 Trees as Habitats
	#31 Plant a Tree	#46 School Yard Safari
	#38 Every Drop Counts	#52 A Look at Aluminum
	#44 Water Wonders	#54 I'd Like to Visit a Place
	#49 Tropical Treehouse	Where
	#57 Democracy in Action	#70 Soil Stories
	#59 Power of Print	#78 Signs of Fall
	#60 Publicize It!	
	#96 Improve Your Place	

English 5.7 The student will write for a variety of purposes: to describe, to inform, to entertain, to explain, and to persuade.

English 5.8 The student will edit writing for correct grammar, capitalization, spelling, punctuation, sentence structure, and paragraphing.

•	•	0	
#5 Poet-Tree #17 People of the Forest	#12 Invasive Species#38 Every Drop Counts#39 Energy Sleuths#60 Publicize It!	 #4 Sounds Around #8 The Forest of S.T. Shrew #11 Can It Be Real? #20 Environmental Exchange Box #54 I'd Like to Visit a Place Where 	

English 5.9 The student will find, evaluate, and select appropriate resources for a research product.

•	۲	0
#7 Habitat Pen Pals	 #10 Charting Diversity #12 Invasive Species #13 We All Need Trees #31 Plant a Tree #39 Energy Sleuths #48 Field, Forest & Stream #49 Tropical Treehouse #57 Democracy in Action #59 Power of Print #60 Publicize It! #76 Tree Cookies #90 Native Ways #91 In the Good Old Days #92 A Look at Lifestyles #95 Did You Notice? 	#2 Get in Touch with Trees #8 The Forest of S.T. Shrew #18 Tale of the Sun #58 There Ought To Be a Law #81 Living With Fire #82 Resource-Go-Round #88 Life on the Edge

•	\odot	0
#19 Viewpoints on the Line	#22 Trees as Habitats	#12 Invasive Species
	#23 The Fallen Log	#13 We All Need Trees
	#24 Nature's Recyclers	#18 Tale of the Sun
	#55 Planning the Ideal	#49 Tropical Treehouse
	Community	#54 I'd Like to Visit a Place
	#56 We Can Work It Out	Where
	#84 The Global Climate	#57 Democracy in Action
	#89 Trees for Many Reasons	#69 Forest for the Trees
	#92 A Look at Lifestyles	#70 Soil Stories
		#94 By the Rivers of Babylon

English 6.1 The student will participate in and contribute to small-group activities.

English 6.2 The student will present, listen critically, and express opinions in oral presentations.

•	۲	0
#19 Viewpoints on the Line	#9 Planet Diversity	#12 Invasive Species
	#11 Can It Be Real?	#49 Tropical Treehouse
	#39 Energy Sleuths	#54 I'd Like to Visit a Place
	#50 400-Acre Wood	Where
	#56 We Can Work It Out	
	#70 Soil Stories	
	#84 The Global Climate	
	#89 Trees for Many Reasons	
	#94 By the Rivers of Babylon	
	#96 Improve Your Place	

English 6.3 The student will understand the elements of media literacy.

•	۲	0
		#60 Publicize It!

English 6.4 The student will read and learn the meanings of unfamiliar words and phrases within authentic texts.

•	۲	0
	#5 Poet-Tree	#4 Sounds Around
		#11 Can It Be Real?
	#49 Tropical Treehouse	#69 Forest for the Trees

English 6.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry.

•	۲	0
#5 Poet-Tree	#7 Habitat Pen Pals	#4 Sounds Around
#17 People of the Forest	#13 We All Need Trees	#8 The Forest of S.T. Shrew
	#18 Tale of the Sun	
	#33 Forest Consequences	
	#59 Power of Print	
	#91 In the Good Old Days	

noniction texts.		
•	۲	0
#7 Habitat Pen Pals	#5 Poet-Tree	#4 Sounds Around
#17 People of the Forest	#9 Planet Diversity	#8 The Forest of S.T. Shrew
#90 Native Ways	#10 Charting Diversity	#11 Can It Be Real?
	#12 Invasive Species	#13 We All Need Trees
	#26 Dynamic Duos	#21 Adopt a Tree
	#29 Rain Reasons	#34 Who Works in this Forest?
	#33 Forest Consequences	#35 Loving It Too Much
	#37 Reduce, Reuse, Recycle	#36 Pollution Search
	#39 Energy Sleuths	#52 A Look at Aluminum
	#45 Web of Life	#58 There Ought To Be a Law
	#57 Democracy in Action	#77 Trees in Trouble
	#59 Power of Print	#81 Living With Fire
	#60 Publicize It!	#88 Life on the Edge
	#72 Air We Breathe	
	#76 Tree Cookies	
	#80 Nothing Succeeds Like	
	Succession	
	#89 Trees for Many Reasons	
	#91 In the Good Old Days	
	#92 A Look at Lifestyles	
	#93 Paper Civilizations	
	#94 By the Rivers of Babylon	
	#95 Did You Notice?	

English 6.6 The student will read and demonstrate comprehension of a variety of nonfiction texts.

English 6.7 The student will write narration, description, exposition, and persuasion.

•	\odot	0
#7 Habitat Pen Pals	#38 Every Drop Counts	#2 Get in Touch with Trees
#17 People of the Forest	#39 Energy Sleuths	#8 The Forest of S.T. Shrew
	#44 Water Wonders	#20 Environmental Exchange Box
	#54 I'd Like to Visit a Place	#31 Plant a Tree
	Where	#52 A Look at Aluminum
	#59 Power of Print	#70 Soil Stories
	#60 Publicize It!	#78 Signs of Fall
	#91 In the Good Old Days	#82 Resource-Go-Round
	#96 Improve Your Place	

English 6.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing.

•	•	0
	#60 Publicize It!	#54 I'd Like to Visit a Place
		Where

English 6.9 The student will find, evaluate, and select appropriate resources for a research product.

•	\odot	0
#17 People of the Forest	#12 Invasive Species	#20 Environmental Exchange Box

•	\odot	0
#19 Viewpoints on the Line #70 Soil Stories #71 Watch on Wetlands #84 The Global Climate	 #11 Can It Be Real? #12 Invasive Species #22 Trees as Habitats #23 The Fallen Log #31 Plant a Tree #32 A Forest of Many Uses #33 Forest Consequences #39 Energy Sleuths #45 Web of Life #48 Field, Forest & Stream #50 400-Acre Wood #51 Make Your Own Paper #55 Planning the Ideal Community #56 We Can Work It Out #72 Air We Breathe #89 Trees for Many Reasons #90 Native Ways #92 A Look at Lifestyles #94 By the Rivers of Babylon #96 Improve Your Place 	 #29 Rain Reasons #35 Loving It Too Much #41 How Plants Grow #42 Sunlight & Shades of Green #43 Have Seeds, Will Travel #44 Water Wonders #46 School Yard Safari #47 Are Vacant Lots Vacant? #49 Tropical Treehouse #52 A Look at Aluminum #53 On the Move #54 I'd Like to Visit a Place Where #57 Democracy in Action #58 There Ought To Be a Law #69 Forest for the Trees

English 7.1 The student will participate in and contribute to conversations, group discussions, and oral presentations.

English 7.2 The student will identify and demonstrate the relationship between a speaker's verbal and nonverbal messages.

Torbal and nonvolbal moodageol		
•	\odot	0
	#56 We Can Work It Out	#19 Viewpoints on the Line#50 400-Acre Wood#52 A Look at Aluminum#57 Democracy in Action#70 Soil Stories

English 7.3 The student will understand the elements of media literacy.

•	\odot	0
	#60 Publicize It!	#19 Viewpoints on the Line
	#92 A Look at Lifestyles	#39 Energy Sleuths
		#57 Democracy in Action
		#71 Watch on Wetlands
		#89 Trees for Many Reasons

English 7.4 The student will read to determine the meanings and pronunciations of unfamiliar words and phrases within authentic texts.

•	\odot	0
	#2 Get in Touch with Trees	

English 7.5 The student will read and demonstrate comprehension of a variety of fictional texts, narrative nonfiction, and poetry.

•	۲	0	
	#59 Power of Print	#60 Publicize It!	

	0	\cap
• •	<u> </u>	0
#17 People of the Forest	#11 Can It Be Real?	#35 Loving It Too Much
#90 Native Ways	#12 Invasive Species	#69 Forest for the Trees
	#26 Dynamic Duos	#77 Trees in Trouble
	#33 Forest Consequences	
	#39 Energy Sleuths	
	#45 Web of Life	
	#49 Tropical Treehouse	
	#50 400-Acre Wood	
	#59 Power of Print	
	#60 Publicize It!	
	#71 Watch on Wetlands	
	#72 Air We Breathe	
	#80 Nothing Succeeds Like	
	Succession	
	#89 Trees for Many Reasons	
	#91 In the Good Old Days	
	#92 A Look at Lifestyles	
	#93 Paper Civilizations	
	#94 By the Rivers of Babylon	

English 7.6 The student will read and demonstrate comprehension of a variety of nonfiction texts.

English 7.7 The student will write in a variety of forms with an emphasis on exposition, narration, and persuasion.

•	۲	0
#45 Web of Life	 #21 Adopt a Tree #23 The Fallen Log #37 Reduce, Reuse, Recycle #38 Every Drop Counts #39 Energy Sleuths #44 Water Wonders #50 400-Acre Wood #57 Democracy in Action #59 Power of Print #60 Publicize It! #71 Watch on Wetlands #91 In the Good Old Days #96 Improve Your Place 	 #12 Invasive Species #17 People of the Forest #20 Environmental Exchange Box #22 Trees as Habitats #31 Plant a Tree #50 400-Acre Wood #52 A Look at Aluminum #54 I'd Like to Visit a Place Where #70 Soil Stories

English 7.8	The student will edit writing for correct grammar, capitalization, punctuation,
spelling, sent	tence structure, and paragraphing.

	\cap
#59 Power of Print	#11 Can It Be Real?
#60 Publicize It!	#54 I'd Like to Visit a Place
	Where

•	\odot	0	
#17 People of the Forest	#10 Charting Diversity	#17 People of the Forest	
	#31 Plant a Tree	#20 Environmental Exchange Box	
	#39 Energy Sleuths	#31 Plant a Tree	
	#57 Democracy in Action	#52 A Look at Aluminum	
	#59 Power of Print	#58 There Ought To Be a Law	
	#60 Publicize It!	#76 Tree Cookies	
	#84 The Global Climate	#82 Resource-Go-Round	
	#90 Native Ways	#88 Life on the Edge	
	#91 In the Good Old Days		
	#92 A Look at Lifestyles		
	#95 Did You Notice?		

English 7.9 The student will apply knowledge of appropriate reference materials to produce a research project.

English 8.1 The student will use interviewing techniques to gain information.

•	۲	0
#19 Viewpoints on the Line#40 Then and Now#71 Watch on Wetlands#84 The Global Climate	#56 We Can Work It Out	 #51 Make Your Own Paper #52 A Look at Aluminum #54 I'd Like to Visit a Place Where #57 Democracy in Action
		#72 Air We Breathe #95 Did You Notice? #96 Improve Your Place

English 8.2 The student will develop and deliver oral presentations in groups and individually.

•	۲	0
	#11 Can It Be Real?	#54 I'd Like to Visit a Place
	#12 Invasive Species	Where
	#39 Energy Sleuths	
	#50 400-Acre Wood	
	#56 We Can Work It Out	
	#84 The Global Climate	
	#89 Trees for Many Reasons	
	#94 By the Rivers of Babylon	
	#96 Improve Your Place	

English 8.3 The student will analyze, develop, and produce creative or informational media messages.

•	۲	0	
	#37 Reduce, Reuse, Recycle	#71 Watch on Wetlands	
	#57 Democracy in Action	#88 Life on the Edge	
	#59 Power of Print	-	
	#60 Publicize It!		
	#84 The Global Climate		
	#90 Native Ways		
	#92 A Look at Lifestyles		

English 8.4	The student will apply knowledge of word origins, analogies, and figurative)
language to	xtend vocabulary development within authentic texts.	

•	•		0
	#59 Pov	ver of Print	#5 Poet-Tree
			#12 Invasive Species
			#60 Publicize It!

English 8.5 The student will read and analyze a variety of fictional texts, narrative nonfiction, and poetry.

•	۲	0
	#59 Power of Print	
	#91 In the Good Old Days	

English 8.6 The student will read, comprehend, and analyze a variety of nonfiction texts.

•	۲	0
#17 People of the Forest	#11 Can It Be Real?	#35 Loving It Too Much
#90 Native Ways	#12 Invasive Species	#70 Soil Stories
	#26 Dynamic Duos	#77 Trees in Trouble
	#33 Forest Consequences	
	#39 Energy Sleuths	
	#50 400-Acre Wood	
	#59 Power of Print	
	#60 Publicize It!	
	#71 Watch on Wetlands	
	#72 Air We Breathe	
	#80 Nothing Succeeds Like	
	Succession	
	#84 The Global Climate	
	#89 Trees for Many Reasons	
	#91 In the Good Old Days	
	#93 Paper Civilizations	

English 8.7 The student will write in a variety of forms, including narration, exposition, persuasion, and informational.

•	0
 #12 Invasive Species	#11 Can It Be Real?
#21 Adopt a Tree	#17 People of the Forest
#23 The Fallen Log	#20 Environmental Exchange Box
#31 Plant a Tree	#22 Trees as Habitats
#38 Every Drop Counts	#52 A Look at Aluminum
#39 Energy Sleuths	#54 I'd Like to Visit a Place
#44 Water Wonders	Where
#50 400-Acre Wood	#90 Native Ways
#57 Democracy in Action	
#59 Power of Print	
#60 Publicize It!	
#71 Watch on Wetlands	
#91 In the Good Old Days	
#96 Improve Your Place	

English 8.8 The student will edit writing for correct grammar, capitalization, punctuation, spelling, sentence structure, and paragraphing.

,		
•	۲	0
#17 People of the Forest	#59 Power of Print #60 Publicize It!	#20 Environmental Exchange Box#31 Plant a Tree#54 I'd Like to Visit a PlaceWhere

English 8.9 The student will apply knowledge of appropriate reference materials to produce a research product.

•	•	0
		#17 People of the Forest
		#20 Environmental Exchange Bo

HISTORY AND SOCIAL SCIENCE STANDARDS OF LEARNING

HSS K.2 The student will describe everyday life in the present and in the past and begin to recognize that things change over time.

•	۲	0
#18 Tale of the Sun		
#95 Did You Notice?		

HSS K.3 The student will describe the relative location of people, places, and things by using positional words, with emphasis on near/far, above/below, left/right, and behind/in front.

•	۲	0
#53 On the Move #74 People, Places, Things	#55 Planning the Ideal Community	

HSS K.4 The student will use simple maps and globes to...

•	\odot	0
#53 On the Move #55 Planning the Ideal	#4 Sounds Around	
Community #74 People, Places, Things		

HSS K.5 The student will develop an awareness that maps and globes ...

•	•	0
#53 On the Move	#4 Sounds Around	
#55 Planning the Ideal		
Community		
#74 People, Places, Things		

HSS K.6 The student will match simple descriptions of work that people do with the names of those jobs.

•	\odot	0
#74 People, Places, Things	#51 Make Your Own Paper	#18 Tale of the Sun

HSS K.7 The student will a) recognize that people make choices because they cannot have everything they want and b) explain that people work to earn money to buy the things they want.

•	۲	0
	#21 Adopt a Tree	#31 Plant a Tree
		#74 People, Places, Things

HSS K.8 The student will demonstrate that being a good citizen involves...

•	•	0
#87 Earth Manners		

HSS 1.1 The student will interpret information presented in picture time lines to show sequence of events and will distinguish among past, present, and future.

•	\odot	0
#16 Pass The Plants, Please	#53 On the Move	
#95 Did You Notice?	#55 Planning the Ideal	
	Community	

HSS 1.4 The student will develop map skills by...

•	۲	0
#55 Planning the Ideal	#4 Sounds Around	#74 People, Places, Things
Community	#53 On the Move	

HSS 1.5 The student will construct a simple map of a familiar area, using basic map symbols in the map legend.

•	۲	0
#55 Planning the Ideal	#4 Sounds Around	#47 Are Vacant Lots Vacant?
Community	#74 People, Places, Things	

HSS 1.6 The student will describe how the location of his/her community, climate, and physical surroundings affect the way people live, including their food, clothing, shelter, transportation, and recreation.

•	۲	0
	#53 On the Move	#54 I'd Like to Visit a Place Where #55 Planning the Ideal Community

HSS 1.7 The student will explain the difference between goods and services and describe how people are consumers and producers of goods and services.

•	\odot	0
#74 People, Places, Things	#55 Planning the Ideal	#13 We All Need Trees
	Community	#51 Make Your Own Paper

HSS 1.10 The student will apply the traits of a good citizen by...

•	۲	0
	#87 Earth Manners	

HSS 1.12 The student will recognize that communities in Virginia...

	#16 Pass the Plants, Please
	#20 Environmental
	Exchange Box
	#31 Plant a Tree

HSS 2.1 The student will explain how the contributions of ancient China and Egypt have influenced the present world in terms of architecture, inventions, the calendar, and written language.

•	۲	0
		#51 Make Your Own Paper

HSS 2.2 The student will compare the lives and contributions of three American Indian cultures of the past and present with emphasis on the Powhatan of the Eastern Woodlands, the Lakota of the Plains, and the Pueblo peoples of the Southwest.

•	۲	0
	#75 Tipi Talk	#18 Tale of the Sun
		#20 Environmental
		Exchange Box
		_

HSS 2.3 The student will identify and compare changes in community life over time in terms of buildings, jobs, transportation, and population.

•		0
	#53 On the Move	#51 Make Your Own Paper
		#74 People, Places, Things

HSS 2.6 The student will demonstrate map skills by constructing simple maps, using title, map, legend, and compass rose.

•	\odot	0
#55 Planning the Ideal		
Community		

HSS 2.7 The student will describe natural resources (water, soil, wood, and coal), human resources (people at work), and capital resources (machines, tools, and buildings).

•	\odot	0
#30 Three Cheers for Trees	#13 We All Need Trees	#16 Pass the Plants, Please
#55 Planning the Ideal	#21 Adopt a Tree	#31 Plant a Tree
Community	#39 Energy Sleuths	#51 Make Your Own Paper
	#63 Tree Factory	
	#74 People, Places, Things	

HSS 2.9 The student will explain that scarcity (limited resources) requires people to make choices about producing and consuming goods and services.

•	\odot	0
	#13 We All Need Trees #21 Adopt a Tree #32 A Forest of Many Uses	#31 Plant a Tree

HSS 3.6 The student will read and construct maps, tables, graphs, and/or charts.

•	۲	0
#55 Planning the Ideal	#82 Resource-Go-Round	#49 Tropical Treehouse
Community		

HSS 3.7 The student will explain how producers in ancient Greece, Rome, and the West African empire of Mali used natural resources, human resources, and capital resources in the production of goods and services.

•	۲	0
	#82 Resource-Go-Round	#13 We All Need Trees
		#16 Pass the Plants, Please
		#94 By the Rivers of Babylon

HSS 3.8 The student will recognize that because people and regions cannot produce everything they want, they specialize in producing some things and trade for the rest.

•	۲	0
	#82 Resource-Go-Round	#34 Who Works in this Forest? #92 A Look at Lifestyles

HSS 3.9 The student will identify examples of making an economic choice and will explain the idea of opportunity cost (what is given up when making choice).

•	۲	0
		#89 Trees For Many Reasons #92 A Look at Lifestyles

HSS 3.10 The student will recognize the importance of government in the community, Virginia, and the United States of America by...

•	\odot	0
#58 There Ought To Be a Law	#87 Earth Manners	#4 Sounds Around #31 Plant a Tree #74 People, Places, Things #89 Trees for Many Reasons

VS.1 The student will demonstrate responsible citizenship and develop skills for historical and geographical analysis including the ability to ...

•	Ō	0
	#92 A Look at Lifestyles	#53 On the Move
		#95 Did You Notice?

VS.2 The student will demonstrate knowledge of the physical geography and native peoples, past and present, of Virginia by ...

•	•	0
#90 Native Ways	#92 A Look at Lifestyles	#20 Environmental Exchange Box
		#32 A Forest of Many Uses
		#54 I'd Like to Visit a Place
		Where

VS.4 The student will demonstrate knowledge of life in the Virginia colony by...

•	۲	0
	#16 Pass the Plants Please	#13 We All Need Trees
	#17 People of the Forest	#20 Environmental
	#34 Who Works in this	Exchange Box
	Forest?	#95 Did You Notice?

VS.9 The student will demonstrate knowledge of twentieth- and twenty-first centuries Virginia by ...

•	۲	0
	#92 A Look at Lifestyles	
	#95 Did You Notice?	

VS.10 The student will demonstrate knowledge of government, geography, and economics by ...

•	۲	0
	#13 We All Need Trees	#16 Pass the Plants Please
	#14 Renewable or Not?	#27 Every Tree for Itself
	#15 A Few of My Favorite	#28 Air Plants
	Things	#31 Plant a Tree
	#32 A Forest of Many Uses	

USI.1 The student will demonstrate responsible citizenship and develop skills for historical and geographical analysis, including the ability to....

•	۲	0
	#92 A Look at Lifestyles	
	#95 Did You Notice?	

USI.2 The student will use maps, globes, photographs, pictures, or tables to ...

#75 Tipi Talk	

USI.3 The student will demonstrate knowledge of how early cultures developed in North America by...

•	\odot	0
#75 Tipi Talk	#18 Tale of the Sun	#17 People of the Forest
#90 Native Ways		#40 Then and Now
#92 A Look at Lifestyles		

USI.5 The student will demonstrate knowledge of the factors that shaped colonial America by...

•	۲	0
		#17 People of the Forest
		#40 Then and Now
		#95 Did You Notice?

USI.8 The student will demonstrate knowledge of westward expansion and reform in America from 1801-1861 by...

•	•	0
	#92 A Look at Lifestyles	#40 Then and Now
		#91 In the Good Old Days

USII.1 The student will demonstrate skills for historical and geographical analysis, and responsible citizenship, including the ability to....

•	\odot	0
	#95 Did You Notice?	

USII.2 The student will use maps, globes, photographs, pictures, or tables for...

•	۲	0
#82 Resource Go-Round	 #34 Who Works in this Forest? #35 Loving It Too Much #53 On the Move #55 Planning the Ideal Community 	#40 Then and Now
	#85 In the Driver's Seat	

USII.4 The student will demonstrate knowledge of how life changed after the Civil War by...

•	۲	0
#90 Native Ways	#92 A Look at Lifestyles	#40 Then and Now
	#93 Paper Civilizations	#84 The Global Climate

USII.6 The student will demonstrate knowledge of the social, economic, and technological changes of the early twentieth century by...

•	۲	0
	#38 Every Drop Counts	#40 Then and Now
	#51 Make Your Own Paper	#84 The Global Climate
	#53 On the Move	#91 In the Good Old Days
	#93 Paper Civilizations	-
	#95 Did You Notice?	

USII.9 The student will demonstrate knowledge of the key domestic and international issues during the second half of the twentieth and early twenty-first centuries by...

•	\odot	0
	#38 Every Drop Counts	#40 Then and Now
	#73 Waste Watchers	#53 On the Move
	#84 The Global Climate	#83 A Peek at Packaging
	#85 In the Driver's Seat	#93 Paper Civilizations
	#86 Our Changing World	#95 Did You Notice?
	#91 In the Good Old Days	

CE.1 The student will develop the social studies skills responsible citizenship requires, including the ability to...

•	\odot	0
	#50 400-Acre Wood	#69 Forest for the Trees #95 Did You Notice?

CE.3 The student will demonstrate knowledge of citizenship and the rights, duties, and responsibilities of citizens by...

•	۲	0
#56 We Can Work It Out	#33 Forest Consequences	#4 Sounds Around
#58 There Ought To Be a Law	#50 400-Acre Wood	#19 Viewpoints on the Line
	#54 I'd Like to Visit a Place	#35 Loving It Too Much
	Where	#52 A Look at Aluminum
	#57 Democracy in Action	#55 Planning the Ideal
	#60 Publicize It!	Community
	#71 Watch on Wetlands	#86 Our Changing World
	#96 Improve Your Place	

CE.4 The student will demonstrate knowledge of personal character traits that facilitate thoughtful and effective participation in civic life by...

•	•	0
#56 We Can Work It Out #57 Democracy In Action	#52 Look at Aluminum #54 I'd Like to Visit a Place Where #58 There Ought to be a Law #70 Soil Stories	#60 Publicize It! #96 Improve Your Place

CE.5 The student will demonstrate knowledge of the political process at the local, state, and national levels of government by...

•	\odot	0
#57 Democracy in Action	#58 There Ought to be a Law	#19 Viewpoints on the Line

CE.6 The student will demonstrate knowledge of the American constitutional government at the national level by...

•	۲	0
#58 There Ought to be a Law	#57 Democracy in Action	#19 Viewpoints on the Line
		#35 Loving It Too Much
		#49 Tropical Treehouse
		#50 400-Acre Wood

CE.7 The student will demonstrate knowledge of the American constitutional government at the state level by...

•	۲	0
#58 There Ought To Be a Law	#33 Forest Consequences	#4 Sounds Around
	#49 Tropical Treehouse	#19 Viewpoints on the Line
	#57 Democracy in Action	#35 Loving It Too Much
	#71 Watch on Wetlands	#50 400-Acre Wood
		#69 Forest for the Trees

CE.8 The student will demonstrate knowledge of the American constitutional government at the local level by...

•	۲	0
#58 There Ought To Be a Law	#33 Forest Consequences	#4 Sounds Around
	#49 Tropical Treehouse	#19 Viewpoints on the Line
	#56 We Can Work It Out	#35 Loving It Too Much
	#57 Democracy in Action	#50 400-Acre Wood
	#71 Watch on Wetlands	#69 Forest for the Trees

CE.9 The student will demonstrate knowledge of how public policy is made at the local, state, and national levels of government by...

•	•	0
#49 Tropical Treehouse	#19 Viewpoints on the Line	#35 Loving It Too Much
#56 We Can Work It Out	#33 Forest Consequences	#50 400-Acre Wood
	#57 Democracy in Action	#58 There Ought to be a Law
		#60 Publicize It!
		#69 Forest for the Trees
		#71 Watch on Wetlands
		#84 The Global Climate
		#86 Our Changing World
		#88 Life on the Edge
		#89 Trees for Many Reasons

CE.11 The student will demonstrate knowledge of how economic decisions are made in the marketplace by...

•	۲	0
#14 Renewable or Not	#38 Every Drop Counts	#39 Energy Sleuths
	#50 400-Acre Wood	#52 A Look at Aluminum
	#69 Forest for the Trees	#82 Resource Go-Round
	#73 Waste Watchers	#83 Peek at Packaging
	#84 The Global Climate	#88 Life on the Edge
	#89 Trees for Many Reasons	_

CE.12 The student will demonstrate knowledge of the structure and operation of the United States economy by...

•	۲	0
	#14 Renewable or Not	#69 Forest for the Trees
	#33 Forest Consequences	
	#50 400-Acre Wood	
	#82 Resource Go-Round	
	#89 Trees for Many Reasons	

CE.13 The student will demonstrate knowledge of the role of government in the United States economy by...

•	۲	0
	#14 Renewable or Not	#19 Viewpoints on the Line
	#49 Tropical Treehouse	#38 Every Drop Counts
	#54 I'd Like to Visit a Place	#39 Energy Sleuths
	Where	#88 Life on the Edge
	#71 Watch on Wetlands	6
	#89 Trees for Many Reasons	

WHI.1 The student will improve skills in historical research and geographical analysis by...

•	۲	0
	#94 By the Rivers of Babylon	

WHI.2 The student will demonstrate knowledge of early development of humankind from the Paleolithic Era to the agricultural revolution by...

•	•	0
#90 Native Ways		

WHI.3 The student will demonstrate knowledge of ancient river civilizations, including Mesopotamia, Egypt, the Indus River Valley, and China and the civilizations of the Hebrews, Phoenicians, and Nubians, by...

•	۲	0
	#94 By the Rivers of Babylon	#93 Paper Civilizations

WG.1 The student will use maps, globes, photographs, and pictures in order to...

•	۲	0
	#29 Rain Reasons	

WG.2 The student will analyze how selected physical and ecological processes shape the Earth's surface by...

•	۲	0
	#29 Rain Reasons	

WG.4 The student will locate and analyze physical, economic, and cultural characteristics of world regions...

•	۲	0
		#29 Rain Reasons