

1. Lakes

Great Lakes in My World Unit: **Lakes in Lakes**

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Ohio:
Science
and
Social
Studies

				Activities																																			
Category	Area	Grade	Standard	K-8	Lake Connection	K-4	I Am A Camera	3-6	Maps of Home Watershed	4-8	Orientation	K-8	Satisfy Your Curiosity	3-6	Eco-Language	3-6	Closer Look	3-6	Fish Observation	K-4	Web of Life	4-8	Tangled Web	3-6	What's New?	4-8	Great Lakes Relay	6-8	Invasive Issues	4-8	Moving Mercury	6-8	Solubility	6-8	It Adds Up and Up	K-8	Building a Web		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17																							
Science	Life	0	4. Investigate variations that exist among individuals of the same kind of plant or animal.									X																											
Science	Life	0	5. Investigate observable features of plants and animals that help them live in different kinds of places.									X						X																					
Science	Life	0	6. Investigate the habitats of many different kinds of local plants and animals and some of the ways in which animals depend on plants and each other in our community.									X												X															
Science	Scientific Inquiry	0	4. Use the five senses to make observations about the natural world.		X																																		
Science	Scientific Inquiry	0	5. Draw pictures that correctly portray features of the item being described.	X																																			
Science	Life	1	1. Explore that organisms, including people, have basic needs which include air, water, food, living space and shelter.									X								X																			
Science	Life	1	2. Explain that food comes from sources other than grocery stores (e.g., farm crops, farm animals, oceans, lakes and forests).									X								X																			
Science	Life	1	3. Explore that humans and other animals have body parts that help to seek, find and take in food when they are hungry (e.g., sharp teeth, flat teeth, good nose, sharp vision).									X								X																			
Science	Life	1	4. Investigate that animals eat plants and/or other animals for food and may also use plants or other animals for shelter and nesting.									X								X																			
Science	Scientific Inquiry	1	8. Use oral, written and pictorial representation to communicate work.		X																																		
Science	Scientific Inquiry	1	9. Describe things as accurately as possible and compare with the observations of others.		X																																		
Science	Life	2	1. Explain that animals, including people, need air, water, food, living space and shelter, and plants need air, water, nutrients (e.g., minerals), living space and light to survive.																X																			X	
Science	Life	2	2. Identify that there are many distinct environments that support different kinds of organisms.																X																			X	

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Category	Area	Grade	Standard	1	2	3	4	5	6	7	8	9	10	11	12	13	15	14	16	17	
Science	Life	2	3. Explain why organisms can survive only in environments that meet their needs (e.g., organisms that once lived on earth have disappeared for different reasons such as natural forces or human-caused effects).					X			X										X
Science	Life	2	4. Compare similarities and differences among individuals of the same kind of plants and animals, including people.					X			X										X
Science	Life	2	5. Explain that food is a basic need of plants and animals (e.g., plants need sunlight to make food and to grow, animals eat plants and/or other animals for food, food chain) and is important because it is a source of energy (e.g., energy used to play, ride bicycles, read, etc.).					X													X
Science	Life	2	6. Investigate the different structures of plants and animals that help them live in different environments (e.g., lungs, gills, leaves and roots).					X			X										
Science	Life	2	7. Compare the habitats of many different kinds of Ohio plants and animals and some of the ways animals depend on plants and each other.					X													
Science	Life	2	8. Compare the activities of Ohio's common animals (e.g., squirrels, chipmunks, deer, butterflies, bees, ants, bats and frogs) during the different seasons by describing changes in their behaviors and body covering.					X													
Science	Scientific Inquiry	2	1. Ask "how can I/we" questions.								X										
Science	Scientific Inquiry	2	2. Ask "how do you know" questions (not "why" questions) in appropriate situations and attempt to give reasonable answers when others ask questions.								X										
Science	Scientific Inquiry	2	3. Explore and pursue student-generated "how" questions.								X										
Science	Life	3	1. Compare the life cycles of different animals including birth to adulthood, reproduction and death (e.g., egg-tadpole-frog, egg-caterpillar-chrysalis-butterfly).					X	X												
Science	Life	3	2. Relate animal structures to their specific survival functions (e.g., obtaining food, escaping or hiding from enemies).					X	X												
Science	Life	3	3. Classify animals according to their characteristics (e.g., body coverings and body structure).					X	X												
Science	Life	3	6. Describe how changes in an organism's habitat are sometimes beneficial and sometimes harmful.					X	X				X								
Science	Scientific Inquiry	3	6. Communicate scientific findings to others through a variety of methods (e.g., pictures, written, oral and recorded observations).					X	X												
Science	Earth	4	8. Describe how wind, water and ice shape and reshape Earth's land surface by eroding rock and soil in some areas and depositing them in other areas producing characteristic landforms (e.g., dunes, deltas, glacial moraines).				X														

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Category	Area	Grade	Standard	1	2	3	4	5	6	7	8	9	10	11	12	13	15	14	16	17
Science	Life	4	1. Compare the life cycles of different plants including germination, maturity, reproduction and death.						X											
Science	Life	4	2. Relate plant structures to their specific functions (e.g., growth, survival and reproduction).						X											
Science	Life	4	3. Classify common plants according to their characteristics (e.g., tree leaves, flowers, seeds, roots, stems).						X											
Science	Life	4	5. Describe how organisms interact with one another in various ways (e.g., many plants depend on animals for carrying pollen or dispersing seeds).						X											
Science	Earth	5	6. Investigate ways Earth's renewable resources (e.g., fresh water, air, wildlife and trees) can be maintained				X													
Science	Life	5	1. Describe the role of producers in the transfer of energy entering ecosystems as sunlight to chemical energy through photosynthesis.										X		X					X
Science	Life	5	2. Explain how almost all kinds of animal's food can be traced back to plants.					X	X				X		X					X
Science	Life	5	3. Trace the organization of simple food chains and food webs (e.g., producers, herbivores, carnivores, omnivores and decomposers).					X	X				X		X					X
Science	Life	5	4. Summarize that organisms can survive only in ecosystems in which their needs can be met (e.g., food, water, shelter, air, carrying capacity and waste disposal). The world has different ecosystems and distinct ecosystems support the lives of different types of organisms.					X	X				X	X		X				X
Science	Life	5	5. Support how an organism's patterns of behavior are related to the nature of that organism's ecosystem, including the kinds and numbers of other organisms present, the availability of food and resources, and the changing physical characteristics of the ecosystem.					X	X				X	X		X				X
Science	Life	5	6. Analyze how all organisms, including humans, cause changes in their ecosystems and how these changes can be beneficial, neutral or detrimental (e.g., beaver ponds, earthworm burrows, grasshoppers eating all plants, people planting and cutting trees, and people introducing a new species).						X				X	X		X	X			X
Science	Sci & Tech	5	1. Investigate positive and negative impacts of human activity and technology on the environment.													X	X			
Science	Sci & Tech	5	3. Explain how the solution to one problem may create other problems													X				
Science	Sci Way of Know	5	1. Summarize how conclusions and ideas change as new knowledge is gained.				X		X											
Science	Sci Way of Know	5	2. Develop descriptions, explanations and models using evidence to defend/support findings.				X													

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Category	Area	Grade	Standard	1	2	3	4	5	6	7	8	9	10	11	12	13	15	14	16	17	
Science	Sci Way of Know	5	4. Identify how scientists use different kinds of ongoing investigations depending on the questions they are trying to answer (e.g., observations of things or events in nature, data collection, controlled experiments).				X		X												
Science	Sci Way of Know	5	5. Keep records of investigations and observations that are understandable weeks or months later.				X														
Science	Life	6	8. Describe how organisms may interact with one another.					X	X												
Science	Physical	6	3. Describe that in a physical change (e.g., state, shape, size) the chemical properties of a substance remain unchanged.															X			
Science	Physical	6	4. Describe that chemical and physical changes occur all around us (e.g., in the human body, cooking, industry).															X			
Science	Physical	6	8. Describe how renewable and nonrenewable energy resources can be managed (e.g., fossil fuels, trees, water).				X														
Science	Sci & Tech	6	1. Explain how technology influences the quality of life.															X			
Science	Sci & Tech	6	2. Explain how decisions about the use of products and systems can result in desirable or undesirable consequences (e.g., social and environmental).															X			
Science	Earth	7	1. Explain the biogeochemical cycles which move materials between the lithosphere (land), hydrosphere (water) and atmosphere (air).				X											X			
Science	Earth	7	2. Explain the Earth's capacity to absorb and recycle materials naturally (e.g., smoke smog, sewage) can change the environmental quality depending on the length of time involved (e.g. global warming).				X											X			
Science	Earth	7	4. Analyze data on the availability of fresh water that is essential for life and for most industrial and agricultural processes. Describe how rivers, lakes and groundwater can be depleted or polluted becoming less hospitable to life and even becoming unavailable or unsuitable for life.				X											X	X	X	
Science	Life	7	1. Investigate the great variety of body plans and internal structures found in multicellular organisms.					X		X											
Science	Life	7	2. Investigate how organisms or populations may interact with one another through symbiotic relationships and how some species have become so adapted to each other that neither could survive without the other (e.g., predator-prey, parasitism, mutualism, commensalism).					X	X	X							X			X	X
Science	Life	7	3. Explain how the number of organisms an ecosystem can support depends on adequate biotic (living) resources (e.g., plants, animals) and abiotic (non-living) resources (e.g., light, water, soil).					X	X	X							X				X
Science	Life	7	4. Investigate how overpopulation impacts an ecosystem.					X	X	X							X				X

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Category	Area	Grade	Standard	1	2	3	4	5	6	7	8	9	10	11	12	13	15	14	16	17
Science	Life	7	5. Explain that some environmental changes occur slowly while others occur rapidly (e.g., forest and pond succession, fires and decomposition).				X	X	X							X				X
Science	Life	7	6. Summarize the ways that natural occurrences and human activity affect the transfer of energy in Earth's ecosystems (e.g., fire, hurricanes, roads, oil spills).				X								X		X		X	X
Science	Life	7	7. Explain that photosynthetic cells convert solar energy into chemical energy that is used to carry on life functions or is transferred to consumers and used to carry on their life functions.												X					
Science	Physical	7	1. Investigate how matter can change forms but the total amount of matter remains constant.												X					
Science	Sci & Tech	7	2. Describe how decisions to develop and use technologies often put environmental and economic concerns in direct competition with each other				X												X	X
Science	Scientific Inquiry	7	3 Formulate and identify questions to guide scientific investigations that connect to science concepts and can be answered through scientific investigations.							X										
Science	Scientific Inquiry	7	4. Choose the appropriate tools and instruments and use relevant safety procedures to complete scientific investigations.							X										
Science	Scientific Inquiry	7	7. Use graphs, tables and charts to study physical phenomena and infer mathematical relationships between variables (e.g., speed, density).																X	
Science	Sci Way of Know	7	3 Describe how the work of science requires a variety of human abilities and qualities that are helpful in daily life (e.g., reasoning, creativity, skepticism, openness).																X	
Social Studies	Location	0	1. Identify and correctly use terms related to location, direction and distance including:			X														
Social Studies	Location	0	3. Make models and maps representing real places including the classroom.			X	X													
Social Studies	Location	0	4. Distinguish between land and water on maps and globes.			X	X													
Social Studies	Location	0	6. Describe the immediate surroundings of home (e.g., streets, buildings, fields, woods or lakes).			X														
Social Studies	Location	3	1. Use political maps, physical maps and aerial photographs to ask and answer questions about the local community.			X														
Social Studies	Location	3	2. Use a compass rose and cardinal directions to describe the relative location of places.			X														
Social Studies	Location	3	3. Read and interpret maps by using the map title, map key, direction indicator and symbols to answer questions about the local community.			X														

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Category	Area	Grade	Standard	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
Social Studies	Location	3	6. Identify and describe the landforms and climate, vegetation, population and economic characteristics of the local community.			X															
Social Studies	Location	4	3. Describe the location of Ohio relative to other states and countries.				X														
Social Studies	Location	4	4. Use maps to identify the location of major physical and human features of Ohio including:			X	X														
Social Studies	Location	4	9. Identify ways that people have affected the physical environment of Ohio including:				X	X													
Social Studies	Location	5	6. Use distribution maps to describe the patterns of renewable, nonrenewable and flow resources in North America including:				X														
Social Studies	Location	5	7. Analyze reasons for conflict and cooperation among regions of North America including:				X														
Social Studies	Location	5	8. Explain how the characteristics of different physical environments affect human activities in North America.				X														
Social Studies	Location	5	9. Analyze the positive and negative consequences of human changes to the physical environment including:				X														
Social Studies	Location	7	3. Describe changes in the physical and human characteristics of regions that occur over time and identify the consequences of such changes.																		X

2. Sand Dunes

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Ohio:
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Category	Area	Grade	Standard	Activities															
				1	2	3	4	5	6	8	7	9	10	11	12	13	14	15	
Science	Life	0	3. Describe how plants and animals usually resemble their parents.				X												
Science	Life	0	4. Investigate variations that exist among individuals of the same kind of plant or animal.				X												X
Science	Life	0	5. Investigate observable features of plants and animals that help them live in different kinds of places.				X					X							X
Science	Life	0	6. Investigate the habitats of many different kinds of local plants and animals and some of the ways in which animals depend on plants and each other in our community.				X												X
Science	Scientific Inquiry	0	5. Draw pictures that correctly portray features of the item being described.																X
Science	Scientific Inquiry	0	9. Make pictographs and use them to describe observations and draw conclusions.																X
Science	Life	1	1. Explore that organisms, including people, have basic needs which include air, water, food, living space and shelter.				X												X
Science	Life	1	2. Explain that food comes from sources other than grocery stores (e.g., farm crops, farm animals, oceans, lakes and forests).				X												
Science	Life	1	3. Explore that humans and other animals have body parts that help to seek, find and take in food when they are hungry (e.g., sharp teeth, flat teeth, good nose, sharp vision).				X												
Science	Life	1	4. Investigate that animals eat plants and/or other animals for food and may also use plants or other animals for shelter and nesting.				X												X
Science	Life	1	5. Recognize that seasonal changes can influence the health, survival or activities of organisms.				X												
Science	Scientific Inquiry	1	8. Use oral, written and pictorial representation to communicate work.				X												X
Science	Scientific Inquiry	1	9. Describe things as accurately as possible and compare with the observations of others.																X

2. Sand Dunes

Category	Area	Grade	Standard	1	2	3	4	5	6	8	7	9	10	11	12	13	14	15
Science	Life	2	1. Explain that animals, including people, need air, water, food, living space and shelter, and plants need air, water, nutrients (e.g., minerals), living space and light to survive.				X									X		
Science	Life	2	2. Identify that there are many distinct environments that support different kinds of organisms.				X									X		
Science	Life	2	3. Explain why organisms can survive only in environments that meet their needs (e.g., organisms that once lived on earth have disappeared for different reasons such as natural forces or human-caused effects).				X					X				X		
Science	Life	2	4. Compare similarities and differences among individuals of the same kind of plants and animals, including people.				X					X				X		
Science	Life	2	5. Explain that food is a basic need of plants and animals (e.g., plants need sunlight to make food and to grow, animals eat plants and/or other animals for food, food chain) and is important because it is a source of energy (e.g., energy used to play, ride bicycles, read, etc.).				X									X		
Science	Life	2	6. Investigate the different structures of plants and animals that help them live in different environments (e.g., lungs, gills, leaves and roots).				X					X				X		
Science	Life	2	7. Compare the habitats of many different kinds of Ohio plants and animals and some of the ways animals depend on plants and each other.				X					X				X		
Science	Life	2	8. Compare the activities of Ohio's common animals (e.g., squirrels, chipmunks, deer, butterflies, bees, ants, bats and frogs) during the different seasons by describing changes in their behaviors and body covering.				X									X		
Science	Life	2	9. Compare Ohio plants during the different seasons by describing changes in their appearance.				X											
Science	Scientific Inquiry	2	10. Share explanations with others to provide opportunities to ask questions, examine evidence and suggest alternative explanations.													X		
Science	Earth	3	Compare distinct properties of rocks (e.g., color, layering, texture).					X										
Science	Earth	3	2. Observe and investigate that rocks are often found in layers.															
Science	Earth	3	3. Describe that smaller rocks come from the breakdown of larger rocks through the actions of plants and weather.					X										
Science	Life	3	1. Compare the life cycles of different animals including birth to adulthood, reproduction and death (e.g., egg-tadpole-frog, egg-caterpillar-chrysalis-butterfly).				X											
Science	Life	3	2. Relate animal structures to their specific survival functions (e.g., obtaining food, escaping or hiding from enemies).				X				X	X						
Science	Life	3	3. Classify animals according to their characteristics (e.g., body coverings and body structure).				X				X	X						
Science	Life	3	4. Use examples to explain that extinct organisms may resemble organisms that are alive today.				X											
Science	Life	3	5. Observe and explore how fossils provide evidence about animals that lived long ago and the nature of the environment at that time.				X											

2. Sand Dunes

Category	Area	Grade	Standard	1	2	3	4	5	6	8	7	9	10	11	12	13	14	15
Science	Life	3	6. Describe how changes in an organism's habitat are sometimes beneficial and sometimes harmful.				X				X							
Science	Sci & Tech	3	4. Use a simple design process to solve a problem (e.g., identify a problem, identify possible solutions, design a solution).						X									
Science	Sci & Tech	3	5. Describe possible solutions to a design problem (e.g., how to hold down paper in the wind).						X									
Science	Scientific Inquiry	3	1. Select the appropriate tools and use relevant safety procedures to measure and record length and weight in metric and English units.						X									
Science	Scientific Inquiry	3	4. Identify and apply science safety procedures.						X									
Science	Scientific Inquiry	3	5. Record and organize observations (e.g., journals, charts, tables).						X									
Science	Scientific Inquiry	3	6. Communicate scientific findings to others through a variety of methods (e.g., pictures, written, oral and recorded observations).						X									
Science	Sci Way of Know	3	1. Describe different kinds of investigations that scientists use depending on the questions they are trying to answer						X									
Science	Sci Way of Know	3	2. Keep records of investigations and observations and do not change the records that are different from someone else's.						X									
Science	Sci Way of Know	3	3. Explore through stories how men and women have contributed to the development of science				X		X									
Science	Sci Way of Know	3	4. Identify various careers in science				X		X									
Science	Sci Way of Know	3	5. Discuss how both men and women find science rewarding as a career and in their everyday lives.				X											
Science	Earth	4	8. Describe how wind, water and ice shape and reshape Earth's land surface by eroding rock and soil in some areas and depositing them in other areas producing characteristic landforms (e.g., dunes, deltas, glacial moraines).				X											
Science	Earth	4	10. Describe evidence of changes on Earth's surface in terms of slow processes (e.g., erosion, weathering, mountain building, deposition) and rapid processes (e.g. volcanic eruptions, earthquakes, landslides).	X														
Science	Life	4	1. Compare the life cycles of different plants including germination, maturity, reproduction and death.				X											
Science	Life	4	2. Relate plant structures to their specific functions (e.g., growth, survival and reproduction).				X				X							
Science	Life	4	3. Classify common plants according to their characteristics (e.g., tree leaves, flowers, seeds, roots, stems).				X				X							
Science	Life	4	4. Observe and explore that fossils provide evidence about plants that lived long ago and the nature of the environment at that time.															
Science	Life	4	5. Describe how organisms interact with one another in various ways (e.g., many plants depend on animals for carrying pollen or dispersing seeds).				X											
Science	Life	5	1. Describe the role of producers in the transfer of energy entering ecosystems as sunlight to chemical energy through photosynthesis.														X	

2. Sand Dunes

Category	Area	Grade	Standard	1	2	3	4	5	6	8	7	9	10	11	12	13	14	15
Science	Life	5	3. Trace the organization of simple food chains and food webs (e.g., producers, herbivores, carnivores, omnivores and decomposers).				X				X							X
Science	Life	5	4. Summarize that organisms can survive only in ecosystems in which their needs can be met (e.g., food, water, shelter, air, carrying capacity and waste disposal). The world has different ecosystems and distinct ecosystems support the lives of different types of organisms.				X				X							X
Science	Life	5	5. Support how an organism's patterns of behavior are related to the nature of that organism's ecosystem, including the kinds and numbers of other organisms present, the availability of food and resources, and the changing physical characteristics of the ecosystem.				X				X							X
Science	Life	5	6. Analyze how all organisms, including humans, cause changes in their ecosystems and how these changes can be beneficial, neutral or detrimental (e.g., beaver ponds, earthworm burrows, grasshoppers eating all plants, people planting and cutting trees, and people introducing a new species).				X				X							X
Science	Earth	7	2. Explain the Earth's capacity to absorb and recycle materials naturally (e.g., smoke smog, sewage) can change the environmental quality depending on the length of time involved (e.g. global warming).											X				
Science	Life	7	1. Investigate the great variety of body plans and internal structures found in multicellular organisms.							X								
Science	Life	7	2. Investigate how organisms or populations may interact with one another through symbiotic relationships and how some species have become so adapted to each other that neither could survive without the other (e.g., predator-prey, parasitism, mutualism, commensalism).										X					
Science	Life	7	3. Explain how the number of organisms an ecosystem can support depends on adequate biotic (living) resources (e.g., plants, animals) and abiotic (non-living) resources (e.g., light, water, soil).							X			X					
Science	Life	7	5. Explain that some environmental changes occur slowly while others occur rapidly (e.g., forest and pond succession, fires and decomposition).							X			X	X				
Science	Life	7	6. Summarize the ways that natural occurrences and human activity affect the transfer of energy in Earth's ecosystems (e.g., fire, hurricanes, roads, oil spills).											X				
Science	Scientific Inquiry	7	3 Formulate and identify questions to guide scientific investigations that connect to science concepts and can be answered through scientific investigations.							X								
Science	Scientific Inquiry	7	4. Choose the appropriate tools and instruments and use relevant safety procedures to complete scientific investigations.							X								
Science	Scientific Inquiry	7	5. Analyze alternative scientific explanations and predictions and recognize that there may be more than one good way to interpret a given set of data.							X								

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Category	Area	Grade	Standard	1	2	3	4	5	6	8	7	9	10	11	12	13	14	15
Science	Scientific Inquiry	7	6. Identify faulty reasoning and statements that go beyond the evidence or misinterpret the evidence.							X								
Science	Sci Way of Know	7	3 Describe how the work of science requires a variety of human abilities and qualities that are helpful in daily life (e.g., reasoning, creativity, skepticism, openness).							X								
Social Studies	Participation	3	1. Describe how people help to make the community a better place in which to live including:											X				
Social Studies	Participation	3	3. Describe the responsibilities of citizenship with emphasis on:											X				
Social Studies	Location	4	5. Describe and compare the landforms, climates, population, vegetation and economic characteristics of places and regions in Ohio.											X	X			
Social Studies	Location	4	8. Identify how environmental processes (i.e., glaciation and weathering) and characteristics (landforms, bodies of water, climate, vegetation) influence human settlement and activity in Ohio.											X	X			
Social Studies	Location	4	9. Identify ways that people have affected the physical environment of Ohio including:											X	X			
Social Studies	Participation	4	1. Describe the ways in which citizens can promote the common good and influence their government including:											X	X			
Social Studies	Obtaining Information	4	10. Use a problem-solving/decision-making process which includes:											X	X			
Social Studies	Obtaining Information	5	9. Use a problem-solving/decision-making process which includes:											X	X			
Social Studies	Location	6	5. Describe ways human settlements and activities are influenced by environmental factors and processes in different places and regions including:											X	X			
Social Studies	Location	7	3. Describe changes in the physical and human characteristics of regions that occur over time and identify the consequences of such changes.											X	X			

3. Wetlands

Great Lakes in My World Unit: **Wetlands**

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Ohio:
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Category	Area	Grade	Standard	Activities												
				Wetland Alphabet	Wetland Song	Mud Painting	Groundwater Exploration	Value of Wetlands	Wetland Observation	Bugs In The Mud	Critical Critters	Living Life Cycles	Name that Plant	Working Wetlands	Mini Wetland Teaching About Wetlands	
				K-4	K-2	4-8	4-8	4-8	K-8	K-3	4-8	3-6	4-8	4-8	4-8	4-8
Science	Earth	0	2. Explore that animals and plants cause changes to their surroundings						X							
Science	Earth	0	3. Explore that sometimes change is too fast to see and sometimes change is too slow to see						X							
Science	Life	0	1. Explore differences between living and non-living things (e.g., plant-rock)			X			X	X						
Science	Life	0	3. Describe how plants and animals usually resemble their parents.						X				X			
Science	Life	0	4. Investigate variations that exist among individuals of the same kind of plant or animal.			X			X	X			X			
Science	Life	0	5. Investigate observable features of plants and animals that help them live in different kinds of places.			X			X				X			
Science	Life	0	6. Investigate the habitats of many different kinds of local plants and animals and some of the ways in which animals depend on plants and each other in our community.			X			X	X			X			
Science	Scientific Inquiry	0	1. Ask "what if" questions.						X							
Science	Scientific Inquiry	0	2. Explore and pursue student-generated "what if" questions.						X							
Science	Scientific Inquiry	0	3. Use appropriate safety procedures when completing scientific investigations.						X	X						
Science	Scientific Inquiry	0	4. Use the five senses to make observations about the natural world.						X	X			X			
Science	Scientific Inquiry	0	5. Draw pictures that correctly portray features of the item being described.						X	X			X			
Science	Scientific Inquiry	0	6. Recognize that numbers can be used to count a collection of things.						X	X			X			
Science	Scientific Inquiry	0	7. Use appropriate tools and simple equipment/instruments to safely gather scientific data (e.g., magnifiers and other appropriate tools).						X	X						
Science	Scientific Inquiry	0	8. Measure the lengths of objects using non-standard methods of measurement (e.g., teddy bear counters, pennies).						X	X			X			
Science	Scientific Inquiry	0	9. Make pictographs and use them to describe observations and draw conclusions.						X	X			X			
Science	Scientific Inquiry	0	10. Make new observations when people give different descriptions for the same thing.						X	X			X			
Science	Sci Way of Know	0	1. Recognize that scientific investigations involve asking open-ended questions. (How? What if?)						X	X			X			
Science	Sci Way of Know	0	2. Recognize that people are more likely to accept your ideas if you can give good reasons for them.						X	X			X			

3. Wetlands

Category	Area	Grade	Standard	1	2	3	4	5	6	7	8	9	10	11	12	13
Science	Sci Way of Know	0	3. Interact with living things and the environment in ways that promote respect.						X	X			X			
Science	Sci Way of Know	0	4. Demonstrate ways science is practiced by people everyday (children and adults).						X	X			X			
Science	Earth	1	1. Identify that resources are things that we get from the living (e.g., forests) and nonliving (e.g., minerals, water) environment and that resources are necessary to meet the needs and wants of a population.						X							
Science	Earth	1	2. Explain that the supply of many resources is limited but the supply can be extended through careful use, decreased use, reusing and/or recycling.						X							
Science	Earth	1	3. Explain that all organisms cause changes in the environment where they live; the changes can be very noticeable or slightly noticeable, fast or slow. (e.g., spread of grass cover slowing soil erosion, tree roots slowly breaking sidewalks).						X							
Science	Life	1	1. Explore that organisms, including people, have basic needs which include air, water, food, living space and shelter.						X							
Science	Life	1	3. Explore that humans and other animals have body parts that help to seek, find and take in food when they are hungry (e.g., sharp teeth, flat teeth, good nose, sharp vision).						X	X						
Science	Life	1	4. Investigate that animals eat plants and/or other animals for food and may also use plants or other animals for shelter and nesting.						X	X						
Science	Scientific Inquiry	1	1. Ask "what happens when" questions.						X	X						
Science	Scientific Inquiry	1	2. Explore and pursue student-generated "what happens when" questions.						X	X						
Science	Scientific Inquiry	1	3. Use appropriate safety procedures when completing scientific investigations.						X	X						
Science	Scientific Inquiry	1	4. Work in a small group to complete an investigation and then share findings with others.						X	X						
Science	Scientific Inquiry	1	5. Create individual conclusions about group findings.						X	X						
Science	Scientific Inquiry	1	6. Use appropriate tools and simple equipment/instruments to safely gather scientific data (e.g., magnifiers, timers, simple balances and other appropriate tools).						X	X						
Science	Scientific Inquiry	1	7. Make estimates to compare familiar lengths, weights and time intervals.						X	X						
Science	Scientific Inquiry	1	8. Use oral, written and pictorial representation to communicate work.						X	X						
Science	Scientific Inquiry	1	9. Describe things as accurately as possible and compare with the observations of others.						X	X						
Science	Sci Way of Know	1	2. Demonstrate good explanations based on evidence from investigations and observations.						X	X						
Science	Sci Way of Know	1	3. Explain that everybody can do science, invent things and have scientific ideas no matter where they live.						X	X						
Science	Earth	2	4. Observe and describe that some weather changes occur throughout the day and some changes occur in a repeating seasonal pattern.						X							

3. Wetlands

Category	Area	Grade	Standard	1	2	3	4	5	6	7	8	9	10	11	12	13
Science	Earth	2	5. Describe weather by measurable quantities such as temperature and precipitation.						X							
Science	Life	2	1. Explain that animals, including people, need air, water, food, living space and shelter, and plants need air, water, nutrients (e.g., minerals), living space and light to survive.						X	X						
Science	Life	2	2. Identify that there are many distinct environments that support different kinds of organisms.						X							
Science	Life	2	3. Explain why organisms can survive only in environments that meet their needs (e.g., organisms that once lived on earth have disappeared for different reasons such as natural forces or human-caused effects).						X							
Science	Life	2	4. Compare similarities and differences among individuals of the same kind of plants and animals, including people.			X			X	X			X			
Science	Life	2	5. Explain that food is a basic need of plants and animals (e.g., plants need sunlight to make food and to grow, animals eat plants and/or other animals for food, food chain) and is important because it is a source of energy (e.g., energy used to play, ride bicycles, read, etc.).						X							
Science	Life	2	6. Investigate the different structures of plants and animals that help them live in different environments (e.g., lungs, gills, leaves and roots).			X			X	X			X			
Science	Life	2	7. Compare the habitats of many different kinds of Ohio plants and animals and some of the ways animals depend on plants and each other.						X				X			
Science	Life	2	8. Compare the activities of Ohio's common animals (e.g., squirrels, chipmunks, deer, butterflies, bees, ants, bats and frogs) during the different seasons by describing changes in their behaviors and body covering.						X							
Science	Life	2	9. Compare Ohio plants during the different seasons by describing changes in their appearance.										X			
Science	Sci & Tech	2	4. Communicate orally, pictorially, or written the design process used to make something.						X							
Science	Scientific Inquiry	2	1. Ask "how can I/we" questions.						X	X			X			
Science	Scientific Inquiry	2	2. Ask "how do you know" questions (not "why" questions) in appropriate situations and attempt to give reasonable answers when others ask questions.						X	X			X			
Science	Scientific Inquiry	2	3. Explore and pursue student-generated "how" questions.						X	X			X			
Science	Scientific Inquiry	2	4. Use appropriate safety procedures when completing scientific investigations.						X	X			X			
Science	Scientific Inquiry	2	5. Use evidence to develop explanations of scientific investigations. (What do you think? How do you know?)						X	X			X			
Science	Scientific Inquiry	2	6. Recognize that explanations are generated in response to observations, events and phenomena.						X	X			X			
Science	Scientific Inquiry	2	7. Use appropriate tools and simple equipment/instruments to safely gather scientific data (e.g., magnifiers, non-breakable thermometers, timers, rulers, balances, calculators and other appropriate tools).						X	X			X			

3. Wetlands

Category	Area	Grade	Standard	1	2	3	4	5	6	7	8	9	10	11	12	13
Science	Scientific Inquiry	2	8. Measure properties of objects using tools such as rulers, balances and thermometers.						X	X			X			
Science	Scientific Inquiry	2	9. Use whole numbers to order, count, identify, measure and describe things and experiences.						X	X			X			
Science	Scientific Inquiry	2	10. Share explanations with others to provide opportunities to ask questions, examine evidence and suggest alternative explanations.							X			X			
Science	Sci Way of Know	2	1. Describe that scientific investigations generally work the same way under the same conditions.										X			
Science	Sci Way of Know	2	2. Explain why scientists review and ask questions about the results of other scientists' work.						X	X			X			
Science	Sci Way of Know	2	3. Describe ways in which using the solution to a problem might affect other people and the environment.										X			
Science	Sci Way of Know	2	4. Demonstrate that in science it is helpful to work with a team and share findings with others.						X	X			X			
Science	Earth	3	Compare distinct properties of rocks (e.g., color, layering, texture).				X	X	X							
Science	Earth	3	2. Observe and investigate that rocks are often found in layers.				X	X	X							
Science	Earth	3	3. Describe that smaller rocks come from the breakdown of larger rocks through the actions of plants and weather.					X	X					X		
Science	Earth	3	4. Observe and describe the composition of soil (e.g., small pieces of rock and decomposed pieces of plants and animals, and products of plants and animals).					X	X					X		
Science	Earth	3	5. Investigate the properties of soil (e.g., color, texture, capacity to retain water, ability to support plant growth)				X	X	X					X		
Science	Earth	3	6. Investigate that soils are often found in layers and can be different from place to place.				X	X						X		
Science	Life	3	1. Compare the life cycles of different animals including birth to adulthood, reproduction and death (e.g., egg-tadpole-frog, egg-caterpillar-chrysalis-butterfly).									X				
Science	Life	3	2. Relate animal structures to their specific survival functions (e.g., obtaining food, escaping or hiding from enemies).						X	X		X				
Science	Life	3	3. Classify animals according to their characteristics (e.g., body coverings and body structure).						X	X		X				
Science	Life	3	6. Describe how changes in an organism's habitat are sometimes beneficial and sometimes harmful.						X			X				
Science	Physical	3	Describe an objects position by locating it relative to another object or the background.						X							
Science	Scientific Inquiry	3	1. Select the appropriate tools and use relevant safety procedures to measure and record length and weight in metric and English units.						X	X						
Science	Scientific Inquiry	3	2. Discuss observations and measurements made by other people.						X	X						
Science	Scientific Inquiry	3	3. Read and interpret simple tables and graphs produced by self/others.									X				
Science	Scientific Inquiry	3	4. Identify and apply science safety procedures.						X	X		X				

3. Wetlands

Category	Area	Grade	Standard	1	2	3	4	5	6	7	8	9	10	11	12	13
Science	Scientific Inquiry	3	5. Record and organize observations (e.g., journals, charts, tables).						X	X		X				
Science	Scientific Inquiry	3	6. Communicate scientific findings to others through a variety of methods (e.g., pictures, written, oral and recorded observations).						X	X		X				
Science	Sci Way of Know	3	1. Describe different kinds of investigations that scientists use depending on the questions they are trying to answer						X	X						
Science	Sci Way of Know	3	2. Keep records of investigations and observations and do not change the records that are different from someone elses.						X	X		X				
Science	Sci Way of Know	3	3. Explore through stories how men and women have contributed to the development of science						X	X		X				
Science	Sci Way of Know	3	4. Identify various careers in science						X	X		X				
Science	Sci Way of Know	3	5. Discuss how both men and women find science rewarding as a career and in their everyday lives.						X	X		X				
Science	Earth	4	4. Describe weather by measurable quantities such as temperature, wind direction, wind speed, precipitation, and barometric pressure.						X							
Science	Earth	4	5. Record local weather information on a calendar or map and describe changes over a period of time (e.g., barometric pressure, temperature, precipitation symbols, cloud conditions).						X							
Science	Earth	4	7. Describe the weather which accompanies cumulus, cumulonimbus, cirrus and stratus clouds.						X							
Science	Earth	4	8. Describe how wind, water and ice shape and reshape Earth's land surface by eroding rock and soil in some areas and depositing them in other areas producing characteristic landforms (e.g., dunes, deltas, glacial moraines).				X	X	X							
Science	Earth	4	9. Identify and describe how freezing, thawing and plant growth reshape the land surface by causing the weathering of rock.					X	X							
Science	Earth	4	10. Describe evidence of changes on Earth's surface in terms of slow processes (e.g., erosion, weathering, mountain building, deposition) and rapid processes (e.g. volcanic eruptions, earthquakes, landslides).				X	X	X							
Science	Life	4	1. Compare the life cycles of different plants including germination, maturity, reproduction and death.										X			
Science	Life	4	2. Relate plant structures to their specific functions (e.g., growth, survival and reproduction).						X				X			
Science	Life	4	3. Classify common plants according to their characteristics (e.g., tree leaves, flowers, seeds, roots, stems).						X				X			
Science	Scientific Inquiry	4	1. Select the appropriate tools and use relevant safety procedures to measure and record length, weight, volume and area in metric and English units.						X							
Science	Scientific Inquiry	4	3. Develop, design and conduct safe, simple investigations or experiments to answer questions.				X		X							
Science	Scientific Inquiry	4	4. Explain the importance of keeping conditions the same in an experiment.				X									

3. Wetlands

Category	Area	Grade	Standard	1	2	3	4	5	6	7	8	9	10	11	12	13
Science	Scientific Inquiry	4	5. Describe how comparisons may not be fair when some conditions are not kept the same between experiments.				X		X							
Science	Scientific Inquiry	4	6. Formulate instructions and communicate data in a manner that allows others to understand and repeat an investigation or experiment.						X							
Science	Sci Way of Know	4	1. Differentiate fact from opinion and explain that scientists do not rely on claims or conclusions unless they are backed by observations that can be confirmed.						X							
Science	Sci Way of Know	4	2. Record the results and data from an investigation and make a reasonable explanation.				X		X							
Science	Sci Way of Know	4	3. Explain discrepancies in an investigation using evidence to support findings.				X		X							
Science	Sci Way of Know	4	4. Explain why keeping records of observations and investigations is important.				X		X							
Science	Earth	5	5. Explain how the supply of many non-renewable resources is limited and can be extended through reducing, reusing and recycling but cannot be extended indefinitely.					X								X
Science	Earth	5	6. Investigate ways Earth's renewable resources (e.g., fresh water, air, wildlife and trees) can be maintained					X	X							X
Science	Life	5	2. Explain how almost all kinds of animal's food can be traced back to plants.						X							X
Science	Life	5	3. Trace the organization of simple food chains and food webs (e.g., producers, herbivores, carnivores, omnivores and decomposers).						X							X
Science	Life	5	4. Summarize that organisms can survive only in ecosystems in which their needs can be met (e.g., food, water, shelter, air, carrying capacity and waste disposal). The world has different ecosystems and distinct ecosystems support the lives of different types of organisms.						X		X					X
Science	Life	5	5. Support how an organism's patterns of behavior are related to the nature of that organism's ecosystem, including the kinds and numbers of other organisms present, the availability of food and resources, and the changing physical characteristics of the ecosystem.						X		X					
Science	Life	5	6. Analyze how all organisms, including humans, cause changes in their ecosystems and how these changes can be beneficial, neutral or detrimental (e.g., beaver ponds, earthworm burrows, grasshoppers eating all plants, people planting and cutting trees, and people introducing a new species).						X							
Science	Sci Way of Know	5	1. Summarize how conclusions and ideas change as new knowledge is gained.						X							
Science	Sci Way of Know	5	2. Develop descriptions, explanations and models using evidence to defend/support findings.						X							X
Science	Sci Way of Know	5	3. Explain why an experiment must be repeated by different people or at different times or places and yield consistent results before the results are accepted.													X

3. Wetlands

Category	Area	Grade	Standard	1	2	3	4	5	6	7	8	9	10	11	12	13
Science	Sci Way of Know	5	4. Identify how scientists use different kinds of ongoing investigations depending on the questions they are trying to answer (e.g., observations of things or events in nature, data collection, controlled experiments).						X							X
Science	Sci Way of Know	5	5. Keep records of investigations and observations that are understandable weeks or months later.						X							X
Science	Sci Way of Know	5	6. Identify a variety of scientific and technological work that people of all ages, backgrounds and groups perform.						X							X
Science	Earth	7	1. Explain the biogeochemical cycles which move materials between the lithosphere (land), hydrosphere (water) and atmosphere (air).				X		X					X		
Science	Earth	7	2. Explain the Earth's capacity to absorb and recycle materials naturally (e.g., smoke smog, sewage) can change the environmental quality depending on the length of time involved (e.g. global warming).				X		X					X	X	
Science	Earth	7	4. Analyze data on the availability of fresh water that is essential for life and for most industrial and agricultural processes. Describe how rivers, lakes and groundwater can be depleted or polluted becoming less hospitable to life and even becoming unavailable or unsuitable for life.				X		X					X	X	
Science	Earth	7	9. Describe the connection between the water cycle and weather-related phenomenon (e.g., tornadoes, floods, droughts, hurricanes).						X							
Science	Life	7	1. Investigate the great variety of body plans and internal structures found in multicellular organisms.								X					
Science	Life	7	2. Investigate how organisms or populations may interact with one another through symbiotic relationships and how some species have become so adapted to each other that neither could survive without the other (e.g., predator-prey, parasitism, mutualism, commensalism).						X		X					X
Science	Life	7	3. Explain how the number of organisms an ecosystem can support depends on adequate biotic (living) resources (e.g., plants, animals) and abiotic (non-living) resources (e.g., light, water, soil).						X		X					X
Science	Life	7	4. Investigate how overpopulation impacts an ecosystem.													X
Science	Life	7	5. Explain that some environmental changes occur slowly while others occur rapidly (e.g., forest and pond succession, fires and decomposition).						X							X
Science	Life	7	6. Summarize the ways that natural occurrences and human activity affect the transfer of energy in Earth's ecosystems (e.g., fire, hurricanes, roads, oil spills).						X							
Science	Life	7	8. Investigate the great diversity among organisms.						X		X					
Science	Sci & Tech	7	2. Describe how decisions to develop and use technologies often put environmental and economic concerns in direct competition with each other						X							
Science	Sci & Tech	7	3 Recognize that science can only answer some questions and technology can only solve some human problems.						X							
Science	Scientific Inquiry	7	3 Formulate and identify questions to guide scientific investigations that connect to science concepts and can be answered through scientific investigations.						X							X

3. Wetlands

Category	Area	Grade	Standard	1	2	3	4	5	6	7	8	9	10	11	12	13
Science	Scientific Inquiry	7	4. Choose the appropriate tools and instruments and use relevant safety procedures to complete scientific investigations.						X							X
Science	Scientific Inquiry	7	5. Analyze alternative scientific explanations and predictions and recognize that there may be more than one good way to interpret a given set of data.						X							X
Science	Scientific Inquiry	7	6. Identify faulty reasoning and statements that go beyond the evidence or misinterpret the evidence.						X							X
Science	Scientific Inquiry	7	7. Use graphs, tables and charts to study physical phenomena and infer mathematical relationships between variables (e.g., speed, density).						X							X
Science	Sci Way of Know	7	3 Describe how the work of science requires a variety of human abilities and qualities that are helpful in daily life (e.g., reasoning, creativity, skepticism, openness).						X							X
Social Studies	Location	0	1. Identify and correctly use terms related to location, direction and distance including:						X							
Social Studies	Location	0	3. Make models and maps representing real places including the classroom.						X							
Social Studies	Location	0	4. Distinguish between land and water on maps and globes.						X							
Social Studies	Location	0	6. Describe the immediate surroundings of home (e.g., streets, buildings, fields, woods or lakes).						X							
Social Studies	Participation	0	1. Participate and cooperate in classroom activities.						X							
Social Studies	Participation	0	2. Take personal responsibility to follow directions and rules.						X							
Social Studies	Participation	0	3. Demonstrate the ability to make choices and take responsibility for personal actions.						X							
Social Studies	Obtaining Information	0	1. Listen for information.						X							
Social Studies	Obtaining Information	0	2. Sort objects or pictures according to appropriate criteria.						X							
Social Studies	Obtaining Information	0	3. Compare similarities and differences among objects or pictures.						X							
Social Studies	Obtaining Information	0	4. Communicate information.						X							
Social Studies	Location	1	1. Identify and correctly use terms related to location, direction and distance including:						X							
Social Studies	Location	1	2. Construct simple maps and models using symbols to represent familiar places (e.g., classroom, school or neighborhood).						X							
Social Studies	Location	1	3. Identify and use symbols to locate places of significance on maps and globes.						X							
Social Studies	Location	1	5. Identify and describe the physical features (lake, river, hill, mountain, forest) and human features (town, city, farm, park, playground, house, traffic signs/signals) of places in the community.						X							
Social Studies	Location	1	6. Compare areas within the local community to identify similarities.						X							

3. Wetlands

Category	Area	Grade	Standard	1	2	3	4	5	6	7	8	9	10	11	12	13
Social Studies	Obtaining Information	1	1. Obtain information about a topic using a variety of oral and visual sources.						X							
Social Studies	Obtaining Information	1	3. Determine categories for sorting information.						X							
Social Studies	Obtaining Information	1	4. Identify main ideas from oral, visual and print sources.						X							
Social Studies	Obtaining Information	1	5. Communicate information orally or visually.						X							
Social Studies	Obtaining Information	1	6. Display courtesy and respect for others in group settings including:						X							
Social Studies	Location	2	4. Describe and locate landforms (plateaus, islands, hills, mountains, valleys) and bodies of water (creeks, ponds, lakes, oceans) in photographs, maps and 3-D models.						X							
Social Studies	Location	2	5. Compare how land is used in urban, suburban and rural environments.						X							
Social Studies	Location	2	6. Identify ways in which people have responded to and modified the physical environment such as building roads and clearing land for urban development.						X							
Social Studies	Obtaining Information	2	1. Obtain information from oral, visual and print sources.						X							
Social Studies	Obtaining Information	2	2. Identify sources used to gather information:						X							
Social Studies	Obtaining Information	2	4. Distinguish the difference between fact and fiction in oral, visual and print materials.						X							
Social Studies	Obtaining Information	2	5. Communicate information in writing.						X							
Social Studies	Obtaining Information	2	6. Use problem-solving/decision-making skills to identify a problem and gather information while working independently and in groups.						X							
Social Studies	Location	3	1. Use political maps, physical maps and aerial photographs to ask and answer questions about the local community.						X							
Social Studies	Location	3	7. Identify ways that physical characteristics of the environment (i.e., landforms, bodies of water, climate and vegetation) affect and have been modified by the local community.						X							
Social Studies	Participation	3	1. Describe how people help to make the community a better place in which to live including:													X
Social Studies	Participation	3	3. Describe the responsibilities of citizenship with emphasis on:													X
Social Studies	Obtaining Information	3	1. Obtain information about local issues from a variety of sources including:				X		X							
Social Studies	Obtaining Information	3	2. Locate information using various parts of a source including:						X							
Social Studies	Obtaining Information	3	3. Identify possible cause and effect relationships.						X							

3. Wetlands

Category	Area	Grade	Standard	1	2	3	4	5	6	7	8	9	10	11	12	13
Social Studies	Obtaining Information	3	4. Read and interpret pictographs, bar graphs and charts.						X							
Social Studies	Obtaining Information	3	5. Communicate information using pictographs and bar graphs.						X							
Social Studies	Obtaining Information	3	6. Use a problem-solving/decision-making process which includes:						X							
Social Studies	Location	4	1. Use a linear scale to measure the distance between places on a map.						X							
Social Studies	Location	4	2. Use cardinal and intermediate directions to describe the relative location of places.				X		X							
Social Studies	Location	4	4. Use maps to identify the location of major physical and human features of Ohio including:				X		X							
Social Studies	Location	4	5. Describe and compare the landforms, climates, population, vegetation and economic characteristics of places and regions in Ohio.						X							
Social Studies	Location	4	7. Explain how resources, transportation and location influenced the development of cities and industries in Ohio including major industries such as oil, steel, rubber and glass.													X
Social Studies	Location	4	8. Identify how environmental processes (i.e., glaciation and weathering) and characteristics (landforms, bodies of water, climate, vegetation) influence human settlement and activity in Ohio.				X									X
Social Studies	Location	4	9. Identify ways that people have affected the physical environment of Ohio including:				X		X							X
Social Studies	Location	5	2. Use maps to identify the location of:				X									
Social Studies	Location	5	6. Use distribution maps to describe the patterns of renewable, nonrenewable and flow resources in North America including:				X									X
Social Studies	Location	5	7. Analyze reasons for conflict and cooperation among regions of North America including:													X
Social Studies	Location	5	8. Explain how the characteristics of different physical environments affect human activities in North America.													X
Social Studies	Location	5	9. Analyze the positive and negative consequences of human changes to the physical environment including:				X									X
Social Studies	Location	6	1. Place countries, cities, deserts, mountain ranges and bodies of water on the continents on which they are located.				X									
Social Studies	Location	6	7. Describe ways humans depend on and modify the environment and the positive and negative consequences of the modifications including:													X

4. Human Communities

Great Lakes in My World Unit: Human Communities

www.greatlakes.org

Ohio:
Science
and
Social
Studies

Category	Area	Grade	Standard	Activities													
				4-8 1	3-6 2	K-4 3	K-4 4	4-8 5	3-6 6	4-8 7	4-8 8	4-8 9	4-8 10	K-3 11	4-8 12		
Science	Life	0	1. Explore differences between living and non-living things (e.g., plant-rock)			X											
Science	Life	0	2. Discover that stories (e.g., cartoons, movies, comics) sometimes give plants and animals characteristics they really do not have (e.g., talking flowers).			X											
Science	Life	0	3. Describe how plants and animals usually resemble their parents.				X										
Science	Life	0	4. Investigate variations that exist among individuals of the same kind of plant or animal.			X											
Science	Life	0	5. Investigate observable features of plants and animals that help them live in different kinds of places.			X	X										
Science	Life	0	6. Investigate the habitats of many different kinds of local plants and animals and some of the ways in which animals depend on plants and each other in our community.			X	X									X	
Science	Scientific Inquiry	0	5. Draw pictures that correctly portray features of the item being described.												X	X	
Science	Scientific Inquiry	0	9. Make pictographs and use them to describe observations and draw conclusions.			X											
Science	Life	1	1. Explore that organisms, including people, have basic needs which include air, water, food, living space and shelter.			X	X										
Science	Life	1	2. Explain that food comes from sources other than grocery stores (e.g., farm crops, farm animals, oceans, lakes and forests).			X											
Science	Life	1	3. Explore that humans and other animals have body parts that help to seek, find and take in food when they are hungry (e.g., sharp teeth, flat teeth, good nose, sharp vision).			X										X	
Science	Life	1	4. Investigate that animals eat plants and/or other animals for food and may also use plants or other animals for shelter and nesting.			X	X										
Science	Scientific Inquiry	1	8. Use oral, written and pictorial representation to communicate work.			X										X	
Science	Scientific Inquiry	1	9. Describe things as accurately as possible and compare with the observations of others.													X	
Science	Life	2	1. Explain that animals, including people, need air, water, food, living space and shelter, and plants need air, water, nutrients (e.g., minerals), living space and light to survive.			X	X										

4. Human Communities

Category	Area	Grade	Standard	1	2	3	4	5	6	7	8	9	10	11	12
Science	Life	2	2. Identify that there are many distinct environments that support different kinds of organisms.			X	X								X
Science	Life	2	3. Explain why organisms can survive only in environments that meet their needs (e.g., organisms that once lived on earth have disappeared for different reasons such as natural forces or human-caused effects).			X	X								
Science	Life	2	4. Compare similarities and differences among individuals of the same kind of plants and animals, including people.			X	X								
Science	Life	2	5. Explain that food is a basic need of plants and animals (e.g., plants need sunlight to make food and to grow, animals eat plants and/or other animals for food, food chain) and is important because it is a source of energy (e.g., energy used to play, ride bicycles, read, etc.).			X	X								
Science	Life	2	6. Investigate the different structures of plants and animals that help them live in different environments (e.g., lungs, gills, leaves and roots).			X									
Science	Life	2	7. Compare the habitats of many different kinds of Ohio plants and animals and some of the ways animals depend on plants and each other.			X	X								
Science	Life	2	8. Compare the activities of Ohio's common animals (e.g., squirrels, chipmunks, deer, butterflies, bees, ants, bats and frogs) during the different seasons by describing changes in their behaviors and body covering.			X	X								
Science	Sci & Tech	2	4. Communicate orally, pictorially, or written the design process used to make something.												X
Science	Scientific Inquiry	2	10. Share explanations with others to provide opportunities to ask questions, examine evidence and suggest alternative explanations.			X									
Science	Earth	5	5. Explain how the supply of many non-renewable resources is limited and can be extended through reducing, reusing and recycling but cannot be extended indefinitely.						X	X		X			
Science	Earth	5	6. Investigate ways Earth's renewable resources (e.g., fresh water, air, wildlife and trees) can be maintained						X	X		X			
Science	Life	5	6. Analyze how all organisms, including humans, cause changes in their ecosystems and how these changes can be beneficial, neutral or detrimental (e.g., beaver ponds, earthworm burrows, grasshoppers eating all plants, people planting and cutting trees, and people introducing a new species).						X	X		X			
Science	Sci & Tech	5	1. Investigate positive and negative impacts of human activity and technology on the environment.										X		
Science	Sci & Tech	5	2. Revise an existing design used to solve a problem based on peer review.										X		
Science	Sci & Tech	5	3. Explain how the solution to one problem may create other problems										X		
Science	Scientific Inquiry	5	1. Select and safely use the appropriate tools to collect data when conducting investigations and communicating findings to others(e.g., thermometers, timers, balances, spring scales, magnifiers, microscopes and other appropriate tools).										X		
Science	Scientific Inquiry	5	2. Evaluate observations and measurements made by other people and identify reasons for any discrepancies.						X			X			

4. Human Communities

Category	Area	Grade	Standard	1	2	3	4	5	6	7	8	9	10	11	12
Science	Scientific Inquiry	5	3. Use evidence and observations to explain and communicate the results of investigations.						X			X			
Science	Scientific Inquiry	5	5. Identify potential hazards and/or precautions involved in an investigation.						X			X			
Science	Scientific Inquiry	5	6. Explain why results of an experiment are sometimes different (e.g., because of unexpected differences in what is being investigated, unrealized differences in the methods used or in the circumstances in which the investigation was carried out, and because of errors in observations).									X			
Science	Sci Way of Know	5	1. Summarize how conclusions and ideas change as new knowledge is gained.						X			X			
Science	Sci Way of Know	5	2. Develop descriptions, explanations and models using evidence to defend/support findings.									X			
Science	Sci Way of Know	5	3. Explain why an experiment must be repeated by different people or at different times or places and yield consistent results before the results are accepted.									X			
Science	Sci Way of Know	5	4. Identify how scientists use different kinds of ongoing investigations depending on the questions they are trying to answer (e.g., observations of things or events in nature, data collection, controlled experiments).									X			
Science	Sci Way of Know	5	5. Keep records of investigations and observations that are understandable weeks or months later.						X			X			
Science	Sci Way of Know	5	6. Identify a variety of scientific and technological work that people of all ages, backgrounds and groups perform.									X			
Science	Earth	7	2. Explain the Earth's capacity to absorb and recycle materials naturally (e.g., smoke smog, sewage) can change the environmental quality depending on the length of time involved (e.g. global warming).							X	X	X	X		
Science	Earth	7	4. Analyze data on the availability of fresh water that is essential for life and for most industrial and agricultural processes. Describe how rivers, lakes and groundwater can be depleted or polluted becoming less hospitable to life and even becoming unavailable or unsuitable for life.								X	X	X		
Science	Life	7	2. Investigate how organisms or populations may interact with one another through symbiotic relationships and how some species have become so adapted to each other that neither could survive without the other (e.g., predator-prey, parasitism, mutualism, commensalism).												X
Science	Life	7	3. Explain how the number of organisms an ecosystem can support depends on adequate biotic (living) resources (e.g., plants, animals) and abiotic (non-living) resources (e.g., light, water, soil).												X
Science	Life	7	5. Explain that some environmental changes occur slowly while others occur rapidly (e.g., forest and pond succession, fires and decomposition).									X	X		
Social Studies	Location	0	1. Identify and correctly use terms related to location, direction and distance including:												X
Social Studies	Location	0	3. Make models and maps representing real places including the classroom.												X
Social Studies	Location	0	4. Distinguish between land and water on maps and globes.												X

4. Human Communities

Category	Area	Grade	Standard	1	2	3	4	5	6	7	8	9	10	11	12
Social Studies	Location	0	6. Describe the immediate surroundings of home (e.g., streets, buildings, fields, woods or lakes).												X
Social Studies	Location	0	7. Identify key natural resources that are used in the students' daily lives.												X
Social Studies	Participation	0	1. Participate and cooperate in classroom activities.												X
Social Studies	Cultures	1	1. Describe similarities and differences in the ways different cultures meet common human needs including:				X								
Social Studies	Cultures	1	3. Describe family and local community customs and traditions.				X								
Social Studies	Location	1	1. Identify and correctly use terms related to location, direction and distance including:												X
Social Studies	Location	1	2. Construct simple maps and models using symbols to represent familiar places (e.g., classroom, school or neighborhood).				X								X
Social Studies	Location	1	3. Identify and use symbols to locate places of significance on maps and globes.												X
Social Studies	Location	1	4. Locate the local community, state and the United States on maps or globes.												X
Social Studies	Location	1	5. Identify and describe the physical features (lake, river, hill, mountain, forest) and human features (town, city, farm, park, playground, house, traffic signs/signals) of places in the community.				X								X
Social Studies	Location	1	7. Describe human adaptations to variations in the physical environment including:				X								X
Social Studies	Location	2	1. Read and interpret a variety of maps.												X
Social Studies	Location	2	2. Construct a map that includes a map title and key that explains all symbols that are used.												X
Social Studies	Location	2	4. Describe and locate landforms (plateaus, islands, hills, mountains, valleys) and bodies of water (creeks, ponds, lakes, oceans) in photographs, maps and 3-D models.												X
Social Studies	Location	2	5. Compare how land is used in urban, suburban and rural environments.												X
Social Studies	Location	2	6. Identify ways in which people have responded to and modified the physical environment such as building roads and clearing land for urban development.												X
Social Studies	Participation	3	1. Describe how people help to make the community a better place in which to live including:									X			
Social Studies	Location	4	3. Describe the location of Ohio relative to other states and countries.					X							
Social Studies	Location	4	4. Use maps to identify the location of major physical and human features of Ohio including:					X							
Social Studies	Location	4	5. Describe and compare the landforms, climates, population, vegetation and economic characteristics of places and regions in Ohio.					X							
Social Studies	Location	4	6. Identify manufacturing, agricultural, mining and forestry regions in Ohio.					X							
Social Studies	Location	4	7. Explain how resources, transportation and location influenced the development of cities and industries in Ohio including major industries such as oil, steel, rubber and glass.					X							

4. Human Communities

Category	Area	Grade	Standard	1	2	3	4	5	6	7	8	9	10	11	12
Social Studies	Location	4	8. Identify how environmental processes (i.e., glaciation and weathering) and characteristics (landforms, bodies of water, climate, vegetation) influence human settlement and activity in Ohio.					X							
Social Studies	Location	4	9. Identify ways that people have affected the physical environment of Ohio including:					X				X			
Social Studies	Participation	4	1. Describe the ways in which citizens can promote the common good and influence their government including:									X			
Social Studies	Participation	4	2. Explain why personal responsibilities (e.g., taking advantage of the opportunity to be educated) and civic responsibilities (e.g., obeying the law and respecting the rights of others) are important.									X			
Social Studies	Participation	4	3. Explain the importance of leadership and public service.									X			
Social Studies	Location	5	3. Describe and compare the landforms, climates, population, culture and economic characteristics of places and regions in North America.					X							
Social Studies	Location	5	6. Use distribution maps to describe the patterns of renewable, nonrenewable and flow resources in North America including:					X							
Social Studies	Location	5	8. Explain how the characteristics of different physical environments affect human activities in North America.					X				X			
Social Studies	Location	5	9. Analyze the positive and negative consequences of human changes to the physical environment including:					X				X			
Social Studies	Obtaining Information	5	6. Draw inferences from relevant information.									X			
Social Studies	Obtaining Information	5	8. Communicate research findings using line graphs and tables.									X			
Social Studies	Obtaining Information	5	9. Use a problem-solving/decision-making process which includes:									X			
Social Studies	Location	6	5. Describe ways human settlements and activities are influenced by environmental factors and processes in different places and regions including:									X			
Social Studies	Location	6	7. Describe ways humans depend on and modify the environment and the positive and negative consequences of the modifications including:									X			

5. History

Great Lakes in My World
www.greatlakes.org

Unit: History

Ohio:
Science
and Social
Studies

Category	Area	Grade	Standard	Activities	Who Needs the Lakes?	Now and Then	Beaches Over Time	Seasons Change	Ways of Life	Boats of Many Sizes	200 Years of Change	Something's Fishy	Water Quality Over Time	A Day In The Life	Sign of the Times
					4-8	3-6	K-4	3-6	4-8	3-6	4-8	6-8	6-8	K-3	4-8
Science	Life	0	6. Investigate the habitats of many different kinds of local plants and animals and some of the ways in which animals depend on plants and each other in our community.				X								
Science	Earth	1	1. Identify that resources are things that we get from the living (e.g., forests) and nonliving (e.g., minerals, water) environment and that resources are necessary to meet the needs and wants of a population.				X								
Science	Earth	1	2. Explain that the supply of many resources is limited but the supply can be extended through careful use, decreased use, reusing and/or recycling.				X								
Science	Earth	1	3. Explain that all organisms cause changes in the environment where they live; the changes can be very noticeable or slightly noticeable, fast or slow. (e.g., spread of grass cover slowing soil erosion, tree roots slowly breaking sidewalks).				X								
Science	Life	2	2. Identify that there are many distinct environments that support different kinds of organisms.				X								
Science	Life	2	3. Explain why organisms can survive only in environments that meet their needs (e.g., organisms that once lived on earth have disappeared for different reasons such as natural forces or human-caused effects).				X								
Science	Life	2	7. Compare the habitats of many different kinds of Ohio plants and animals and some of the ways animals depend on plants and each other.				X								
Science	Earth	7	2. Explain the Earth's capacity to absorb and recycle materials naturally (e.g., smoke smog, sewage) can change the environmental quality depending on the length of time involved (e.g. global warming).										X		
Science	Earth	7	4. Analyze data on the availability of fresh water that is essential for life and for most industrial and agricultural processes. Describe how rivers, lakes and groundwater can be depleted or polluted becoming less hospitable to life and even becoming unavailable or unsuitable for life.										X		
Science	Life	7	2. Investigate how organisms or populations may interact with one another through symbiotic relationships and how some species have become so adapted to each other that neither could survive without the other (e.g., predator-prey, parasitism, mutualism, commensalism).									X	X		
Science	Life	7	3. Explain how the number of organisms an ecosystem can support depends on adequate biotic (living) resources (e.g., plants, animals) and abiotic (non-living) resources (e.g., light, water, soil).									X	X		

5. History

Category	Area	Grade	Standard	1	2	3	4	5	6	7	8	9	10	11
Science	Life	7	4. Investigate how overpopulation impacts an ecosystem.								X			
Science	Life	7	5. Explain that some environmental changes occur slowly while others occur rapidly (e.g., forest and pond succession, fires and decomposition).								X	X		
Science	Life	7	6. Summarize the ways that natural occurrences and human activity affect the transfer of energy in Earth's ecosystems (e.g., fire, hurricanes, roads, oil spills).								X	X		
Science	Sci & Tech	7	1. Explain how needs, attitudes and values influence the direction of technological development in various cultures.								X			
Science	Sci & Tech	7	2. Describe how decisions to develop and use technologies often put environmental and economic concerns in direct competition with each other								X			
Science	Sci & Tech	7	3 Recognize that science can only answer some questions and technology can only solve some human problems.								X			
Science	Sci & Tech	7	4. Recognize that science can only answer some questions and technology can only solve some human problems.								X			
Science	Scientific Inqu	7	5. Analyze alternative scientific explanations and predictions and recognize that there may be more than one good way to interpret a given set of data.								X			
Science	Scientific Inqu	7	6. Identify faulty reasoning and statements that go beyond the evidence or misinterpret the evidence.								X			
Social Studies	Chronology	0	5. Listen to and discuss songs, poetry, literature and drama that reflect the cultural heritages of the people of the United States.				X							
Social Studies	Chronology	1	3. Distinguish among past, present and future.				X							
Social Studies	Chronology	1	4. Raise questions about how families lived in the past and use photographs, letters, artifacts and books to clarify what is known and what is unknown.				X							
Social Studies	Chronology	1	5. Compare past and present, near and far, with emphasis on daily life including:				X							
Social Studies	Cultures	1	1. Describe similarities and differences in the ways different cultures meet common human needs including:				X						X	
Social Studies	Cultures	1	2. Identify cultural practices of a culture on each continent through the study of the folktales, music and art created by people living in that culture.				X						X	
Social Studies	Cultures	1	3. Describe family and local community customs and traditions.				X							
Social Studies	Location	1	7. Describe human adaptations to variations in the physical environment including:										X	
Social Studies	Chronology	2	3. Place a series of related events in chronological order on a time line.										X	
Social Studies	Chronology	2	4. Use historical artifacts, photographs, biographies, maps, diaries and folklore to answer questions about daily life in the past.				X						X	
Social Studies	Chronology	2	5. Identify the work that people performed to make a living in the past and explain how jobs in the past are similar and/or different from those of today.				X						X	
Social Studies	Chronology	2	6. Identify and describe examples of how science and technology have changed the daily lives of people and compare:				X							
Social Studies	Cultures	2	2. Describe ways in which language, stories, folktales, music and artistic creations serve as expressions of culture and influence the behavior of people living in a particular culture.				X						X	
Social Studies	Cultures	2	3. Explain how contributions of different cultures within the United States have influenced our common national heritage.										X	

5. History

Category	Area	Grade	Standard	1	2	3	4	5	6	7	8	9	10	11
Social Studies	Cultures	2	4. Describe the contributions of significant individuals, including artisans, inventors, scientists, architects, explorers and political leaders to the cultural heritage of the United States.										X	
Social Studies	Chronology	4	1. Construct time lines with evenly spaced intervals for years, decades and centuries to show the order of significant events in Ohio history.	X	X			X						X
Social Studies	Chronology	4	2. Describe the earliest settlements in Ohio including those of prehistoric peoples.	X	X		X	X						X
Social Studies	Chronology	4	3. Explain the causes and effects of the frontier wars of the 1790s, including the Battle of Fallen Timbers, on American Indians in Ohio and the United States.	X	X		X	X						X
Social Studies	Chronology	4	4. Explain how Ohio progressed from territory to statehood, including the terms of the Northwest Ordinance.	X	X									X
Social Studies	Chronology	4	5. Explain how canals and railroads changed settlement patterns in Ohio and Ohio's economic and political status in the United States.	X	X									X
Social Studies	Cultures	4	1. Describe the cultural practices and products of various groups who have settled in Ohio over time:	X	X		X	X						X
Social Studies	Cultures	4	2. Describe the impact of the expansion of European settlements on American Indians in Ohio.				X							X
Social Studies	Cultures	4	3. Explain the reasons people came to Ohio including:	X	X		X							X
Social Studies	Location	4	1. Use a linear scale to measure the distance between places on a map.	X	X									X
Social Studies	Location	4	2. Use cardinal and intermediate directions to describe the relative location of places.	X	X									X
Social Studies	Location	4	3. Describe the location of Ohio relative to other states and countries.	X	X									X
Social Studies	Location	4	4. Use maps to identify the location of major physical and human features of Ohio including:	X	X									X
Social Studies	Location	4	5. Describe and compare the landforms, climates, population, vegetation and economic characteristics of places and regions in Ohio.	X	X									X
Social Studies	Location	4	6. Identify manufacturing, agricultural, mining and forestry regions in Ohio.	X	X				X					X
Social Studies	Location	4	7. Explain how resources, transportation and location influenced the development of cities and industries in Ohio including major industries such as oil, steel, rubber and glass.	X	X		X		X	X				X
Social Studies	Location	4	8. Identify how environmental processes (i.e., glaciation and weathering) and characteristics (landforms, bodies of water, climate, vegetation) influence human settlement and activity in Ohio.	X	X		X							X
Social Studies	Location	4	9. Identify ways that people have affected the physical environment of Ohio including:	X	X		X				X			X
Social Studies	Location	4	10. Use elevation, natural resource and road maps to answer questions about patterns of settlement, economic activity and movement.	X										X
Social Studies	Scarcity and Resource Allocation	4	1. Identify the productive resources needed to produce a good or service and suggest opportunity costs for the resources involved.						X		X			

5. History

Category	Area	Grade	Standard	1	2	3	4	5	6	7	8	9	10	11
Social Studies	Scarcity and Resource Allocation	4	3. Explain how entrepreneurs organize productive resources to produce goods and services and that they seek to make profits by taking risks.						X					
Social Studies	Obtaining Information	4	9. Communicate relevant information in a written report including the acknowledgement of sources.	X	X									X
Social Studies	Obtaining Information	4	10. Use a problem-solving/decision-making process which includes:	X	X				X					
Social Studies	Chronology	5	1. Create time lines and identify possible relationships between events.	X	X				X	X				X
Social Studies	Chronology	5	2. Explain how American Indians settled the continent and why different nations of Indians interacted with their environment in different ways.	X	X				X	X				X
Social Studies	Chronology	5	3. Explain why European countries explored and colonized North America.							X				X
Social Studies	Chronology	5	4. Describe the lasting effects of Spanish, French and English colonization in North America including cultural patterns evident today such as language, food, traditions and architecture.							X				X
Social Studies	Chronology	5	6. Explain the impact of settlement, industrialization and transportation on the expansion of the United States.							X				X
Social Studies	Cultures	5	4. Describe the waves of immigration to North America and the areas from which people came in each wave.							X				X
Social Studies	Cultures	5	5. Compare reasons for immigration to North America with the reality immigrants experienced upon arrival.							X				X
Social Studies	Location	5	9. Analyze the positive and negative consequences of human changes to the physical environment including:											X
Social Studies	Location	5	10. Use or construct maps of colonization and exploration to explain European influence in North America.							X				
Social Studies	Scarcity and Resource Allocation	5	5. Explain the general relationship between supply, demand and price in a competitive market.								X			

6. Geology and Water Flow

Great Lakes in My World
www.greatlakes.org

Unit: Geology and Water Flow

Ohio:
Science and Social Studies

Category	Area	Grade	Standard	Activities													
				3-6 1	3-6 2	K-8 3	K-8 4	4-8 5	4-8 6	3-6 7	4-8 8	6-8 9	6-8 10	K-3 11	4-8 12		
Science	Life	0	6. Investigate the habitats of many different kinds of local plants and animals and some of the ways in which animals depend on plants and each other in our community.		X												
Science	Life	2	7. Compare the habitats of many different kinds of Ohio plants and animals and some of the ways animals depend on plants and each other.		X												
Science	Earth	4	2. Identify how water exists in the air in different forms (e.g., in clouds, fog, rain, snow and hail).				X										
Science	Earth	4	3. Investigate how water changes from one state to another (e.g., freezing, melting, condensation, evaporation).				X										
Science	Earth	4	7. Describe the weather which accompanies cumulus, cumulonimbus, cirrus and stratus clouds.				X										
Science	Earth	5	5. Explain how the supply of many non-renewable resources is limited and can be extended through reducing, reusing and recycling but cannot be extended indefinitely.			X								X			
Science	Earth	5	6. Investigate ways Earth's renewable resources (e.g., fresh water, air, wildlife and trees) can be maintained			X								X			
Science	Earth	6	1. Describe the rock cycle and explain that there are sedimentary, igneous and metamorphic rocks that have distinct properties (e.g., color, texture) and are formed in different ways.		X												
Science	Earth	6	2. Explain that rocks are made of one or more minerals.		X												
Science	Earth	6	3. Identify minerals by their characteristic properties.		X												
Science	Physical	6	5. Explain that the energy found in nonrenewable resources such as fossil fuels (e.g., oil, coal, natural gas) originally came from the Sun and may renew slowly over millions of years.											X			
Science	Physical	6	6. Explain that energy derived from renewable resources such as wind and water is assumed to be available indefinitely.											X			
Science	Physical	6	8. Describe how renewable and nonrenewable energy resources can be managed (e.g., fossil fuels, trees, water).											X			
Science	Earth	7	1. Explain the biogeochemical cycles which move materials between the lithosphere (land), hydrosphere (water) and atmosphere (air).				X			X		X					

6. Geology and Water Flow

Category	Area	Grade	Standard	1	2	3	4	5	6	7	8	9	10	11	12
Science	Earth	7	2. Explain the Earth's capacity to absorb and recycle materials naturally (e.g., smoke smog, sewage) can change the environmental quality depending on the length of time involved (e.g. global warming).					X			X		X		
Science	Earth	7	3. Describe the water cycle and explain the transfer of energy between the atmosphere and hydrosphere.					X			X		X		
Science	Earth	7	4. Analyze data on the availability of fresh water that is essential for life and for most industrial and agricultural processes. Describe how rivers, lakes and groundwater can be depleted or polluted becoming less hospitable to life and even becoming unavailable or unsuitable for life.					X			X		X		
Science	Life	7	5. Explain that some environmental changes occur slowly while others occur rapidly (e.g., forest and pond succession, fires and decomposition).						X		X				
Science	Earth	8	9. Describe the interior structure of Earth and Earth's crust as divided into tectonic plates riding on top of the slow moving currents of magma in the mantle.						X	X					
Science	Earth	8	10. Explain that most major geological events (e.g., earthquakes, volcanic eruptions, hot spots and mountain building) result from plate motion.	X					X	X					
Science	Earth	8	11. Use models to analyze the size and shape of Earth, its surface and its interior (e.g., globes, topographic maps, satellite images).						X	X					
Science	Earth	8	12. Explain that some processes involved in the rock cycle are directly related to the thermal energy and forces in the mantle that drive plate motions.		X				X	X					
Science	Earth	8	13. Describe how landforms are created through a combination of destructive (e.g., weathering and erosion) and constructive processes (e.g., crustal deformation, volcanic eruptions and deposition of sediment).	X					X	X					
Science	Earth	8	14. Explain that folding, faulting and uplifting can rearrange the rock layers so the youngest is not always found on top.	X	X				X	X					
Science	Earth	8	15. Illustrate how the three primary types of plate boundaries (transform, divergent and convergent) cause different landforms (e.g., mountains, volcanoes, ocean trenches).	X	X				X	X					
Social Studies	Chronology	0	3. Demonstrate understanding of one's own personal life history (e.g., birth, toddler and preschool).	X											
Social Studies	Chronology	2	3. Place a series of related events in chronological order on a time line.	X											
Social Studies	Chronology	3	1. Define and measure time by years, decades and centuries.						X						
Social Studies	Chronology	3	2. Place local historical events in sequential order on a time line.						X						
Social Studies	Chronology	3	3. Describe changes in the community over time including changes in:						X						
Social Studies	Cultures	3	1. Compare some of the cultural practices and products of various groups of people who have lived in the local community including:						X						
Social Studies	Location	3	7. Identify ways that physical characteristics of the environment (i.e., landforms, bodies of water, climate and vegetation) affect and have been modified by the local community.						X						
Social Studies	Chronology	4	1. Construct time lines with evenly spaced intervals for years, decades and centuries to show the order of significant events in Ohio history.						X						

6. Geology and Water Flow

Category	Area	Grade	Standard	1	2	3	4	5	6	7	8	9	10	11	12
Social Studies	Location	4	4. Use maps to identify the location of major physical and human features of Ohio including:						X						
Social Studies	Location	4	5. Describe and compare the landforms, climates, population, vegetation and economic characteristics of places and regions in Ohio.						X						
Social Studies	Location	4	8. Identify how environmental processes (i.e., glaciation and weathering) and characteristics (landforms, bodies of water, climate, vegetation) influence human settlement and activity in Ohio.						X						
Social Studies	Location	4	9. Identify ways that people have affected the physical environment of Ohio including:									X			
Social Studies	Location	4	10. Use elevation, natural resource and road maps to answer questions about patterns of settlement, economic activity and movement.									X			
Social Studies	Scarcity and Resource Allocation	4	1. Identify the productive resources needed to produce a good or service and suggest opportunity costs for the resources involved.									X			
Social Studies	Obtaining Information	4	9. Communicate relevant information in a written report including the acknowledgement of sources.									X			
Social Studies	Obtaining Information	4	10. Use a problem-solving/decision-making process which includes:									X			
Social Studies	Location	5	4. Explain how climate is influenced by:										X		
Social Studies	Location	5	6. Use distribution maps to describe the patterns of renewable, nonrenewable and flow resources in North America including:										X		
Social Studies	Location	5	7. Analyze reasons for conflict and cooperation among regions of North America including:									X	X		
Social Studies	Location	5	8. Explain how the characteristics of different physical environments affect human activities in North America.									X			
Social Studies	Location	5	9. Analyze the positive and negative consequences of human changes to the physical environment including:									X			
Social Studies	Scarcity and Resource Allocation	5	1. Compare different allocation methods for scarce goods and services such as prices, command, first-come-first-served, sharing equally, rationing and lottery.									X			
Social Studies	Location	6	5. Describe ways human settlements and activities are influenced by environmental factors and processes in different places and regions including:									X			
Social Studies	Location	6	7. Describe ways humans depend on and modify the environment and the positive and negative consequences of the modifications including:									X			
Social Studies	Obtaining Information	6	7. Work effectively to achieve group goals:									X			