

## PLANNED COURSE

**SUBJECT AREA:** Environment and Ecology

**GRADE/COURSE:** 2

**Standard And Strand** 4.1 Watersheds and Wetlands

OBJECTIVES	PERFORMANCE INDICATORS	ASSESSMENTS (Variety as per Section 4.52, Chapter 4)
<p>A. Identify various types of water environments.</p> <ul style="list-style-type: none"> <li>• Identify living things found in water environments.</li> </ul>	<p>Identify the lotic system (e.g., creeks, rivers, streams)</p> <p>Identify the lentic system (e.g., ponds, lakes, swamps)</p> <p>Identify fish, insects and amphibians that are found in fresh water.</p> <p>Identify plants found in fresh water.</p>	<p>Tests</p> <p>Projects</p> <p>Reports</p> <p><b>*More specific assessments will be designed upon purchase of new science materials.</b></p>

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**GRADE/COURSE:** 2

**Standard And Strand** 4.2 Renewable and Non-renewable Resources

<b>OBJECTIVES</b>	<b>PERFORMANCE INDICATORS</b>	<b>ASSESSMENTS (Variety as per Section 4.52, Chapter 4)</b>
A. Identify needs of people.  B. Identify products derived from natural resources.  C. Know that some natural resources have limited life spans.	Identify plants, air, etc. as natural resources.  Explain the water cycle.  Identify how the environment provides for the needs of people.  Identify products made from trees.  Identify by products of plants and animals.  Identify the sources of man-made products (plastics, metal, fabric, paper).  Identify renewable and non-renewable resources used in the local community.  Identify various means of conserving natural resources.  Know that natural resources are finite.	Tests  Drawings  Projects (dioramas, charts, etc.)  Tests  Charts  Projects (posters, dioramas, three-dimensional displays)  Reports  <b>*More specific assessments will be designed upon purchase of new science materials.</b>

<b>OBJECTIVES</b>	<b>PERFORMANCE INDICATORS</b>	<b>ASSESSMENTS (Variety as per Section 4.52, Chapter 4)</b>
D. Identify by-products and their use of natural resources.	<p>Identify items that can be recycled and those that cannot be recycled.</p> <p>Identify use of reusable products.</p>	<p>Tests</p> <p>Charts</p> <p>Projects</p> <p><b>*More specific assessments will be designed upon purchase of new science materials.</b></p>

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**GRADE/COURSE:** 2

**Standard And Strand** 4.3 Environmental Health

<b>OBJECTIVES</b>	<b>PERFORMANCE INDICATORS</b>	<b>ASSESSMENTS (Variety as per Section 4.52, Chapter 4)</b>
<p>A. Know that plants, animals and humans are dependent on air and water.</p> <p>B. Identify how human actions affect environmental health.</p>	<p>Know that all living things need air and water to survive.</p> <p>Know that pollution causes sickness when put into the air, water or soil.</p> <p>Know there are dangerous pest controls used in the home.</p> <p>Identify different areas where health can be affected by air, water or land pollution.</p> <p>Identify actions that can prevent or reduce waste pollution.</p> <p>Identify sources of pollution.</p> <p>Identify litter and its effect on the environment.</p> <p>Describe how people can reduce pollution.</p>	<p>Tests</p> <p>Projects</p> <p>Reports</p> <p>Posters</p> <p>Mobiles</p> <p>Charts</p> <p><b>*More specific assessments will be designed upon purchase of new science materials.</b></p>

<b>OBJECTIVES</b>	<b>PERFORMANCE INDICATORS</b>	<b>ASSESSMENTS (Variety as per Section 4.52, Chapter 4)</b>
C. Understand that the elements of natural systems are interdependent.	Understand that the components of a system all play part in a healthy, natural system.	Discussion

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**Standard And Strand** 4.4 Agriculture and Society

<b>OBJECTIVES</b>	<b>PERFORMANCE INDICATORS</b>	<b>ASSESSMENTS (Variety as per Section 4.52, Chapter 4)</b>
<p>A. Know the importance of agriculture to humans.</p> <p>B. Identify the role of the sciences in Pennsylvania agriculture.</p> <p>C. Know that food and fiber originate from plants and animals.</p>	<p>Identify people's basic needs.</p> <p>Explain the influence of agriculture on food, clothing, shelter and culture from one area to another.</p> <p>Know how people depend on agriculture.</p> <p>Identify common animals found on Pennsylvania farms.</p> <p>Identify common plants found on Pennsylvania farms.</p> <p>Define and identify food and fiber.</p> <p>Identify what plants and animals need to grow.</p> <p>Identify agricultural products that are local.</p>	<p>Discussion</p> <p>Tests</p> <p>Posters</p> <p>Projects</p> <p>Flowcharts</p> <p><b>*More specific assessments will be designed upon purchase of new science materials.</b></p>

<b>OBJECTIVES</b>	<b>PERFORMANCE INDICATORS</b>	<b>ASSESSMENTS (Variety as per Section 4.52, Chapter 4)</b>
D. Identify technology and energy use associated with agriculture.	<p>Describe the journey of a local agricultural product from production to the consumer.</p> <p>Identify the various tools and machinery necessary for farming.</p>	

**SUBJECT AREA:** Environment and Ecology

**GRADE/COURSE:** 2

**Standard And Strand** 4.5 Integrated Pest Management

<b>OBJECTIVES</b>	<b>PERFORMANCE INDICATORS</b>	<b>ASSESSMENTS (Variety as per Section 4.52, Chapter 4)</b>
A. Know types of pests.          B. Explain pest control.          C. Understand society’s need for integrated pest management.	Define and differentiate various types of pests.          Know reasons why people control pests.  Identify different methods of controlling pests in school, home, and community.  Identify chemical labels (e.g., caution, poison, warning).  Identify integrated pest management practices in the home.  Identify integrated pest management outside the home.	Tests  Reports  Projects  Posters  Discussion  <b>*More specific assessments will be designed upon purchase of new science materials.</b>



**SUBJECT AREA:** Environment and Ecology

**GRADE/COURSE:** 2

**Standard And Strand** 4.6 Ecosystems and Their Interactions

<b>OBJECTIVES</b>	<b>PERFORMANCE INDICATORS</b>	<b>ASSESSMENTS (Variety as per Section 4.52, Chapter 4)</b>
A. Understand that living things are dependent on non-living things in the environment for survival.	Identify and categorize living and non-living things.  Identify basic needs of a plant or animal and explain how their needs are met.  Identify plants and animals with their habitat and food sources.  Identify environmental variables that affect plant growth (e.g., sunlight, rainfall, temperature).  Describe how animals interact with plants to meet their needs for shelter.  Describe how certain animals interact with the soil to meet their needs.  Understand the components of the food chain.	Tests  Graphic organizers  Projects  Experiments  Observe an ant farm  Reports  Charts  <b>*More specific assessments will be designed upon purchase of new science materials.</b>

<b>OBJECTIVES</b>	<b>PERFORMANCE INDICATORS</b>	<b>ASSESSMENTS (Variety as per Section 4.52, Chapter 4)</b>
	Identify animals that live underground.	

**SUBJECT AREA:**

Environment and Ecology

**GRADE/COURSE:** 2

**Standard And Strand**

4.7 Threatened, Endangered and Extinct Species

<b>OBJECTIVES</b>	<b>PERFORMANCE INDICATORS</b>	<b>ASSESSMENTS (Variety as per Section 4.52, Chapter 4)</b>
A. Identify differences in living things.	<p>Explain why plants and animals are different colors, shapes and sizes and how these differences relate to their survival.</p> <p>Identify characteristics that living things inherit from their parents.</p> <p>Explain why each of the four elements in a habitat is essential for survival.</p> <p>Identify local plants or animals and describe their habitat.</p>	<p>Tests</p> <p>Projects</p> <p>Reports</p> <p>Experiments</p> <p>Graphic organizers</p> <p><b>*More specific assessments will be designed upon purchase of new science materials.</b></p>
B. Know that adaptations are important for survival.	<p>Explain how specific adaptations can help a living organism to survive (camouflage).</p> <p>Explain what happens to a living thing when its food, water, shelter or space is changed.</p>	<p>Projects</p>

<b>OBJECTIVES</b>	<b>PERFORMANCE INDICATORS</b>	<b>ASSESSMENTS (Variety as per Section 4.52, Chapter 4)</b>
C. Define and understand extinction.	<p>Identify plants and animals that are extinct.</p> <p>Explain why some plants and animals are extinct.</p> <p>Know that there are state and local laws regarding plants and animals.</p>	<p>Tests</p> <p>Projects</p> <p>Reports</p> <p><b>*More specific assessments will be designed upon purchase of new science materials.</b></p>

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**Standard And Strand** 4.8 Humans and the Environment

<b>OBJECTIVES</b>	<b>PERFORMANCE INDICATORS</b>	<b>ASSESSMENTS (Variety as per Section 4.52, Chapter 4)</b>
<p>A. Identify the biological requirements of humans.</p> <p>B. Know that environmental conditions influence where and how people live.</p> <p>C. Explain how human activities may change the environment.</p> <p>D. Know the importance of natural resources in daily life.</p>	<p>Identify several ways that people use natural resources.</p> <p>Identify how regional natural resources influences what people use.</p> <p>Explain the influence of climate on how and where people live.</p> <p>Identify everyday human activities and how they affect the environment.</p> <p>Identify examples of how human activities within a community affect the natural environment.</p> <p>Identify items used in daily life that come from natural resources.</p> <p>Identify ways to conserve our natural resources.</p>	<p>Discussion</p> <p>Tests</p> <p>Projects</p> <p>Reports</p> <p><b>*More specific assessments will be designed upon purchase of new science materials.</b></p>

<b>OBJECTIVES</b>	<b>PERFORMANCE INDICATORS</b>	<b>ASSESSMENTS (Variety as per Section 4.52, Chapter 4)</b>
	Identify major land uses in the community.	

**SUBJECT AREA:** Environment and Ecology

**GRADE/COURSE:** 2

**Standard And Strand** 4.9 Environmental Laws and Regulations

<b>OBJECTIVES</b>	<b>PERFORMANCE INDICATORS</b>	<b>ASSESSMENTS (Variety as per Section 4.52, Chapter 4)</b>
A. Know that there are laws and regulations for the environment.	Identify local laws and regulations regarding the environment.  Explain how the recycling law impacts home and school.	Discussion  Tests  Projects  Reports  <b>*More specific assessments will be designed upon purchase of new science materials.</b>