

# McDowell Woods

Correlated Standards by Grade

Last Updated: 2024

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**IMPORTANT:** Our classes have a base curriculum that can vary based on instructor, and some activities that match the standards below may not be taught. Please let us know if there is a standard below you would like us to focus on, and we will tailor our classes to make sure we address it!

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## Next Generation Science Standards (NGSS)

### 4th Grade

4-ESS3-1. Obtain and combine information to describe that energy and fuels are derived from natural resources and their uses affect the environment.

### 5th Grade

5-ESS3-1. Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

3-5ETS1-1. Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.

### Middle School (6-8)

MS-ESS3-4. Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth's systems.

MS-ESS3-3. Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.

## Alabama Course of Study (ACOS)

### 4th Grade

#### **Science**

SC.4.14. Gather information to describe how the use of energy derived from renewable and nonrenewable resources affects the environment. *(CCC: Cause and Effect)*

### 5th Grade

#### **Science**

SC.5.14. Obtain and evaluate information to communicate how science-based solutions are being used to protect Earth's natural resources and its environment. *(CCC: Stability and Change)*

### 6th Grade

#### **Science**

SC.6.11. Obtain, evaluate, and communicate information concerning the relationships between human activities and natural processes and how those relationships affect Earth's systems, including human population growth and its impact on the global environment over time. *(CCC: Cause and Effect)*

SC.6.11a. Define problems and design solutions to monitor and mitigate human impact on the environment. *(CCC: Cause and Effect)*

### 7th Grade

#### **Science**

SC.7.8 Construct an explanation that predicts patterns of interactions between and among organisms in different ecosystems. *(CCC: Cause and Effect)*

SC.7.9. Design a solution to maintain biodiversity and ecosystem services in a given scenario. *(CCC: Cause and Effect)*

#### **Social Studies**

SS.7.3. Compare geographic patterns in the environment that result from processes within the atmosphere, biosphere, lithosphere, and hydrosphere.

3e. Comparing geographic issues in different regions that result from human and natural processes.

SS.7.11. Explain the cultural concept of natural resources and changes in spatial distribution, quantity, and quality through time and by location.

11a. Evaluating various cultural viewpoints regarding the use or value of natural resources.

11b. Identifying issues regarding depletion of nonrenewable resources and the sustainability of renewable resources.

## Mississippi College- and Career-Readiness Standards

### 4th Grade

#### *Science*

E.4.9C. Students will demonstrate an understanding of how natural processes and human activities affect the features of Earth's landforms and oceans.

9C.3. Construct scientific arguments from evidence to support claims that human activities, such as conservation efforts or pollution, affect the land, oceans, and atmosphere of Earth.

### 5th Grade

#### *Science*

E.5.10. Students will demonstrate an understanding of the effects of human interaction with Earth and how Earth's natural resources can be protected and conserved.

10.1. Collect and organize scientific ideas that individuals and communities can use to conserve Earth's natural resources and systems.

### 6th Grade

#### *Science*

L.6.3. Students will demonstrate an understanding of the relationships among survival, environmental changes, and diversity as they relate to the interactions of organisms, populations, and the environment.

3.3. Analyze cause and effect relationships to explore how changes in the physical environment (limiting factors, natural disasters) can lead to population changes within an ecosystem.

#### *Social Studies*

6.2. Identify geographic patterns in the environment that result from the processes of Earth's physical systems.

2.4. Investigate ways humans change their environment.

6.8. Examine how humans and the physical environment are impacted by the extraction of resources and by natural hazards.

8.1. Identify and describe ways in which humans modify the physical environment.

8.2. Explain how people use technology to access resources.

8.3. Assess the opportunities and constraints for human activities created by the physical environment.