7th Grade Standards

Correlated Standards by Class

Last Updated: 2026

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!

Animals in Motion

Next Generation Science Standards (NGSS)

MS-LS1-4. Use arguments based on empirical evidence and scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction of animals and plants respectively.

MS-LS2-1. Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.

MS-LS2-2. Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.

Alabama Course of Study (ACOS)

Science

SC.7.6. Analyze and interpret data to predict how environmental conditions, genetic factors, and resource availability will impact the growth of individual organisms and populations of organisms in an ecosystem. *(CCC: Cause and Effect)*

SC.7.7. Analyze and interpret data to explain how density-independent and density-dependent limiting factors in an ecosystem can lead to shifts in populations. *(CCC: Cause and Effect)*

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

Aquatic Adventures

Next Generation Science Standards (NGSS)

MA-LS2-4. Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations.

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)

Science

SC.7.6. Analyze and interpret data to predict how environmental conditions, genetic factors, and resource availability will impact the growth of individual organisms and populations of organisms in an ecosystem. *(CCC: Cause and Effect)*

SC.7.7. Analyze and interpret data to explain how density-independent and density-dependent limiting factors in an ecosystem can lead to shifts in populations.*(CCC: Cause and Effect)*

Mississippi College- and Career- Readiness Standards

Science

L.7.3. Students will demonstrate an understanding of the importance that matter cycles between living and nonliving parts of the ecosystem to sustain life on Earth.

- L.7.3.1. Analyze diagrams to provide evidence of the importance of the cycling of water, oxygen, carbon, and nitrogen through ecosystems to organisms.
- L.7.3.4. Explain how disruptions in cycles (e.g. water, oxygen, carbon, and nitrogen) affect biodiversity and ecosystem services (e.g. water, food, and medications) which are needed to sustain human life on Earth.

Art in Nature

Alabama Course of Study (ACOS)

Arts Education - Visual Arts

10. Analyze how the method of display and the location of an artwork influence how it is perceived and valued.

Mississippi College- and Career- Readiness Standards

Arts Learning Standards - Visual Arts

Cr2. Organize and develop artistic ideas and work.

- 3.7.a. Apply visual organizational strategies to design and produce a work of art, design, or media that clearly communicates information or ideas.

Re7. Perceive and analyze artistic work.

- 1.7.a. Explain how the method of display, the location, and the experience of an artwork influence how it is perceived and valued.

Re8. Interpret intent and meaning in artistic work.

- 1.7.a. Interpret art by analyzing art-making approaches, the characteristics of form and structure, relevant contextual information, subject matter, and use of media to identify ideas and mood conveyed.

Down to Earth

Next Generation Science Standards (NGSS)

MS-ESS2-1. Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process.
MS-ESS2-2. Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.
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-LS1-6. Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms.
MS-LS2-4. Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations.

Alabama Course of Study (ACOS)

Science

SC.7.5. Construct an explanation of how the cycling of matter between abiotic and biotic parts of ecosystems demonstrates the flow of energy and the conservation of matter, including the carbon, nitrogen, and water cycles. *(CCC: Energy and Matter)*
SC.7.7. Analyze and interpret data to explain how density-independent and density-dependent limiting factors in an ecosystem can lead to shifts in populations.*(CCC: Cause and Effect)*

Focus on Fungi

Next Generation Science Standards (NGSS)

MS-LS2-1. Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.
MS-LS2-2. Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.
MS-LS2-3. Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem.

Alabama Course of Study (ACOS)

Science

SC.7.6. Analyze and interpret data to predict how environmental conditions, genetic factors, and resource availability will impact the growth of individual organisms and populations of organisms in an ecosystem. *(CCC: Cause and Effect)*
SC.7.8 Construct an explanation that predicts patterns of interactions between and among organisms in different ecosystems. *(CCC: Cause and Effect)*

Food for Thought

Next Generation Science Standards (NGSS)

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

MS-PS1-3. Gather and make sense of information to describe that synthetic materials come from natural resources and impact society.

Hop, Slither, Slide & Birds of a Feather

Next Generation Science Standards (NGSS)

MS-LS2-2. Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.

Alabama Course of Study (ACOS)

SC.7.6. Analyze and interpret data to predict how environmental conditions, genetic factors, and resource availability will impact the growth of individual organisms and populations of organisms in an ecosystem. *(CCC: Cause and Effect)*

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

Invention Expo

Next Generation Science Standards (NGSS)

MS-ETS1-2. Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.

McDowell Woods

Next Generation Science Standards (NGSS)

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)

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)*

Meet a Map

Alabama Course of Study (ACOS)

SS.7.1 Describe the world in spatial terms, using maps and other geographic representations, tools, and geospatial technologies.

- SS.7.1a Explain and demonstrate the use of map essentials, including direction, distance, legend, latitude, longitude, map type, projection, scale, and symbols.

Navigation

Alabama Course of Study (ACOS)

SS.7.1 Describe the world in spatial terms, using maps and other geographic representations, tools, and geospatial technologies.

- SS.7.1a Explain and demonstrate the use of map essentials, including direction, distance, legend, latitude, longitude, map type, projection, scale, and symbols.

People of the Earth

Alabama Course of Study (ACOS)

Science

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

Social Studies

SS.7.1 Describe the world in spatial terms, using maps and other geographic representations, tools, and geospatial technologies.

- SS.7.1b Use physical, political, and special-purpose maps to identify the distribution of people, location of places, and classification of physical features.
- SS.7.1c Utilize maps to explain relationships among people and places, including governmental alliances, immigration patterns, and trade patterns.

SS.7.2 Analyze how human interaction with the environment, location, movement, place, and region affect cultural, economic, and social conditions for those living in a geographic area.

SS.7.4 Explain how artifacts and other archaeological findings provide evidence of the nature and movement of prehistoric groups of people.

- SS.7.4a Differentiate among primary, secondary, and tertiary sources in how they are used to study both history and geography.

SS.7.5 Explain common patterns that emerged in the shift from hunter-gatherer societies to permanent settlements in different regions of the world, including types and sizes of settlements.

SS.7.10 Describe cultural and economic characteristics of early Indigenous peoples in North and South America, including civilizations in Mesoamerica, the Andes, and the Mississippi River Valley.

- SS.7.10b Compare and contrast the development of agriculture in the Americas with agricultural practices in other early civilizations.

Rock Query

Next Generation Science Standards (NGSS)

MS-ESS1-4. Construct a scientific explanation based on evidence from rock strata for how the geologic time scale is used to organize Earth's 4.6-billion-year-old history.
MS-ESS2-1. Develop a model to describe the cycling of Earth's materials and the flow of energy that drives this process.
MS-ESS2-2. Construct an explanation based on evidence for how geoscience processes have changed Earth's surface at varying time and spatial scales.
MS-LS2-2. Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.
MS-LS2-3. Develop a model to describe the cycling of matter and flow of energy among living and non-living parts of an ecosystem.
MS-PS1-3. Gather and make sense of information to describe that synthetic materials come from natural resources and impact society.

Alabama Course of Study (ACOS)

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

Scope out the Sky

Next Generation Science Standards (NGSS)

MS-ESS1-1. Develop and use a model of the Earth-sun-moon system to describe the cyclic patterns of lunar phases, eclipses of the sun and moon, and seasons.
MS-ESS1-3. Analyze and interpret data to determine scale properties of objects in the solar system.

Survival Skills