MMWD Next Generation Science Standards Correlations

3rd Grade

Science and Engineering Practices

- Analyzing and interpreting data
- Constructing explanations
- Obtaining, evaluating and communicating information

Disciplinary Core Ideas

3-LS4.B Natural Selection

- Sometimes the differences in characteristics between individuals of the same species provide advantages in surviving, finding mates, and reproducing. (3-LS4-2)

3-LS4.C Adaptation

- For any particular environment, some kinds of organisms survive well, some survive less well, and some cannot survive at all. (3-LS4-3)

ESS2.D: Weather and Climate

- Scientists record patterns of the weather across different times and areas so that they can make predictions about what kind of weather might happen next. (3-ESS2-1)
- Climate describes a range of an area's typical weather conditions and the extent to which those conditions vary over years. (3-ESS2-2)

ESS3.B: Natural Hazards

- A variety of natural hazards result from natural processes. Humans cannot eliminate natural hazards but can take steps to reduce their impacts. (3-ESS3-1)

Crosscutting Concepts

- Patterns
- Cause and effect
- Scientific knowledge assumes an order and consistency in natural systems
- Influence of engineering, technology, and science on society and the natural world
- Science is a human endeavor

4th Grade

Science and Engineering Practices

- Asking questions and defining problems
- Engaging in argument from evidence
- Analyzing and interpreting data
- Obtaining, evaluating, and communicating information

Disciplinary Core Ideas

LS1.A: Structure and Function

- Plants and animals have both internal and external structures that serve various functions in growth, survival, behavior, and reproduction.

LS1.D: Information Processing

- Different sense receptors are specialized for particular kinds of information, which may be then processed by the animal's brain. Animals are able to use their perceptions and memories to guide their actions. (4-LS1-2)

ESS2.A: Earth Materials and Systems

- Rainfall helps to shape the land and affects the types of living things found in a region. (4-ESS2-1)

ESS3.A: Natural Resources

- Energy and fuels that humans use are derived from natural sources, and their use affects the environment in multiple ways. Some resources are renewable over time, and others are not. (4-ESS3-1)

ESS3.B: Natural Hazards

- A variety of hazards result from natural processes (e.g., earthquakes, tsunamis, volcanic eruptions). Humans cannot eliminate the hazards but can take steps to reduce their impacts. (4-ESS3-2)

Crosscutting Concepts

- Energy and matter
- Influence of science, engineering and technology on society and the natural world
- Science is a human endeavor
- Patterns
- Cause and effect
- Interdependence of science, engineering and technology

5th Grade

Science and Engineering Practices

- Planning and carrying out investigations
- Engaging in argument from evidence
- Developing and using models
- Obtaining, evaluating, and communicating information
- Constructing explanations

Disciplinary Core Ideas

LS1.C: Organization for Matter and Energy Flow in Organisms

- Plants acquire their material for growth chiefly from air and water. (5-LS1-1)

LS2.A: Interdependent Relationships in Ecosystems

- The food of almost any kind of animal can be traced back to plants. Organisms are related in food webs in which some animals eat plants for food and other animals eat the animals that eat plants. Some organisms, such as fungi and bacteria, break down dead organisms (both plants or plants parts and animals) and therefore operate as "decomposers." Decomposition eventually restores (recycles) some materials back to the soil. Organisms can survive only in environments in which their particular needs are met. A healthy ecosystem is one in which multiple species of different types are each able to meet their needs in a relatively stable web of life. Newly introduced species can damage the balance of an ecosystem. (5-LS2-1)

ESS2.C: The Roles of Water in Earth's Surface Processes

- Nearly all of Earth's available water is in the ocean. Most fresh water is in glaciers or underground; only a tiny fraction is in streams, lakes, wetlands, and the atmosphere. (5- ESS2-2)

ESS3.C: Human Impacts on Earth Systems

- Human activities in agriculture, industry, and everyday life have had major effects on the land, vegetation, streams, ocean, air, and even outer space. But individuals and communities are doing things to help protect Earth's resources and environments. (5-ESS3-1)

Crosscutting Concepts

- Cause and effect
- Scientific knowledge assumes an order and consistency in natural systems
- Energy and matter
- Systems and system models
- Science addresses questions about the natural and material world
- Influence of engineering, technology, and science on society and the natural world