

Unit 2-Plant & Animal Environments

Content Area: **Science**
Course(s): **Science K**
Time Period: **Marking Period 2**
Length: **MP 2**
Status: **Published**

Essential Questions

- What features help plants and animals survive in different environments?
- How do plants and animals depend on the land, air, and water to survive?
- How do plants and animals change the environment to meet their needs?

Big Ideas

- Plants and animals can change their local environment.
- Living things need water, air and resources from the land, and they live in places that have the things they need.
- Humans use natural resources for everything they do.

Technology Integration

8.1.2.NI.1: Model and describe how individuals use computers to connect to other individuals, places, information, and ideas through a network.

Activity:

Students will watch and interact with Mystery Science, “Why are Polar Bears White?” video.

Cross Curricular Integration

Integration Area: Language Arts

RI.K.1 With prompting and support, ask and answer questions about key details in a text (e.g., who, what, where, when, why, how).

Activity:

Students will draw and write about an animal and its home.

Technology Connection

8.1.2.DA.1: Collect and present data, including climate change data, in various visual formats

Science and Engineering Practices

Obtaining, Evaluating, and Communicating Information:

- Read grade-appropriate texts and/or use media to obtain scientific and/or technical information to determine patterns in and/or evidence about the natural and designed world(s).
- Obtain information using various texts, text features (e.g., headings, tables of contents, glossaries, electronic menus, icons), and other media that will be useful in answering a scientific question and/or supporting a scientific claim.
- Communicate information or design ideas and/or solutions with others in oral and/or written forms using models, drawings, writing, or numbers that provide detail about scientific ideas, practices, and/or design ideas.

Planning and Carrying Out Investigations:

- Make observations (firsthand or from media) and/or measurements to collect data that can be used to make comparisons.
- Make predictions based on prior experiences.

Analyzing and Interpreting Data:

- Record information (observations, thoughts, and ideas).
- Use and share pictures, drawings, and/or writings of observations.
- Compare predictions (based on prior experiences) to what occurred (observable events).

Enduring Understandings

Next Generation Standards

Biogeology

K-ESS2.E Plants and animals can change their environment.

Natural Resources

K-ESS3.A Living things need water, air, and resources from the land, and they live in places that have the

things they need. Humans use natural resources for everything they do.

Student Learning Standards

Mathematics

K.MP.2 Reason abstractly and quantitatively.

K.MP.4 Model with mathematics.

K.C C Counting and Cardinality

Focus Areas

Knowledge

- How plants and animals can change their environment.
- Living things need water, air, resources from land to survive.
- Living things live in places that have the things they need to survive.
- Humans use natural resources from the environment.
- Plants, animals and their surroundings make a system, they work together to meet needs.

Skills

- Diagram/explain how plants and animals can change their environment to meet their needs.
- Diagram/explain the relationship between the needs of different plants or animals and the places they live.
- Diagram/explain what features animals and plants have to survive in different environments.
- Sketch/explain how human use resources in different environments.

Understandings

- Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.
- Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.

Resources

Primary Resources

- BrainPop, Jr.
- Mystery Science

- NJLCT Unit 4 Plant and Animal Environments

Core

- Mystery Science Plant and Animal Environment Read Along "Where do Animals Liv?"
- Environment Activity
- Mystery Science "How do Animals Make Homes in the Forest?"
- Mystery Science "How do Plants and Trees Grow?"
- Hibernation Activity
- Migration Activity
- Mystery Science - Camouflage Activities "Why are polar bears white?"
- Winter Survival "Warmth" Lab

Supplemental

- Wetlands Activities
- Forest Activities
- Nature Walk Activity
- Food Chain, Activity
- Ecosystem Animals, Activity
- Desert Environment, Activities 25-28