Unit 1: Basic Needs of Living Things

Content Area: **Science**
Course(s): **Science K**
Time Period: **October**
Length: **15 Days**
Status: **Published**

Unit Summary

In this unit of study, students develop an understanding of what plants and animals need to survive and the relationship between their needs and where they live. Students compare and contrast what plants and animals need to survive and the relationship between the needs of living things and where they live. The crosscutting concepts of patterns and systems and system models are called out as organizing concepts for these disciplinary core ideas. Students are expected to demonstrate grade-appropriate proficiency in developing and using models, analyzing and interpreting data, and engaging in argument from evidence. Students are also expected to use these practices to demonstrate understanding of the core ideas.

Standards

CRP.K-12.CRP3	Attend to personal health and financial well-being.
CRP.K-12.CRP3.1	Career-ready individuals understand the relationship between personal health, workplace performance and personal well-being; they act on that understanding to regularly practice healthy diet, exercise and mental health activities. Career-ready individuals also take regular action to contribute to their personal financial well-being, understanding that personal financial security provides the peace of mind required to contribute more fully to their own career success.
TECH.8.1.2.A.CS1	Understand and use technology systems.

Student Learning Objectives

Students will learn to...

- use obsevations to describe patterns of what plants and animals (including humans) need to survive. Examples of patterns could include that animals need to take in food but plants do not; the different kinds of food needed by different types of animals; the requirement of plants to have light; and, that all living things need water.
- use a model to represent the relationship between the needs of different plants and animals and the places they live. Examples of relationships could include that deer eat buds and leaves, therefore, they usually live in forested areas; and, grasses need sunlight so they often grow in meadows. Plants, animals, and their surroundings make up a system.
- construct an argument supported by evidence for how plants and animals can change the environment to meet their needs. Examples of plants and animals changing their environment could include a squirrel digs in the ground to hide its food and tree roots can break concrete.

Essential Questions

- What do plants and animals need to survive?
- What is the relationship between what plants and animals need and where they live?

Enduring Understandings

Students will understand that...

- All animals need food in order to live and grow.
- Animals get their food from plants or from other animals.
- Plants need water and light to live and grow.

Application

Students will be able to independently use their learning to…

- Use observations to describe patterns in what animals need to survive.
- Different kinds of food are needed by different types of animals.
- Observe that systems in the natural and designed world have parts that work together.
- Use a model to represent relationships between the needs of different plants and the places they live in the natural world. Examples of relationships could include that grasses need sunlight, so they often grow in meadows. Examples of models include diagrams, drawings, physical replicas, dioramas, dramatizations, or storyboards.
- Use a model to represent the relationships between the needs of different animals and the places they live in the natural world. Plants, animals, and their surroundings make up a system. Examples of relationships could include that deer eat buds and leaves and therefore usually live in forested areas. Examples of models include diagrams, drawings, physical replica, dioramas, dramatizations, and storyboards.

Skills

Students will be skilled at…

- asking questions
- making observations
- gathering information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.