Unit 4: Basic Needs of Living Things

Content Area: **Science**
Course(s):   **Science - Grade K**
Time Period: **5 weeks**
Length: **5 Weeks**
Status: **Published**

Unit Overview

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

Transfer

Students will be able to independently use their learning to...

develop an understanding of what plants and animals need to survive and the relationship between their needs and where they live.

Meaning

Understandings

Students will understand that...

plants and animals need water, air, food and shelter to survive.

animals live in specific habitats based on what they need to survive.

Essential Questions

Where do plants and animals live and why do they live there?

How can you tell if something is alive?

What do animals and plants need to survive?

Where do organisms live and why do they live there?

Application of Knowledge and Skill

Students will know...

that plants and animals need water, air, food and shelter to survive.

that animals live in specific habitats based on what they need to survive.

Students will be skilled at...

planning and carrying out investigations, analyzing and interpreting data and developing and using models.

Academic Vocabulary

plants, animals, food, water, air, shelter, habitats, survive

Learning Goal 1

Use observations to describe patterns of what plants and animals need to survive.

- Use observations to describe patterns of what plants and animals need to survive.

SCI.K-ESS3-1	Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.

Target 1

SWBAT understand that plants and animals need food, water, air and shelter to survive.

- SWBAT understand that plants and animals need food, water, air and shelter to survive.

Learning Goal 2

Use a model to represent the relationship between the needs of different plants and animals and the places they live.

- Use a model to represent the relationship between the needs of different plants and animals and the places they live.

SCI.K-ESS3-1	Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.
SCI.K-LS1-1	Use observations to describe patterns of what plants and animals (including humans) need to survive.

Target 1

SWBAT understand that plants and animals live in specific habitats based on their needs.

- SWBAT understand that plants and animals live in specific habitats based on their needs.

Learning Goal 3

Construct an argument supported by evidence for how plants and animals can change the environment to meet their needs.

- Construct an argument supported by evidence for how plants and animals can change the environment to meet their needs.

SCI.K-ESS3-1	Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.
SCI.K-LS1-1	Use observations to describe patterns of what plants and animals (including humans) need

to survive.

Target 1

SWBAT understand that plants and animals are able to change and adapt to meet their needs.

- SWBAT understand that plants and animals are able to change and adapt to meet their needs.

Summative Assessment

Teacher will create a formal assessment.

21st Century Life and Careers

CAEP.9.2.4.A	Career Awareness
CAEP.9.2.4.A.1	Identify reasons why people work, different types of work, and how work can help a person achieve personal and professional goals.
CAEP.9.2.4.A.2	Identify various life roles and civic and work - related activities in the school, home, and community.
CAEP.9.2.4.A.3	Investigate both traditional and nontraditional careers and relate information to personal likes and dislikes.
CAEP.9.2.4.A.4	Explain why knowledge and skills acquired in the elementary grades lay the foundation for future academic and career success.

Formative Assessment and Performance Opportunities

Teacher observations.

Teacher directed Q and A.

Class discussions.

Learning logs.

Accommodations/Modifications

- Structure lessons around questions that are authentic, relate to students' interests, social/family background and knowledge of their community.
- Provide students with multiple choices for how they can represent their understandings (e.g.

multisensory techniques-auditory/visual aids; pictures, illustrations, graphs, charts, data tables, multimedia, modeling).

- Provide opportunities for students to connect with people of similar backgrounds (e.g. conversations via digital tool such as SKYPE, experts from the community helping with a project, journal articles, and biographies).
- Provide multiple grouping opportunities for students to share their ideas and to encourage work among various backgrounds and cultures (e.g. multiple representation and multimodal experiences).
- Engage students with a variety of Science and Engineering practices to provide students with multiple entry points and multiple ways to demonstrate their understandings.
- Use project-based science learning to connect science with observable phenomena.
- Structure the learning around explaining or solving a social or community-based issue.
- Provide ELL students with multiple literacy strategies.
- Collaborate with after-school programs or clubs to extend learning opportunities.

Unit Resources

Interdisciplinary Connections

MA.K-12.2	Reason abstractly and quantitatively.
MA.K-12.4	Model with mathematics.
MA.K.CC.B.4	Understand the relationship between numbers and quantities; connect counting to cardinality.
MA.K.MD.A.2	Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference.
LA.W.K.7	Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).
LA.SL.K.3	Ask and answer questions in order to seek help, get information, or clarify something that is not understood.
LA.SL.K.5	Add drawings or other visual displays to descriptions as desired to provide additional detail.