2. Plants, Animals and their Environment

Content Area: **Science**
Course(s):
Time Period: **Full Year**
Length: **1 trimester**
Status: **Published**

General Overview, Course Description or Course Philosophy

OBJECTIVES, ESSENTIAL QUESTIONS, ENDURING UNDERSTANDINGS

Does the sun heat all surfaces the same?

Can we change the effect of the sun in a particular area by building a structure?

How do we redesign the structure to build a better structure to protect our plants or animals?

What do plants and animals need to survive?
How do plants and animals change their environments to meet their needs?
How do plants and animals needs determine where they live?

CONTENT AREA STANDARDS

SCI.K-PS3-1	Make observations to determine the effect of sunlight on Earth's surface.
SCI.K-LS1-1	Use observations to describe patterns of what plants and animals (including humans) need to survive.
SCI.K-ESS2-2	Construct an argument supported by evidence for how plants and animals (including humans) 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-ESS3-3	Communicate solutions that will reduce the impact of climate change and humans on the land, water, air, and/or other living things in the local environment.

RELATED STANDARDS (Technology, 21st Century Life & Careers, ELA Companion Standards are Required)

LA.RI.K.1	With prompting and support, ask and answer questions about key details in a text.
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.1	Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an

	opinion or preference about the topic or book (e.g., My favorite book is...).
LA.W.K.3	Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.
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).
TECH.9.4.2.CT.1	Gather information about an issue, such as climate change, and collaboratively brainstorm ways to solve the problem (e.g., K-2-ETS1-1, 6.3.2.GeoGI.2).
TECH.9.4.2.TL.2	Create a document using a word processing application.
TECH.9.4.2.TL.6	Illustrate and communicate ideas and stories using multiple digital tools (e.g., SL.2.5.).

STUDENT LEARNING TARGETS

Refer to the 'Declarative Knowledge' and 'Procedural Knowledge sections.

Declarative Knowledge

Students will understand that:

- Sunlight warms Earth's surface.
- All animals need food in order to live and grow. They obtain their food from plants or from other animals. Plants need water and light to live and grow.
- Plants and animals can change their environment.
- Things that people do to live comfortably can affect the world around them.

Procedural Knowledge

Students will be able to:

- Make observations to determine the effect of sunlight on Earth's surface.
- Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area.
- Use observations to describe patterns of what plants and animals (including humans) need to survive.
- 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.
- Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.

EVIDENCE OF LEARNING

Refer to the 'Formative Assessments' and 'Summative Assessments' sections.

Formative Assessments

Student science notebook/workbook

Lesson assessments

exit tickets

Do Know

Summative Assessments

Benchmark Assessments

- Multiple Choice Assessment administered at the end of each trimester (T1, T2, T3)

Alternative Assessments

- Questions for Comprehension
- Performance Tasks
- Scientific Journals/Notebooks

RESOURCES (Instructional, Supplemental, Intervention Materials)

Mystery Science (online resource)

https://mysteryscience.com/docs/new-jersey

BrainPop Jr

BrainPop

https://www.brainpop.com/science/earthsystem/climatechange/

INTERDISCIPLINARY CONNECTIONS

Art-drawing

Public Speaking-presenting ideas

ACCOMMODATIONS & MODIFICATIONS FOR SUBGROUPS

See link to Accommodations & Modifications document in course folder.