

01 Life Science-Animal and Plants

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

General Overview, Course Description or Course Philosophy

Throughout this unit, students will study Animals and Plants through readings, activities, investigations, and direct observations. Within this unit, students begin to develop an understanding of the world's animal biodiversity. They explore animal classification and the traits that define each group. Students then turn their focus to habitats and how the surrounding environment affects what organisms live in a particular environment. Students will also explore the needs of plants through hands-on investigations. They explore how and why plants disperse their seeds, what those seeds need in order to grow, and what the adult plants need in order to survive and thrive.

OBJECTIVES, ESSENTIAL QUESTIONS, ENDURING UNDERSTANDINGS

Essential Questions:

How many types of living things live in a place?

What is an animal?

How do animals' senses help them survive?

How do habitats provide animals with what they need to survive?

What types of animals live in certain habitats?

Enduring Understandings:

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.

Things that people do to live comfortably can affect the world around them, But they can make choices that reduce their impacts on the land, water, air, and other living things.

CONTENT AREA STANDARDS

SCI.K-2-ETS1-1

Ask questions, make observations, and gather information about a situation people want

	to change (e.g., climate change) to define a simple problem that can be solved through the development of a new or improved object or tool.
SCI.K-2-ETS1-2	Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.
SCI.K-2-ETS1-3	Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.
2-LS4-1	Make observations of plants and animals to compare the diversity of life in different habitats.

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

LA.RI.2.1	Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.
MA.2.MD.D.10	Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put together, take-apart, and compare problems using information presented in a bar graph.
LA.W.2.6	With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.
LA.W.2.7	Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).
LA.W.2.8	Recall information from experiences or gather information from provided sources to answer a question.
LA.SL.2.5	Use multimedia; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.
CRP.K-12.CRP1.1	Career-ready individuals understand the obligations and responsibilities of being a member of a community, and they demonstrate this understanding every day through their interactions with others. They are conscientious of the impacts of their decisions on others and the environment around them. They think about the near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace. They are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good.
CRP.K-12.CRP7.1	Career-ready individuals are discerning in accepting and using new information to make decisions, change practices or inform strategies. They use reliable research process to search for new information. They evaluate the validity of sources when considering the use and adoption of external information or practices in their workplace situation.
TECH.8.1.2.A.2	Create a document using a word processing application.
TECH.8.1.2.A.CS1	Understand and use technology systems.
TECH.9.4.2.CI.1	Demonstrate openness to new ideas and perspectives (e.g., 1.1.2.CR1a, 2.1.2.EH.1, 6.1.2.CivicsCM.2).
TECH.9.4.2.CI.2	Demonstrate originality and inventiveness in work (e.g., 1.3A.2CR1a).
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).

STUDENT LEARNING TARGETS

Declarative Knowledge

Students will understand:

- the obligations and responsibilities of being a member of a community and demonstrate this understanding every day through their interactions with others.
- that the impacts of their decisions on others and the environment around them.
- that near-term and long-term consequences of their actions and seek to act in ways that contribute to the betterment of their teams, families, community and workplace.
- that they are reliable and consistent in going beyond the minimum expectation and in participating in activities that serve the greater good.
- (with guidance and support from adults), how to use a variety of digital tools to produce and publish writing, including in collaboration with peers.

Procedural Knowledge

Students will be able to:

- make observations of plants and animals to compare the diversity of life in different habitats.
- Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.
- Use multimedia; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings
- Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations
- Recall information from experiences or gather information from provided sources to answer a question
- Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories
- Solve simple put together, take-apart, and compare problems using information presented in a bar graph
- Create a document using a word processing application.

EVIDENCE OF LEARNING

Formative Assessments

- Whole-Class Conversations
- Turn and Talk Discussions
- Participation

- Lab Experiments
- Science Journal Pages and Drawings

Summative Assessments

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

Alternative Assessments

- Oral Presentations
- Questions for Comprehension
- Performance Tasks
- Scientific Journals/Notebooks
- Self-Assessment
- WebQuests

RESOURCES (Instructional, Supplemental, Intervention Materials)

- Brain Pop Jr. "Sound" and "Pitch" Video (Lesson 2)
- Dog Whistling Video Clip: <https://www.youtube.com/watch?v=9bhkaf68ABo> (Lesson 2)
- The Oak Tree - Melvin Berger (Lesson 3)
- Brain Pop. Jr "Forest Video (Lessons 4 and 8)
- <https://www.brainpop.com/science/earthsystem/climatechange/>

INTERDISCIPLINARY CONNECTIONS

- Educational Tech Applications
- Google
- Engineering Design Challenge-Bird House

ACCOMMODATIONS & MODIFICATIONS FOR SUBGROUPS

See link to Accommodations & Modifications document in course folder.