03 Life Science-Needs of Living Things

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

What Parts of Plants Help Them Live?

What Parts of Animals Help Them Live?

What Are Some Traits of Living Things?

How do traits passed from parents help offspring survive?

How Are Living Things Similar and Different?

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.
SCI.1-LS1-2	Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.
SCI.1-LS1-1	Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.
SCI.1-LS3-1	Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.

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

MA.1.OA.A.1	Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.
MA.K-12.2	Reason abstractly and quantitatively.
MA.K-12.4	Model with mathematics.
MA.K-12.5	Use appropriate tools strategically.
LA.RI.1.1	Ask and answer questions about key details in a text.
MA.1.MD.C.4	Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.
LA.W.1.7	Participate in shared research and writing projects (e.g., explore a number of "how-to" books on a given topic and use them to write a sequence of instructions).
LA.W.1.8	With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.
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).
TECH.9.4.2.CT.3	Use a variety of types of thinking to solve problems (e.g., inductive, deductive).

STUDENT LEARNING TARGETS

Declarative Knowledge

Students will understand:

- young plants and animals are like, but not exactly like, their parents.
- plants and/or animals use their external parts to help them survive, grow, and meet their needs.
- Animals have patterns in behavior of parents and offspring that help offspring survive.

Procedural Knowledge

Students will be able to:

- Make observations to construct an evidence-based account that young plants and animals are like, but

not exactly like, their parents.
- Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.
- Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.
- Ask questions, make observations, and gather 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.
- 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.
- Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.

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.
- Mystery Science Resource Guide (online)
- https://mysteryscience.com/docs/new-jersey

INTERDISCIPLINARY CONNECTIONS

- Educational Tech Applications
- Google
- Design challenge-Shelter

ACCOMMODATIONS & MODIFICATIONS FOR SUBGROUPS

See link to Accommodations & Modifications document in course folder.