

Unit 2- Characteristics of Living Things

Content Area: **Science**
Course(s): **Science 1**
Time Period: **November**
Length: **15 Days**
Status: **Published**

Unit Summary

Students develop an understanding of how plants and animals use their external parts to help them survive, grow, and meet their needs, as well as how the behaviors of parents and offspring help offspring survive. The understanding that young plants and animals are like but not exactly the same as their parents is developed. The crosscutting concept of patterns is called out as an organizing concept for the disciplinary core ideas. Students are expected to demonstrate grade-appropriate proficiency in obtaining, evaluating, and communicating information and constructing explanations. Students are also expected to use these practices to demonstrate an understanding of the core ideas.

Standards

CCSS.Math.Practice.MP2	Reason abstractly and quantitatively.
CCSS.Math.Practice.MP5	Use appropriate tools strategically.
LA.RI.1.1	Ask and answer questions about key details in a text.
LA.RI.1.2	Identify the main topic and retell key details of a text.
MA.1.NBT.B.3	Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.
MA.1.NBT.C.4	Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models (e.g., base ten blocks) or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.
MA.1.NBT.C.5	Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
LA.RI.1.10	With prompting and support, read informational texts at grade level text complexity or above.
MA.1.MD.A.1	Order three objects by length; compare the lengths of two objects indirectly by using a third object.
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.
LA.SL.1.1	Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.
LA.SL.1.1.A	Follow agreed-upon norms for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).
LA.SL.1.1.B	Build on others’ talk in conversations by responding to the comments of others through multiple exchanges.

LA.SL.1.1.C	Ask questions to clear up any confusion about the topics and texts under discussion.
LA.SL.1.2	Ask and answer questions about key details in a text read aloud or information presented orally or through other media.
LA.SL.1.3	Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.
LA.SL.1.6	Produce complete sentences when appropriate to task and situation.
CRP.K-12.CRP2	Apply appropriate academic and technical skills.
SCI.1.1.SFI	Structure, Function, and Information Processing
SCI.1.1-LS1-2	Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive.
SCI.1.1-LS3-1	Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.
TECH.8.1.2.A.CS1	Understand and use technology systems.

Student Learning Objectives

Students will learn to...

- analyze and interpret data to provide evidence that plants and animals have traits inherited from parents and that variation of these traits exists in a group of similar organisms.
- read texts and use media to determine patterns in the behavior of parents and offspring that help offspring survive.

Essential Questions

- How are young plants and animals alike and different from their parents?
- What types (patterns) of behavior can be observed among parents that help offspring survive?

Enduring Understandings

Students will understand that...

- All organisms have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water, and air. Plants also have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow.
- Adult plants and animals can have young. In many kinds of animals, parents and the offspring themselves engage in behaviors that help the offspring to survive.
- Animals have body parts that capture and convey different kinds of information needed for growth and survival. Animals respond to these inputs with behaviors that help them survive. Plants also respond to some external inputs.
- Young animals are very much, but not exactly, like their parents. Plants also are very much, but not exactly, like their parents.

- Individuals of the same kind of plant or animal are recognizable as similar but can also vary in many ways.

Application

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

- observe patterns in the natural world and use them to describe phenomena.
- describe how the shape and stability of structures of natural and designed objects are related to their function(s).
- build using materials derived from the natural world.

Skills

Students will be skilled at...

- making observations (firsthand or from media) to construct an evidence-based account for natural phenomena.
- using materials to design a device that solves a specific problem or a solution to a specific problem.
- reading grade-appropriate texts and use media to obtain scientific information to determine patterns in the natural world.
- looking for patterns and order when making observations about the world.