



Grade K Science - Unit 1 - Plants & Animals

Unit Focus

In this introductory science unit, kindergarteners will explore the basic needs of plants, animals, and humans, discovering how living things interact with and change their environments to survive. Through engaging activities, hands-on investigations, and guided discussions, students will learn about the connections between organisms and their habitats, including how plants rely on sunlight and water, animals depend on food and shelter, and humans modify their surroundings to meet their needs.

Stage 1: Desired Results - Key Understandings

Standard(s)	Transfer	
Next Generation Science Standards Cross Cutting Concepts: K - Patterns in the natural and human designed world can be observed and used as evidence. (K-LS1-1) (K.IRE.CC.1.1) - Systems in the natural and designed world have parts that work together. (K-ESS2-2), (K-ESS3-1) (K.IRE.CC.3.1) Disciplinary Core Ideas: K - 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. (K-LS1-1) (L.LS1.C.1) - Plants and animals can change their environment. (K-ESS2-2) (K.ESS2.E.1) - 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. (K-ESS3-1) (K.ESS3.A.1) - 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. (secondary to K-ESS2-2),(KESS3-3) (K.ESS3.C.1) Performance Expectations: K - Use observations to describe patterns of what plants and animals (including humans) need to survive. (K-LS1-1) - Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs. (KESS2-2) - Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live. (K-ESS3-1) Science and Engineering Practices: K	<i>Students will be able to independently use their learning to...</i> T1 Create models to explore complex systems, show mastery of key science concepts, and/or develop solutions through creation of a product open to testing and redesign.	
	Meaning	
	Understanding(s)	Essential Question(s)
	<i>Students will understand that...</i> U1 Plants, animals, and humans have basic needs—such as food, water, and shelter—that are required for survival. U2 Living things interact with their environments and sometimes change them in order to meet their needs. U3 The places where plants, animals, and humans live provide the necessary resources for survival.	<i>Students will keep considering...</i> Q1 What do plants, animals, and humans need to survive? Q2 How do living things change their environments to meet their needs? Q3 How are the needs of living things connected to the places they live?
	Acquisition of Knowledge and Skill	
	Knowledge	Skill(s)
<i>Students will know...</i> K1 Plants need light, water, and air to grow. K2 Animals need food, water, and shelter to live. K3 Different animals eat different foods (plants, other animals, or both).	<i>Students will be skilled at...</i> S1 Observe and describe the basic needs of plants, animals, and humans for survival. S2 Identify patterns in the way living things get their food, water, and shelter.	

Stage 1: Desired Results - Key Understandings

- Use a model to represent relationships in the natural world. (K-ESS3-1) (K.IRE.SEP.1.1)
- Use observations (firsthand or from media) to describe patterns in the natural world in order to answer scientific questions. (KLS1-1) (K.IRE.SEP.2.1)
- Construct an argument with evidence to support a claim. (K-ESS2-2) (K.IRE.SEP.3.1)
- Scientists look for patterns and order when making observations about the world. (KESS2-1) (K.WC.SEP.7.1)

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- Product Creation: Effectively use a medium to communicate important information. (POG.3.2)

K4 Plants and animals can change their environments in different ways to meet their needs.

K5 Specific plants and animals live in certain places because those places provide the resources they need.

K6 Vocabulary: Animal, Plant, Needs, Survive, Shelter, Living, Nonliving, Seed, Habitat

S3 Explain how plants and animals (including humans) change their environment to meet their needs.

S4 Use evidence to show how animals and plants interact with their environment (e.g., squirrels hiding food, tree roots breaking concrete).

S5 Identify and describe how different living things need different types of environments (e.g., deer in forests, fish in water).

S6 Construct simple models to represent the relationship between living things and their environments.