

Grade K: Animal and Plant Needs

Stage 1 Desired Results		
ESTABLISHED GOALS: <u>Competencies:</u> <u>Nature of Science and Engineering</u> - Students will demonstrate the ability to work collaboratively and individually to generate testable questions or define problems, plan and conduct investigations using a variety of research methods in various settings, analyze and interpret data, reason with evidence to construct explanations in light of existing theory and previous research, and effectively communicate the research processes and conclusions. <u>Patterns</u> - Students will demonstrate the ability to observe and describe patterns in natural and human designed phenomena and use those patterns to support claims about the observed or predicted relationships among phenomena. <u>Cause & Effect</u> - Students will demonstrate the ability to investigate, explain, and evaluate potential causal relationships by using evidence to support claims and predictions about the mechanisms that drive those relationships. <u>Content Standards:</u> - K-LS1-1. Use observations to describe patterns of what plants and animals (including humans) need to survive. - K-ESS2-2. Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs. - 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 - K-ESS3-3. Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.	Transfer	
	Students will be able to independently use their learning to recognize patterns in the natural environment.	
	Meaning	
	ENDURING UNDERSTANDINGS Students will understand that... - patterns in the natural and human designed world can be observed and used as evidence. - events have causes that generate observable patterns. - systems in the natural and designed world have parts that work together.	ESSENTIAL QUESTIONS What do living things really need?
	Acquisition	
	Students will know... - that all animals need food in order to live and grow. - that animals obtain their food from plants or from other animals. - that plants need water and light to live and grow. - that many animals change their environment to have a special place in order to do things such as hide (to stay safe) or sleep. - that plants and animals can change their environment. (ie: squirrels dig in the ground to hide food which plants seeds; tree roots can break concrete or cause erosion) - that some animals find shelter, others make shelter. - that all animals seek safety but different animals have different needs. - that living things need water, air, and resources from the land, and they live in places that have the things they need. - that humans use natural resources for everything they do. - that 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.	Students will be skilled at... - using observations to describe the needs of plants or animals. - using a model to explain how an environment provides for the needs of its plants and animals. - using a model to explain how plants and animals affect the environment in which they live. - constructing an argument with evidence to support a claim. - identifying the possible opportunities for reducing, reusing, and recycling.

	• that designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solutions to other people. <u>vocabulary:</u> animal, beak, behavior, different, environment, experiment, flower, food, footprint, forest, habitat, healthy, leaf, living, needs, nonliving, observe, pattern, plant, predict, root, safety, seed, shelter, similar, soil, sunlight, survive, tree, wing	
Content Area Literacy Standards		21st Century Skills
not applicable		• communicate clearly • think creatively • use and manage information • reasoning effectively

Stage 2 - Evidence	
<i>Evaluative Criteria</i>	<i>Assessment Evidence</i>
	PERFORMANCE TASK(S):
	OTHER EVIDENCE:

Stage 3 – Learning Plan Summary of Key Learning Events and Instruction	
Language Arts Integration • RI.K.1 With prompting and support, ask and answer questions about key details in a text. • 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. • W.K.2 Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic. • W.K.7 Participate in shared research and writing projects (e.g., explore a number of books by a favorite	Mathematics Integration • MP.2 Reason abstractly and quantitatively. • MP.4 Model with mathematics. • K.CC Counting and Cardinality • 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.

author and express opinions about them). • SL.K.5 Add drawings or other visual displays to descriptions as desired to provide additional detail.	
<i>Technology Integration</i>	<i>District Materials</i>