

Grade 1: Animal and Plant Traits

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>Structure and Function</u> - Students will demonstrate the ability to use evidence to support claims about the relationship among structure and function of natural and human designed objects. <u>Content Standards:</u> 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 1-LS1-2. Read texts and use media to determine patterns in behavior of parents and offspring that help offspring survive. 1-LS3-1. Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like their parents.	Transfer	
	<i>Students will be able to independently use their learning to recognize relationships in the natural environment.</i>	
	Meaning	
	ENDURING UNDERSTANDINGS <i>Students will understand that...</i> - patterns in the natural world can be observed, used to describe phenomena, and used as evidence. - the shape and stability of structures of natural and designed objects are related to their function(s). - every human-made product is designed by applying some knowledge of the natural world and is built by using materials derived from the natural world.	ESSENTIAL QUESTIONS Why don't all plants and animals look the same?
	Acquisition	
	<i>Students will know...</i> - that all organisms have external parts. - that 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. - that plants also have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow. - that adult plants and animals can have young. - that in many kinds of animals, parents and the offspring themselves engage in behaviors that help the offspring to survive. - that animals have body structures and parts that capture and convey different kinds of information needed for growth and survival. - that animals respond to these inputs with behaviors that help them survive. - that plants also respond to some external inputs. - that young animals are very much, but not exactly, like their parents. - that plants also are very much, but not exactly, like	<i>Students will be skilled at...</i> - making observations of plants and animals to construct an evidence-based account for natural phenomena. - identifying the external parts of a plant (roots, stems, leaves, flowers, fruit). - identifying the body parts of animals that capture and convey information (eyes, ears, nose, mouth, paws, etc...). - identifying the similarities and differences between animals/plants and their offspring. - using the natural world to serve as a source of inspiration for designing new things. - using a model to demonstrate that young plants and animals are like, but not exactly the same, as their parents. - obtaining, evaluating, and communicating information about animal and plant performance.

	<i>their parents.</i> • <i>that individuals of the same kind of plant or animal are recognizable as similar but can also vary in many ways.</i> <u><i>vocabulary:</i></u> <i>leaves, flowers, survive, traits, camouflage, seed, seedlings, habitat, predator, prey, generation</i>	
Content Area Literacy Standards		21st Century Skills
<i>not applicable</i>		• <i>reason effectively</i> • <i>make judgments and decisions</i> • <i>think creatively</i> • <i>manage and use information</i>

Stage 2 - Evidence	
Evaluative Criteria	Assessment Evidence
	PERFORMANCE TASK(S):
	OTHER EVIDENCE:

Stage 3 – Learning Plan	
<i>Summary of Key Learning Events and Instruction</i>	
Language Arts Integration	Mathematics Integration
• RI.1.1 Ask and answer questions about key details in a text. • RI.1.2 Identify the main topic and retell key details of a text • RI.1.10 With prompting and support, read informational texts appropriately complex for grade. • 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). • W.1.8 With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.	• MP.2 Reason abstractly and quantitatively. • MP.5 Use appropriate tools strategically. • 1.NBT.B.3 Compare two two-digit numbers based on the meanings of the tens and one digits, recording the results of comparisons with the symbols $>$, $=$, $<$. • 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 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 uses. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten. • 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.

	• 1.NBT.C.6 Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models 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. • 1.NBT.C.6 Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models 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. • 1.NBT.C.6 Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models 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. • 1.MD.A.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object.
Technology Integration	District Materials