

Grade 2: Interdependent Relationships in Ecosystems

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>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>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> 2-LS2-1. Plan and conduct an investigation to determine if plants need sunlight and water to grow. 2-LS2-2. Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants. 2-LS4-1. Make observations of plants and animals to compare the diversity of life in different habitats.	Transfer	
	Students will be able to independently use their learning to make informed decisions based on an understanding of causal relationships in the environment.	
	Meaning	
	ENDURING UNDERSTANDINGS Students will understand that... - events have causes that generate observable patterns. - the shape and stability of structures of natural and designed objects are related to their function(s).	ESSENTIAL QUESTIONS Do plants and animals really need each other?
	Acquisition	
	Students will know... - that plants depend on water and light to grow. - that plants depend on animals for pollination or to move their seeds around. - that there are many different kinds of living things in any area, and they exist in different places on land and in water. - designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solution to other people. <u>Student vocabulary:</u> animal, disperse, habitat, seedling, structure, wind, water <u>Teacher vocabulary:</u> compare, experiment, identify, investigate, model, observe, pattern, predict	Students will be skilled at... - designing an investigation to determine if plants need sunlight and water to grow. - developing a model that shows how animals spread seeds. - comparing and contrasting the diversity of plant and animal life in local habitats (ie: farmland, ponds, forest, desert, arctic, grassland, rainforest).
Content Area Literacy Standards		21st Century Skills
not applicable		- make judgments and decisions - use systems thinking - be flexible - work creatively

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	
<i>Language Arts Integration</i>	<i>Mathematics Integration</i>
• W.2.7 Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations). • W.2.8 Recall information from experiences or gather information from provided sources to answer a question. • SL.2.5 Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.	• MP.2 Reason abstractly and quantitatively. • MP.4 Model with mathematics. • MP.5 Use appropriate tools strategically. • 2.MD.D.10 Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems.
<i>Technology Integration</i>	<i>District Materials</i>