*Unless otherwise specified, "descriptions" referenced in the evidence statements could include but are not limited to written, oral, pictorial, and kinesthetic descriptions.

K-ESS3-1 Earth and Human Activity

Students who demonstrate understanding can:

K-ESS3-1. **Use a model to represent the relationship between the needs of different plants and animals (including humans) and the places they live.** [Clarification Statement: Examples of relationships could include that deer eat buds and leaves, therefore, they usually live in forested areas; and, grasses need sunlight so they often grow in meadows. Plants, animals, and their surroundings make up a system.]

The performance expectation above was developed using the following elements from the NRC document *A Framework for K-12 Science Education*:

Science and Engineering Practices

Developing and Using Models

Modeling in K–2 builds on prior experiences and progresses to include using and developing models (i.e., diagram, drawing, physical replica, diorama, dramatization, storyboard) that represent concrete events or design solutions.

- Use a model to represent relationships in the natural world.

Disciplinary Core Ideas

ESS3.A: Natural Resources

- 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.

Crosscutting Concepts

Systems and System Models

- Systems in the natural and designed world have parts that work together.

Observable features of the student performance by the end of the grade:			
1	Components of the model		
	a	From the given model (e.g., representation, diagram, drawing, physical replica, diorama, dramatization, storyboard) of a phenomenon involving the needs of living things and their environments, students identify and describe* the components that are relevant to their representations, including:	
		i.	Different plants and animals (including humans).
		ii.	The places where the different plants and animals live.
		iii.	The things that plants and animals need (e.g., water, air, and land resources such as wood, soil, and rocks).
2	Relationships		
	a	Students use the given model to represent and describe* relationships between the components, including:	
		i.	The relationships between the different plants and animals and the materials they need to survive (e.g., fish need water to swim, deer need buds and leaves to eat, plants need water and sunlight to grow).
		ii.	The relationships between places where different plants and animals live and the resources those places provide.
		iii.	The relationships between specific plants and animals and where they live (e.g., fish live in water environments, deer live in forests where there are buds and leaves, rabbits live in fields and woods where there is grass to eat and space for burrows for homes, plants live in sunny and moist areas, humans get resources from nature [e.g., building materials from trees to help them live where they want to live]).
3	Connections		
	a	Students use the given model to represent and describe*, including:	
		i.	Students use the given model to describe* the pattern of how the needs of different plants and animals are met by the various places in which they live (e.g., plants need sunlight so they are found in places that have sunlight; fish swim in water so they live in lakes, rivers, ponds, and oceans; deer eat buds and leaves so they live in the forest).
		ii.	Students use the given model to describe* that plants and animals, the places in which they live, and the resources found in those places are each part of a system, and that these parts of systems work together and allow living things to meet their needs.