Kindergarten

3.3.K.C Earth and Space Sciences: Earth and Human Activity

Students who demonstrate understanding can *use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.*

Clarifying 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.

Assessment Boundary: N/A

Science and Engineering Practices (SEP)	Disciplinary Core Ideas (DCI)	Crosscutting Concepts (CCC)
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 and/or develop a model to represent amounts, relationships, relative scales (bigger, smaller), and/or patterns in the natural and designed world(s).	**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.	**Systems and System Models** Systems in the natural and designed world have parts that work together.

Pennsylvania Context: Examples of Pennsylvania context include a wide variety of habitats from mountains to urban areas, each of which provides the specific food, shelter, water, and space required by the variety of plants and animals found in each habitat. Local nature centers can provide information on the types of native Pennsylvania wildlife and native wild plants that can be found in each region of the state.

PA Career Ready Skills: Identify similarities and differences between self and others.

Connections to Other Standards Content and Practices

Standard Source	Possible Connections to Other Standard(s) or Practice(s)
Agriculture (AFNR)	CS.02.01.01.a: Research and describe different types of geographic data used in AFNR systems.
Science, Environmental Literacy and Sustainability (NAAEE)	K-4 Strand 1.F. Working with models and simulations: Learners use models to represent environmental relationships, patterns, and processes.

Standard Source	Possible Connections to Other Standard(s) or Practice(s)
PA Core Standards: ELA	CC.1.5.K.A: Participate in collaborative conversations with peers and adults in small and larger groups. CC.1.5.K.C: Ask and answer questions in order to seek help, get information, or clarify something that is not understood.
PA Core Standards and Practices: Math	MP.2: Reason abstractly and quantitatively. MP.4: Model with mathematics. CC.2.1.K.A.1: Know number names and write and recite the count sequence.
PA Standards: Social Studies	6.4.K.D: Identify individual wants and needs. 7.3.K.A: Describe how weather affects daily life.
Educational Technology (ISTE)	1.1. Empowered Learner: Students leverage technology to take an active role in choosing, achieving, and demonstrating competency in their learning goals, informed by the learning sciences.
Technology and Engineering (ITEEA)	STEL-3B: Draw connections between technology and human experiences.