## Grade 2

**3.1.2.B Life Science:** Ecosystems: Interactions, Energy, and Dynamics

**Students who demonstrate understanding can** *develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.*

**Clarifying Statement:** N/A

**Assessment Boundary:** N/A

| Science and Engineering Practices (SEP) | Disciplinary Core Ideas (DCI) | Crosscutting Concepts (CCC) |
|---|---|---|
| **Developing and Using Models**<br>Modeling in K–2 builds on prior experiences and progresses to include using and developing models (i.e., diagram, drawing, physical replica, diorama, dramatization, or storyboard) that represent concrete events or design solutions.<br>• Develop a simple model based on evidence to represent a proposed object or tool. | **Interdependent Relationships in Ecosystems**<br>• Plants depend on animals for pollination or to move their seeds around.<br>**Developing Possible Solutions**<br>• 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. | **Structure and Function**<br>• The shape and stability of structures of natural and designed objects are related to their function(s). |

**Pennsylvania Context:** Examples of Pennsylvania context include plants commonly found in Pennsylvania.

**PA Career Ready Skills:** Identify multiple ways to solve conflicts and practice solving problems.

### Connections to Other Standards Content and Practices

| Standard Source | Possible Connections to Other Standard(s) or Practice(s) |
|---|---|
| **Agriculture (AFNR)** | CS.01.02.02.b: Analyze how technology is used in AFNR systems to maximize productivity. |
| **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. |
| **PA Core Standards: ELA** | CC.1.4.2.V: Participate in individual or shared research and writing projects.<br>CC.1.4.2.W: Recall information from experiences or gather information from provided sources to answer a question.<br>CC.1.5.2.A: Participate in collaborative conversations with peers and adults in small and larger groups.<br>CC.1.5.2.E: Add drawings or other visual displays to presentations when appropriate to clarify ideas, thoughts, and feelings. |
| **PA Core Standards and Practices: Math** | MP.2: Reason abstractly and quantitatively.<br>MP.4: Model with mathematics.<br>CC.2.4.2.A.4: Represent and interpret data using line plots, picture graphs, and bar graphs. |

| Standard Source | Possible Connections to Other Standard(s) or Practice(s) |
|---|---|
| **PA Standards: Social Studies** | 6.5.2.E: Describe the qualities that may be necessary to complete a task. |
| **Educational Technology (ISTE)** | 1.6. Creative Communicator: Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats and digital media appropriate to their goals. |
| **Technology and Engineering (ITEEA)** | STEL-2A: Illustrate how systems have parts or components that work together to accomplish a goal. |