## Grades K–2

**3.4.K-2.A Environmental Literacy and Sustainability:** Agriculture and Environmental Systems and Resources

**Students who demonstrate understanding can** *categorize ways people harvest, re-distribute, and use natural resources.*

**Clarifying Statement:** Examples could include that trees provide food, fiber, and building materials. Trees are logged, transported, and processed into different products, such as fiber, furniture, and buildings. Fruits and nuts from trees are picked, transported, and processed.

**Assessment Boundary:** N/A

| Science and Engineering Practices (SEP) | Disciplinary Core Ideas (DCI) | Crosscutting Concepts (CCC) |
|---|---|---|
| **Obtaining, Evaluating, and Communicating Information**<br>Obtaining, evaluating, and communicating information in K–2 builds on prior experiences and uses observations and texts to communicate new information.<br>• Communicate information with others in oral and/or written forms using models, drawings, writing, or numbers that provide detail about scientific ideas, practices, and/or design ideas.<br>**Analyzing and Interpreting Data**<br>Analyzing data in K–2 builds on prior experiences and progresses to collecting, recording, and sharing observations.<br>• Use observations (firsthand or from media) to describe patterns in the natural world in order to answer scientific questions. | **Natural Resources**<br>• 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. | **Cause and Effect**<br>• Events have causes that generate observable patterns.<br>**Systems and System Models**<br>• Systems in the natural and designed world have parts that work together. |

**Pennsylvania Context:** Examples of Pennsylvania context include Pennsylvania farms (agriculture, urban agriculture, and aquaculture), businesses (manufacturing, recreation), and industries (electricity and power, mining, biotechnology, forest products, transportation).

**PA Career Ready Skills:** Identify consequences of a decision to oneself and others prior to action.

## Connections to Other Standards Content and Practices

| Standard Source | Possible Connections to Other Standard(s) or Practice(s) |
|---|---|
| **Agriculture (AFNR)** | CS.04.01.01.a: Define stewardship of natural resources and distinguish how it connects to AFNR systems. |

| Standard Source | Possible Connections to Other Standard(s) or Practice(s) |
|---|---|
| **Science, Environmental Literacy and Sustainability (NAAEE)** | K-4 Strand 2.3.B. Resource distribution and consumption: Learners describe ways people harvest, re-distribute, and use natural resources. |
| **PA Core Standards: ELA** | CC.1.4.K-1.W: With guidance and support, recall information from experiences or gather information from provided sources to answer a question.<br>CC.1.4.2.W: Recall information from experiences or gather information from provided sources to answer a question.<br>CC.1.5.K.B: Ask and answer questions about key details in a text read aloud or information presented orally or through other media.<br>CC.1.5.1.B: Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.<br>CC.1.5.2.B: Recount or describe key ideas or details from a text read aloud or information presented orally or through other media. |
| **PA Core Standards and Practices: Math** | MP.2: Reason abstractly and quantitatively.<br>CC.2.4.1.A.4: Represent and interpret data using tables/charts.<br>CC.2.4.2.A.4: Represent and interpret data using line plots, picture graphs, and bar graphs. |
| **PA Standards: Social Studies** | 5.2.2.D: Explain responsible community behavior.<br>6.2.2.G: Identify examples of an economic system. |
| **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-4D: Select ways to reduce, reuse, and recycle resources in daily life. Children should give examples of the ways they handle waste at school or at home. |