



## Grade 2

### 3.1.2.A Life Science: Ecosystems: Interactions, Energy, and Dynamics

**Students who demonstrate understanding can plan and conduct an investigation to determine if plants need sunlight and water to grow.**

**Clarifying Statement:** N/A

**Assessment Boundary:** Assessment is limited to testing one variable at a time.

Science and Engineering Practices (SEP)	Disciplinary Core Ideas (DCI)	Crosscutting Concepts (CCC)
<b>Planning and Carrying Out Investigations</b> Planning and carrying out investigations to answer questions or test solutions to problems in K–2 builds on prior experiences and progresses to simple investigations, based on fair tests, which provide data to support explanations or design solutions. <ul style="list-style-type: none"> <li>Plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence to answer a question.</li> </ul>	<b>Interdependent Relationships in Ecosystems</b> <ul style="list-style-type: none"> <li>Plants depend on water and light to grow.</li> </ul>	<b>Cause and Effect</b> <ul style="list-style-type: none"> <li>Events have causes that generate observable patterns.</li> </ul>

**Pennsylvania Context:** Examples of Pennsylvania context include Pennsylvania native plants and agricultural products.

**PA Career Ready Skills:** Distinguish among a set of short-term, mid-range, and long-term goals.

### Connections to Other Standards Content and Practices

Standard Source	Possible Connections to Other Standard(s) or Practice(s)
<b>Agriculture (AFNR)</b>	CS.06.01.01.a: Research and explain the foundational cycles in AFNR (e.g., water cycle, nutrient cycle, carbon cycle, etc.).
<b>Science, Environmental Literacy and Sustainability (NAAEE)</b>	K-4 Strand 1.B. Designing investigations: Learners design simple environmental investigations.
<b>PA Core Standards: ELA</b>	CC.1.4.2.V: Participate in individual or shared research and writing projects. CC.1.5.2.A: Participate in collaborative conversations with peers and adults in small and larger groups.
<b>PA Core Standards and Practices: Math</b>	MP.2: Reason abstractly and quantitatively. CC.2.4.2.A.1: Measure and estimate lengths in standard units using appropriate tools. 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	5.1.2.C: Define fairness in working with others. 7.2.2.A: Identify the physical characteristics of places.
Educational Technology (ISTE)	1.4. Innovative Designer: Students use a variety of technologies within a design process to identify and solve problems by creating new, useful or imaginative solutions.
Technology and Engineering (ITEEA)	STEL-2E: Collaborate effectively as a member of a team.