



## Grades K–2

### 3.5.K-2.L Technology and Engineering: Influence of Society on Technological Development

**Students who demonstrate understanding can** *explore how technologies are developed to meet individual and societal needs and wants.*

**Clarifying Statement:** For example, people need clean, safe water, so systems are developed to provide water to homes and schools. Human-made technology requires some knowledge of the natural world and uses materials from it as well.

**Assessment Boundary:** N/A

Science and Engineering Practices (SEP)	Disciplinary Core Ideas (DCI)	Technology and Engineering Practices (TEP)
<p><b>Asking Questions and Defining Problems</b> Asking questions and defining problems in K–2 builds on prior experiences and progresses to simple descriptive questions that can be tested.</p> <ul style="list-style-type: none"> <li>Define a simple problem that can be solved through the development of a new or improved object or tool.</li> </ul>	<p><b>ETS1.A: Defining and Delimiting Engineering Problems</b></p> <ul style="list-style-type: none"> <li>Before beginning to design a solution, it is important to clearly understand the problem.</li> </ul>	<p><b>Systems Thinking</b></p> <ul style="list-style-type: none"> <li>Learns that human-designed things are connected.</li> </ul>

**Pennsylvania Context:** Examples of Pennsylvania context include but are not limited to manufacturing businesses.

**Pennsylvania Career Ready Skills:** Respond to others given a sense of the others' point of view.

## Connections to Other Standards Content and Practices

Standard Source	Possible Connections to Other Standard(s) or Practice(s)
PA Core Standards: Reading and Writing in Science and Technical Areas	CC.1.4.K.U: With guidance and support, explore a variety of digital tools to produce and publish writing or in collaboration with peers. CC.1.4.1-2.U: With guidance and support, use a variety of digital tools to produce and publish writing including in collaboration with peers. CC.1.4.K.V: Participate in individual or shared research projects on a topic of interest. CC.1.4.1-2.V: Participate in individual or shared research and writing projects. CC.1.4.K-1.W: With guidance and support, recall information from experiences or gather information from provided sources to answer a question. CC.1.4.2.W: Recall information from experiences or gather information from provided sources to answer a question. CC.1.5.K-2.A: Participate in collaborative conversations with peers and adults in small and larger groups.
PA Core Standards and Practices: Math	MP.2: Reason abstractly and quantitatively. MP.4: Model with mathematics. MP.5: Use appropriate tools strategically.



**Science, Technology &  
Engineering, and  
Environmental Literacy &  
Sustainability Academic  
Standards**

N/A