



## Grades K–2

### 3.5.K-2.D Technology and Engineering: Impacts of Technology

**Students who demonstrate understanding can** *select ways to reduce, reuse, and recycle resources in daily life.*

**Clarifying Statement:** Children should give examples of the ways they handle waste at school or at home.

**Assessment Boundary:** N/A

Science and Engineering Practices (SEP)	Disciplinary Core Ideas (DCI)	Technology and Engineering Practices (TEP)
<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. <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>	<b>Human Impacts on Earth Systems</b> <ul style="list-style-type: none"> <li>Things that people do to live comfortably can affect the world around them. But they can make choices that reduce their impacts on the land, water, air, and other living things.</li> </ul> <b>Developing Possible Solutions</b> <ul style="list-style-type: none"> <li>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.</li> </ul>	<b>Attention to Ethics</b> <ul style="list-style-type: none"> <li>Learns that use of technology affects humans and the environment.</li> </ul>

**Pennsylvania Context:** Examples of Pennsylvania context include but are not limited to waste removal and recycling facilities.

**Pennsylvania Career Ready Skills:** Select coping skill strategies response to adverse situations (e.g., positive self-talk, talking to others, taking a break, taking care of oneself, avoiding negative self-talk).

## Connections to Other Standards Content and Practices

Standard Source	Possible Connections to Other Standard(s) or Practice(s)
<b>PA Core Standards: Reading and Writing in Science and Technical Areas</b>	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.



Standard Source	Possible Connections to Other Standard(s) or Practice(s)
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