## Grades 3–5

## 3.5.3-5.F Technology and Engineering: Impacts of Technology

Students who demonstrate understanding can classify resources used to create technologies as either renewable or nonrenewable.

**Clarifying Statement:** An introduction to material resources and how they are recovered will help students understand the concept of renewability and its importance and can be tied to concepts they learn in science.

### Assessment Boundary: N/A

Science and Engineering Practices (SEP)	Disciplinary Core Ideas (DCI)	Technology and Engineering Practices (TEP)
<ul> <li>Obtaining, Evaluating, and Communicating Information</li> <li>Obtaining, evaluating, and communicating information in 3–5 builds on K–2 experiences and progresses to evaluating the merit and accuracy of ideas and methods.</li> <li>Obtain and combine information from books and/or other reliable media to explain phenomena or solutions to a design problem.</li> </ul>	<b>ESS3.A</b> Energy and fuels that humans use are derived from natural sources, and their use affects the environment in multiple ways. Some resources are renewable over time, and others are not.	<ul> <li>Critical Thinking</li> <li>Knows how to find answers to technological questions.</li> </ul>

Pennsylvania Context: Examples of Pennsylvania context include but are not limited to robotic industries and agriculture industries.

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



Standard Source	Possible Connections to Other Standard(s) or Practice(s)
PA Core Standards: Reading and Writing in Science and Technical Areas	<ul> <li>CC.1.2.3.G: Use information gained from text features to demonstrate understanding of a text.</li> <li>CC.1.2.4.G: Interpret various presentations of information within a text or digital source and explain how the information contributes to an understanding of text in which it appears.</li> <li>CC.1.2.5.G: Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.</li> <li>CC.1.4.3.V: Conduct short research projects that build knowledge about a topic.</li> <li>CC.1.4.5.V: Conduct short research projects that build knowledge through investigation of different aspects of a topic.</li> <li>CC.1.4.3.W: Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.</li> <li>CC.1.4.4.W: Recall relevant information from experiences or gather relevant information from print and digital sources; take brief notes on sources and categorize information, and provide a list of sources.</li> <li>CC.1.4.5.W: Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information in notes and finished work, and provide a list of sources.</li> </ul>
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

# **Connections to Other Standards Content and Practices**