

Grades 6-8

3.5.6-8.F Technology and Engineering: Applying, Maintaining, Assessing, and Evaluating Technological Products and Systems

Students who demonstrate understanding can analyze examples of technologies that have changed the way people think, interact, live, and communicate.

Clarifying Statement: At this age, students should be able to identify and discuss specific examples of technologies that have led to fundamental changes in humans. Obvious examples include things like social media and smartphones; students should be encouraged to dig deeper and identify less obvious technologies.

Assessment Boundary: N/A

| Science and Engineering Practices (SEP) | Disciplinary Core Ideas (DCI) | Technology and Engineering Practices (TEP) |
|---|--|--|
| Obtaining, Evaluating, and Communicating Information Obtaining, evaluating, and communicating information in 6–8 builds on K–5 experiences and progresses to evaluating the merit and validity of ideas and methods. • Critically read scientific texts adapted for classroom use to determine the central ideas and/or obtain scientific and/or technical information to describe patterns in and/or evidence about the natural and designed world(s). | Compare the impacts of a given technology on different societies, noting factors that may make a technology appropriate and sustainable in one society but not in another. | Defends technological decisions based on evidence. |

Pennsylvania Context: Examples of Pennsylvania context include but are not limited to Pennsylvania's inventors and inventions.

Pennsylvania Career Ready Skills: Explain how expressive communication strategies can affect others.

Connections to Other Standards Content and Practices

Science, Technology & Engineering, and Environment Literacy & Sustainability (STEELS)



| Standard Source | Possible Connections to Other Standard(s) or Practice(s) | |
|---|--|--|
| PA Core Standards: Reading and Writing in Science and Technical Areas | CC.1.2.3.G: Use information gained from text features to demonstrate understanding of a text. 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. 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. CC.1.4.3.V: Conduct short research projects that build knowledge about a topic. CC.1.4.4.V: Conduct short research projects that build knowledge through investigation of different aspects of a topic. CC.1.4.5.V: Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic. 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. CC.1.4.4.W: Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources. CC.1.4.5.W: Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources. | |
| PA Core Standards and Practices: Math | MP.2: Reason abstractly and quantitatively. MP.7: Look for and make use of structure. | |
| Integrated Standards for Science, Environment & Ecology, and Technology & Engineering Standards Grades K–12 | N/A | |