Grades K–2

3.5.K-2.CC Technology and Engineering: Nature and Characteristics of Technology and Engineering

Students who demonstrate understanding can *discuss the roles of scientists, engineers, technologists and others who work with technology.*

Clarifying Statement: Technological advancement does not occur without the teamwork of many people who have knowledge and skills in distinct areas. Being able to recognize the unique contributions of these individuals is a necessary part of the technological and engineering design process. Young children can develop an appreciation of how people with different specialties can collaborate to design, create, build, and test a product or system. Analogies often work well with students in this grade band. For example, they can understand how a vehicle is purchased from a dealer, maintained by a mechanic at a service center, and driven by a family member. All of these people have something to do with the vehicle, but each in their own way.

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 3–5 builds on K–2 experiences and progresses to evaluating the merit and accuracy of ideas and methods. • Compare and/or combine across complex texts and/or other reliable media to support the engagement in other scientific and/or engineering practices.	N/A	**Communication** • Learns that humans have many ways to communicate.

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

Pennsylvania Career Ready Skills: Identify multiple ways to solve conflicts and practice solving problems.

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