### Grades 3–5

#### 3.5.3-5.CC Technology and Engineering: Core Concepts of Technology and Engineering

**Students who demonstrate understanding can describe how a subsystem is a system that operates as a part of another larger system.**

**Clarifying Statement:** An example of a subsystem is the assemblage of water pipes in a house, which is part of a larger fresh-water distribution system in a town, city, or community.

**Assessment Boundary:** N/A

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<tr>
<td>Obtaining, Evaluating, and Communicating Information</td>
<td>ETS1.B: Developing Possible Solutions</td>
<td>Systems Thinking</td>
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<td>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.</td>
<td>• Research on a problem should be carried out before beginning to design a solution. Testing a solution involves investigating how well it performs under a range of likely conditions.</td>
<td>• Provides examples of how human-designed products are connected.</td>
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<td>• Communicate scientific and/or technical information orally and/or in written formats, including various forms of media as well as tables, diagrams, and charts.</td>
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**Pennsylvania Context:** Examples of Pennsylvania context include but are not limited to manufacturing businesses.

**Pennsylvania Career Ready Skills:** Select and utilize expressive communication strategies (e.g., tone, body language, facial expressions) with an understanding of its effect on others.

**Connections to Other Standards Content and Practices**
<table>
<thead>
<tr>
<th>Standard Source</th>
<th>Possible Connections to Other Standard(s) or Practice(s)</th>
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| **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.4: Model with mathematics.  
MP.5: Use appropriate tools strategically. |
| **Science, Technology & Engineering, and Environmental Literacy & Sustainability Academic Standards** | N/A |