

Unit: Experimentation and Development	Concept: Quality Control
<p><b>Standard</b></p> <ul style="list-style-type: none"> <li>3.5.9-12.QQ Implement quality control as a planned process to ensure that a product, service, or system meets established criteria.</li> </ul>	
<p><b>Key Learning</b></p> <ul style="list-style-type: none"> <li>(LTTG) Students will be able to employ hands-on problem solving, i.e., designing, making/building, producing, and evaluating outcomes.</li> </ul>	<p><b>Unit Essential Question</b></p> <ul style="list-style-type: none"> <li>How can I employ hands-on problem solving, i.e., designing, making/building, producing, and evaluating outcomes?</li> </ul>
<p><b>Essential Question</b></p> <ul style="list-style-type: none"> <li>How are various resources used in technology and engineering activities?</li> </ul>	
<p><b>Key Vocabulary</b></p> <ul style="list-style-type: none"> <li>Quality Control, Planned Process, and Criteria</li> </ul>	
<p><b>Learning Experience</b></p> <ul style="list-style-type: none"> <li>Students who demonstrate understanding can implement quality control as a planned process to ensure that a product, service, or system meets established criteria.</li> <li>Clarifying Statement: Quality control is concerned with how well a product, service, or system conforms to specifications and tolerances required by the design. For example, a set of rigorous international standards has been established to help companies systematically increase the quality of their products and operations.</li> </ul>	
<p><b>(Big Idea) Technology &amp; Engineering Curriculum Framework Big Ideas</b></p> <ul style="list-style-type: none"> <li>Technology and engineering activities require resources.</li> </ul>	
<p><b>(SEP) Science and Engineering Practices</b></p> <ul style="list-style-type: none"> <li>Planning and Carrying Out Investigations - Plan and conduct an investigation or test a design solution in a safe and ethical manner including considerations of environmental, social, and personal impacts.</li> </ul>	
<p><b>(DCI) Disciplinary Core Ideas</b></p> <ul style="list-style-type: none"> <li>HS-ESS3-4 - Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.</li> </ul>	
<p><b>(TEP) Technology and Engineering Practices</b></p> <ul style="list-style-type: none"> <li>Making and Doing - Demonstrates the ability to regulate and improve making and doing skills.</li> <li>Optimism - Shows persistence in addressing technological problems and finding solutions to those problems.</li> </ul>	
<p><b>Terms</b></p>	

- (ETS) Engineering, Technology, and Applications of Science – Standards applicable across the Science, Environmental Literacy & Sustainability, and Technology & Engineering content areas.
- (LTTG) PDE Technology & Engineering Long Term Transfer Goals
- (Learning Experience) A learning experience refers to any interaction, activity, or other experience in which students acquire new understanding, knowledge, behaviors, or skills.
- (Big Idea #) PDE Technology & Engineering Curriculum Framework Big Ideas
- (SEP) PDE Science and Engineering Practices
- (DCI) PDE Disciplinary Core Ideas
- (TEP) PDE Technology and Engineering Practices