

Engineering

Technological Systems – Grade 8

Lesson Plan 3/18/20

Teacher/Subject: McCoy/Engineering	Date: Wednesday, March 18
Standard:	<p>MS-ENGR-TS-2: Demonstrate proper safety techniques and tool usage in the Engineering and Technology Laboratory.</p> <p>2.1 Accurately interpret and adhere to safety signs, symbols, and labels. 2.2 Demonstrate and incorporate safe laboratory procedures in lab, shop, and field environments. 2.3 Identify, select, and use appropriate Personal Protective Equipment, follow work area organization procedures and follow Standard Operating Procedures when performing work. 2.5 Demonstrate safe use of tools and machines.</p> <p>MS-ENGR-TS-3: Examine the variety of components that make up several examples of a system model.</p> <p>3.1 Understand the components of a systems model: input, process, output feedback. 3.2 Compare open-looped and closed-looped systems. 3.3 Understand and identify the resources of technology. 3.4 Explore a variety of system types. (i.e. mechanical, fluid, etc.)</p> <p>MS-ENGR-TS-6: Describe how technological systems continuously improve from one iteration to another.</p> <p>6.1 Illustrate the evolution of a variety of technological systems. 6.2 Investigate the cause of system failure or improvement. 6.3 Analyze the reason for the evolution of technological systems.</p> <p>MS-ENGR-TS-1: Demonstrate employability skills required by business and industry.</p> <p>1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities. 1.2 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.</p>
Objective:	<ol style="list-style-type: none"> Gain an understanding of the wide scope of engineering fields and a foundation for future exploration. Learn the structure of standard safety signage, including icons and colors. Practice reading, analyzing, and writing technological content.
Student Activity:	<p>Activity 1: View Crash Course Engineering: Preview and Crash Course Engineering: What is Engineering?</p> <p>Also linked on website: nwengineering.weebly.com, under <i>Content</i> ⇒ <i>Resources</i></p> <p>Activity 2: Safety Sign Project: Create two safety signs using the proper format and colors as defined in the ANSI z535 standard documents provided.</p> <p>Sign 1: Alert Style (ex. “Caution, Teenager”) Sign 2: Information (ex. “Turtle Nesting Area”)</p> <p>Homework 1: Begin the first writing article assignment: <i>Engineering Disaster</i> located under <i>Content</i> ⇒ <i>Writing, Quarter 4</i>.</p>
Resources	<p>Class website with all resource links nwengineering2019.weebly.com.</p> <p>Videos: Crash Course Engineering: Preview Crash Course Engineering: What is Engineering?</p> <p>ANSI z535 Standard Resources on <i>Content</i> ⇒ <i>Files</i> under SAFETY PROJECT.</p> <p>safety_label_format.pdf selecting_the_right_header.pdf use_of_safety_symbols.pdf</p> <p>Writing assignments are defined under <i>Content</i> ⇒ <i>Writing, Quarter 4</i>.</p>
Help Session Hours	<p>Help session hours between 10:00 - 12:00, Wednesday. Answers to requests will be immediate. Requests at other times answered as soon as possible.</p>