

# Jefferson City Public Schools–High School Curriculum

**SUBJECT:** Grade 10-12

**COURSE:** Electricity/Electronics Technology

**STRAND:**

Objectives	Assessment/Evaluation	Instructional Activities
<p>(A) Examine what is necessary for a career in electricity/electronics by using the <i>Occupational Outlook Handbook</i> to determine:</p> <ul style="list-style-type: none"> <li>• job descriptions</li> <li>• job demand</li> <li>• pay</li> <li>• training</li> </ul> <p><b>Performance: 3.5</b>  <b>Knowledge: (CA) 1,6</b>  <b>CACLE: R.1.I (English I-IV); R.3.Cf,g (English I)</b>  <b>CAGLE: IL.1.B</b>  <b>NETS: (9-12) 10</b>  <b>DOK: 1</b></p>	<ul style="list-style-type: none"> <li>• Assignment sheets – assessed using an answer key</li> <li>• Teacher observation</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Occupational Outlook Handbook</i></li> <li>• Videos</li> <li>• Textbook</li> </ul>
<p>(B) Regarding electricity/electronics technology, formulate problem solving and creative abilities involving:</p> <ul style="list-style-type: none"> <li>• materials</li> <li>• equipment</li> <li>• processes</li> <li>• products</li> </ul> <p><b>Performance: 1.6</b>  <b>Knowledge: (MA) 5 (H/PE) 7 (SC) 1,8</b>  <b>PEGLE: PALW.2.A</b>  <b>SCCLE: SC8.1.B (Physical Science)</b>  <b>NETS: N/A</b>  <b>DOK: 2</b></p>	<ul style="list-style-type: none"> <li>• Assignment sheets – assessed using an answer key</li> <li>• Teacher observation</li> <li>• Safety poster – assessed using a scoring guide</li> </ul>	<ul style="list-style-type: none"> <li>• Textbook</li> <li>• PowerPoint</li> <li>• IE: LED activities</li> </ul>

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<p>(C) Explain the resistor color code and show how it is used</p> <p><b>Performance: 1.8, 2.1</b>  <b>Knowledge: (MA) 1 (SC) 1,7</b>  <b>CACLE: R.3.D (English I-IV)</b>  <b>SCCLE: SC7.1.C (Physical Science)</b>  <b>NETS: N/A</b>  <b>DOK: 2</b></p>	<ul style="list-style-type: none"> <li>• Assignment sheets – assessed using an answer key</li> <li>• Color code poster – assessed using a scoring guide</li> <li>• Test</li> </ul>	<ul style="list-style-type: none"> <li>• Textbook</li> <li>• Videos</li> <li>• PowerPoint</li> </ul>
<p>(D) Show how to take various measurements using a multi-meter</p> <p><b>Performance: 3.5</b>  <b>Knowledge: (MA) 1,5 (SC) 7</b>  <b>CACLE: R.3.D (English I-IV)</b>  <b>SCCLE: SC7.1.B (Physical Science)</b>  <b>NETS: (9-12) 8</b>  <b>DOK: 2</b></p>	<ul style="list-style-type: none"> <li>• Assignment sheets – assessed using an answer key</li> <li>• Exam</li> </ul>	<ul style="list-style-type: none"> <li>• Textbook</li> <li>• Teacher demonstration</li> <li>• IE: Use meter to make measurement</li> </ul>
<p>(E) Construct various simple circuits using basic electronic components</p> <p><b>Performance: 1.10, 3.5</b>  <b>Knowledge: (MA) 4-6 (SC) 7</b>  <b>CACLE: R.3.D (English I-IV)</b>  <b>SCCLE: SC7.1.B (Physical Science)</b>  <b>NETS: N/A</b>  <b>DOK: 2</b></p>	<ul style="list-style-type: none"> <li>• Assignments – assessed using a checklist</li> <li>• Projects – assessed using a checklist</li> </ul>	<ul style="list-style-type: none"> <li>• Videos</li> <li>• Teacher demonstrations</li> <li>• Lab activities</li> </ul>
<p>(F) Wire various simple home wiring circuits using typical home wiring components</p> <p><b>Performance: 1.6, 1.10</b>  <b>Knowledge: (H/PE) 6 (SC) 1,7</b>  <b>CACLE: R.3.D (English I-IV)</b>  <b>SCCLE: SC7.1.B (Physical Science)</b>  <b>NETS: (9-12) 10</b>  <b>DOK: 1</b></p>	<ul style="list-style-type: none"> <li>• Assignments – assessed using an answer key</li> <li>• Projects – assessed using a scoring guide</li> </ul>	<ul style="list-style-type: none"> <li>• Assignments</li> <li>• Teacher demonstrations</li> <li>• Lab activities</li> <li>• IE: wire: <ul style="list-style-type: none"> <li>• lights</li> <li>• switches</li> <li>• outlets</li> </ul> </li> </ul>

Objectives	Assessment/Evaluation	Instructional Activities
<p>(G) Demonstrate and employ correct care and use of basic electrical tools</p> <p><b>Performance: 1.6, 1.10</b>  <b>Knowledge: (SC) 2</b>  <b>CACLE: R.3.D (English I-IV)</b>  <b>PEGLE: PALW.3.A (Gr. 7)</b>  <b>NETS: N/A</b>  <b>DOK: 1</b></p>	<ul style="list-style-type: none"> <li>• Assignment sheets – assessed using an answer key</li> <li>• Project evaluation</li> <li>• Test</li> </ul>	<ul style="list-style-type: none"> <li>• Lab demonstrations</li> <li>• Videos</li> <li>• PowerPoint</li> </ul>
<p>(H) Identify and explain basic solid state components</p> <p><b>Performance: 1.6, 2.7</b>  <b>Knowledge: (SC) 1,6</b>  <b>CACLE: W.1.A (English I-IV)</b>  <b>CAGLE: LS.2.A</b>  <b>NETS: (9-12) 8</b>  <b>DOK: 2</b></p>	<ul style="list-style-type: none"> <li>• Assignment sheets – assessed using a scoring guide</li> <li>• Project evaluation</li> <li>• Test</li> </ul>	<ul style="list-style-type: none"> <li>• PowerPoint</li> <li>• Videos</li> <li>• IE: construct audio generator</li> </ul>