## Content Area: Science

Strand: Properties and Principles of Matter and Energy	Missouri GLE:
Reporting Topic: Forms of Energy—Electrical Circuits	8.1.B
Grade: 4	

Score 4.0	In addition to Score 3.0, in-depth inferences or applications that go beyond what was taught. For example, the student may:
	<ul> <li>Construct new knowledge or understanding of electrical circuits.</li> <li>Take a position on whether or not technology is more harmful or helpful.</li> </ul>
	<b>3.5</b> In addition to 3.0 performance, in-depth inferences and applications with partial success.
Score 3.0	The student will:
	<ul> <li>Construct and diagram a complete electric circuit by using a source (e.g. battery), means of transfer (e.g. wires), receiver (e.g. fans, resistance bulbs, motors), and observe the evidence of energy transfer in a closed series circuit (e.g. lit bulb, moving motor, fan).</li> <li>Classify materials as conductors or insulators of electricity when placed within a circuit (e.g. lit bulb, moving motor, fan).</li> <li>Classify materials as conductors or insulators of electricity when placed within a circuit (e.g. wood, pencil lead, plastic, glass, aluminum foil, lemon juice, air water).</li> <li>Describe how new technologies have helped scientists make better observations and measurements for investigations (telescopes, magnifiers, balances, microscopes).</li> </ul>
	The student exhibits no major errors or gaps in the learning goal (complex ideas and processes).
	<b>2.5</b> No major errors or gaps in 2.0 content and partial knowledge of 3.0 content.
Score 2.0	The student will:
	<ul> <li>Identify components of a complete electric circuit as source, means of transfer and receiver.</li> </ul>
	<ul> <li>Identify materials as conductors or insulators.</li> </ul>
	<ul> <li>Recognize or recall specific terminology: source, transfer, receiver,</li> </ul>
	<ul> <li>conductors, circuit, insulators, static electricity.</li> <li>Identify the new technologies that have helped scientists make better</li> </ul>
	observations and measurements for investigations.
	The student exhibits no major errors or gaps in the simpler details and processes.
	1.5 Partial understanding of the 2.0 content with major errors or gaps in 3.0 content.
Score 1.0	With help, a partial understanding of the 2.0 content and some of the 3.0 content.
	<b>0.5</b> With help, a partial understand of the 2.0 content and none of the 3.0 content.
Score 0.0	Even with help, no understanding or skill demonstrated.