


## Rubric: Flashlight Project

### Electric Circuits Culminating Activity

Flashlight Project				
	<b>4 pts</b>	<b>3 pts</b>	<b>2 pts</b>	<b>1 pts</b>
<b>Design</b>	<p><b>4</b></p> <p>Device fits in one hand and can be operated easily. Efficient, effective, and innovative design</p>	<p><b>3</b></p> <p>Size and shape are reasonable. Stands up to normal use.</p>	<p><b>2</b></p> <p>Relatively easy to use and handle. Some design errors make use tricky at times.</p>	<p><b>1</b></p> <p>Difficult to use because of size or shape. Fragile build makes normal use impossible.</p>
<b>Working Circuit</b>	<p><b>4</b></p> <p>Circuit responds to the switch properly; all parts of the circuit are connected securely.</p>	<p><b>3</b></p> <p>Circuit may not respond to switch at all times, but it does have a working circuit. One connection may be loose.</p>	<p><b>2</b></p> <p>Circuit may not respond to switch at all times, and is missing one part needed to make the circuit work properly.</p>	<p><b>1</b></p> <p>Circuit does not respond to switch at all, and is missing parts</p>
<b>Knowledge</b>	<p><b>4</b></p> <p>Student's knowledge of circuits is obvious in design. Any malfunctions dealt with quickly and independently.</p>	<p><b>3</b></p> <p>Student can independently fix most problems. Can explain in basic detail how the devices circuit works.</p>	<p><b>2</b></p> <p>Can explain function of device with some guidance. Problems can be fixed with assistance.</p>	<p><b>1</b></p> <p>Little to know knowledge of design or function. Unable to fix problems without assistance.</p>
<b>Durability</b>	<p><b>4</b></p> <p>Flashlight is extremely durable and can withstand shaking and being bumped around. It has a solid construction.</p>	<p><b>3</b></p> <p>Flashlight is pretty durable. It may flicker a bit, but will remain on when subjected to shaking or bumping. It is constructed well.</p>	<p><b>2</b></p> <p>Flashlight is somewhat durable. It is constructed fairly well, but could use extra support in some areas.</p>	<p><b>1</b></p> <p>Flashlight is not durable at all. It will not remain lit when shaken. Flashlight is falling apart.</p>
<b>Appearance</b>	<p><b>4</b></p> <p>Flashlight is extremely appealing. Extra time and thought was put into making this flashlight look nice.</p>	<p><b>3</b></p> <p>Flashlight is neat in appearance. Some effort was made in making the flashlight look nice.</p>	<p><b>2</b></p> <p>Flashlight is neat. Basic steps taken.</p>	<p><b>1</b></p> <p>Flashlight design is messy. Minimal effort taken to make the flashlight attractive.</p>