

Name: _____ Date: _____

BLM B-1

Build Your Own Electric Device Rubric

Category	50–59% Level 1	60–69% Level 2	70–79% Level 3	80–100% Level 4
Knowledge and Understanding (PEC1.02, 1.03, 1.04, 2.01, 2.02, 2.03, 2.06; SIL1.01, 2.06, 3.01, 3.03; BSA3.01)				
	Shows limited knowledge and understanding	With some knowledge and understanding	With a lot of knowledge and understanding	With a high degree of knowledge and understanding
<ul style="list-style-type: none"> follows design criteria to plan device (e.g., two different electric circuits; as many different sources, loads, and switches as wish; written instructions) 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> identifies and follows safety precautions 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> builds and tests device 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> lists safety precautions for user 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Thinking (PEC1.02, 2.01, 2.03, 2.06; SIL2.06, 3.01, 3.02, 3.03; BSA3.01)				
	With limited effectiveness	With some effectiveness	With considerable effectiveness	With a high degree of effectiveness
<ul style="list-style-type: none"> develops plan for device 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> evaluates device (e.g., improves on original plan, assesses changes in design, considers one way to improve device) 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> analyses why part may not work 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Communication (PEC1.02, 1.03, 1.04, 2.06; SIL2.06, 3.02, 3.03; BSA3.01)				
	With limited effectiveness	With some effectiveness	With considerable effectiveness	With a high degree of effectiveness
<ul style="list-style-type: none"> expresses and organizes plan (e.g., describes device, draws circuit diagram, lists materials) 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> communicates to user (e.g., explains how to use device, lists safety precautions) 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> uses appropriate vocabulary and terminology 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Application (PEC2.03, 2.06; SIL2.06, 3.03; BSA3.01)				
	With limited effectiveness	With some effectiveness	With considerable effectiveness	With a high degree of effectiveness
<ul style="list-style-type: none"> uses tools, equipment, and materials correctly and safely 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<ul style="list-style-type: none"> explains how to use device and use safely 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>