

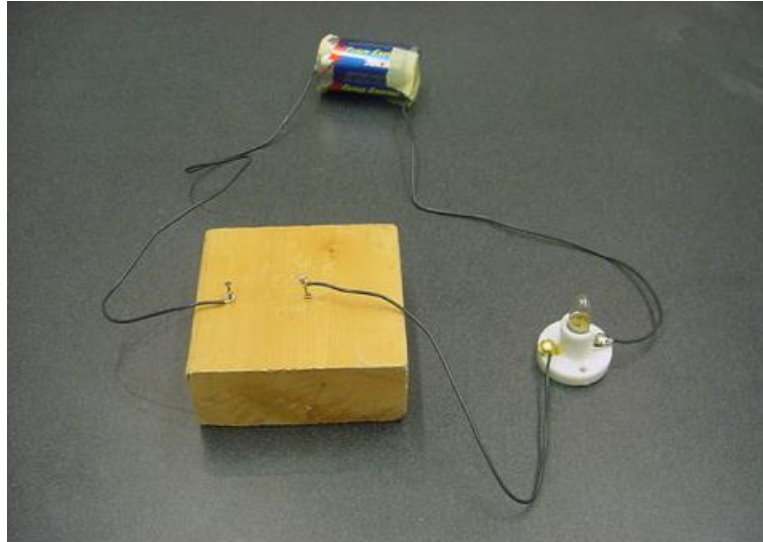
Name:

Date:

Class:

## Switcheroo Worksheet Answers

1. In the space below, draw a picture of the switch circuit.



2. List all the objects available to make a switch. Next to each object, write “**good switch**” if you predict it will make a good switch and “**no**” if you predict it will not.

Object	Prediction: Will this be a good switch?
<p><b>Example possible objects:</b></p> <p><b>Nail</b> <b>Aluminum</b> <b>Pipe cleaner</b> <b>Piece of cloth</b> <b>Glass test tube</b></p>	<p><b>Example possible predictions:</b></p> <p><b>Good switch</b> <b>Good switch</b> <b>Good switch</b> <b>No</b> <b>No</b></p>

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3. In the table below, write the name of each object your team is going to test.
4. In the second column, write your prediction on whether you think each object is a **conductor** or an **insulator**.
5. Test each object and record your result in the third column. Write **“good switch”** if the object made a good switch; write **“no”** if it did not make a good switch.

Object	Prediction: Conductor or Insulator	Test Results: Is this a good switch?
<p><b>Example possible objects:</b></p> <p><b>Nail</b> <b>Aluminum</b> <b>Piece of cloth</b></p>	<p><b>Example possible predictions:</b></p> <p><b>Conductor</b> <b>Conductor</b> <b>Insulator</b></p>	<p><b>Example results:</b></p> <p><b>Good switch</b> <b>Good switch</b> <b>No</b></p>

6. Observations. Why did some objects you tested make good switches while others did not?

**The objects that were conductors made good switches.**  
**The objects that were insulators did not make good switches.**

7. How could you tell when an object made a good switch?

**The light bulb would light up.**

8. What are some qualities of a good switch?

**A good switch is a conductor.**  
**Metal makes a good switch.**  
**A good switch closes the circuit and lights the light bulb.**