**Focus Question:** How does energy flow in a circuit?

**Claim:** Energy flows in a closed circuit from an energy source (battery), through a conductor (metal), to an object (lightbulb).

**Evidence:**

Word Bank:

Open Circuit, Closed Circuit, Insulator, Conductor, Clay, Tape, Copper Wire, Battery, Light Bulb

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| Circuit Lab | Flashlight Lab |
| * The bulb only lit when the battery, wire, and bulb were all connected in a complete closed circuit.
* When the clay, which is an insulator, got in the way of the flow of energy, the bulb did not light.
* The light bulb lit when we connected the battery to the light bulb using a paper clip.
* The light bulb did not light if it was only connected to one end of the battery.
 | * We made a switch using brass fasteners, when they were touching the circuit was closed and the light bulb lit. When they were not touching the circuit was open and the light bulb was off.
* When the tape, which is an insulator, got in the way of the flow of energy, the bulb did not light.
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**Reasoning:**

If energy flows in a closed circuit, then the light bulb in our investigation would only light when the source, conductor, and light bulbs are all connected without a break. We observed this when we made the on/off switch on our flashlight. When the brass insulators touched, the circuit was closed, causing the light bulb to light. When the brass insulators were separated, the circuit was open, and the light bulb did not luminate. Our claim was also supported through our observations of insulators interrupting the flow of energy. When the tape or clay got in the way of the connection between the wire, battery, or light bulb the bulb would not light.