Build Your Own Electrical Circuit

You may have seen the lights in Reginald's house. They run on an electrical circuit. A circuit is a pathway for electrons to flow constantly.

A simple circuit has 4 parts:
1. Power source, like a battery
2. Conductors, like wires that the electrons flow along
3. Load, like a light
4. Switch, which opens or closes the circuit

A circuit can be closed or open. Only when it's closed can the electrical current flow. When it is open, there is a break somewhere in the circuit.

Here are the supplies you'll need:
- 9 volt battery
- Tinfoil (Folded Into Strips)
- LED light
- Metal paperclip
- Metal thumb tack
- Tape

Are you ready to build your own circuit?

1. Fold tinfoil into strips.

2. Make a square with the strips, like you see here. Make sure to leave a gap for your switch.

3. Tape down the square to your table.

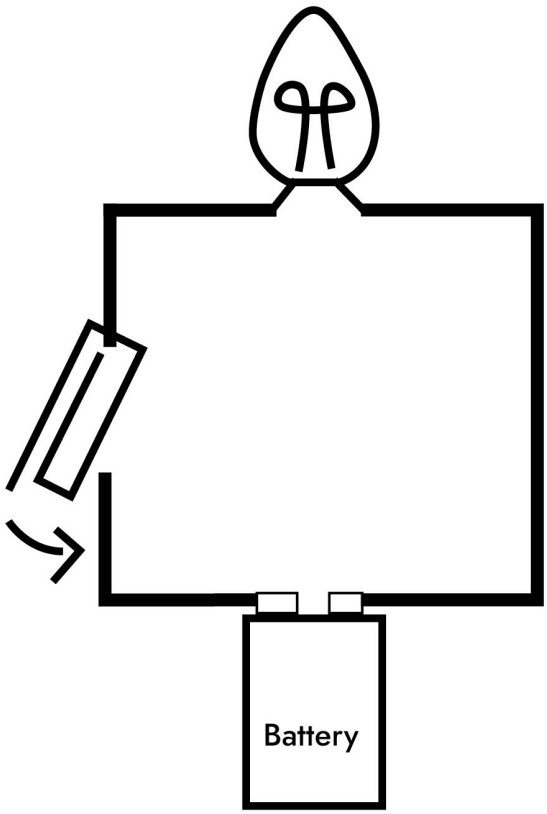
4. Place the light bulb at the top. Tape the wire to the tinfoil on both sides.
5. Place the battery at the bottom. Make sure the two sides of the battery (the positive and negative ends) are connected on opposite sides of the tinfoil.

6. Watch what happens to your light.

7. Remove the battery and place your paperclip over the gap you left and secure with the thumb tack (push the tack through the tinfoil with the pointy side up, but be careful!).

8. Move the paperclip to different positions and return the battery to the bottom.

9. What happens to the light when the paperclip touches both sides of the tinfoil?



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