

Simple Flashlight

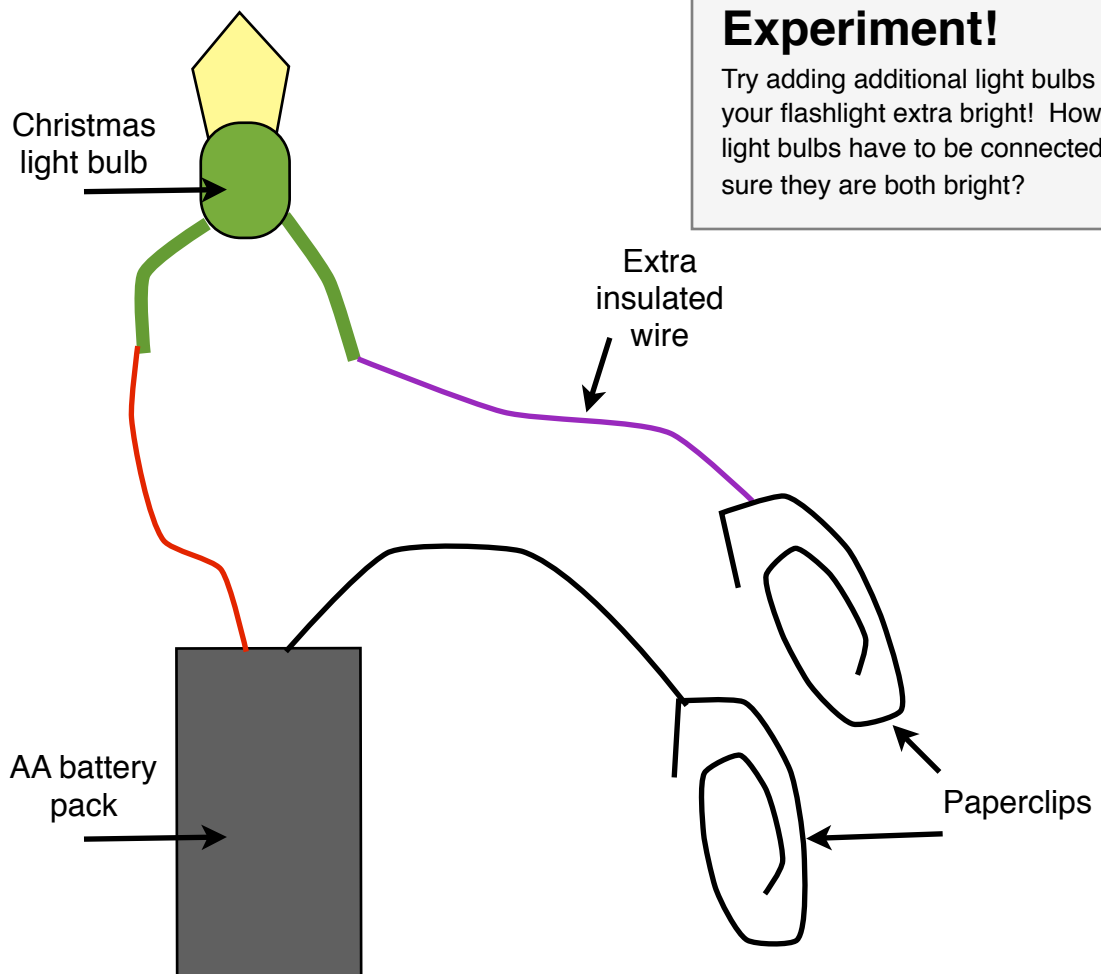
How to Build It:

Materials:

- | | | |
|--|---|---|
| <input type="checkbox"/> AA batteries | <input type="checkbox"/> Cardstock | <input type="checkbox"/> Soldering iron |
| <input type="checkbox"/> AA battery holder | <input type="checkbox"/> Paperclips | <input type="checkbox"/> Tape |
| <input type="checkbox"/> Christmas lights | <input type="checkbox"/> Extra insulated wire | <input type="checkbox"/> Hot glue |

Procedure:

1. Assemble a simple circuit following the diagram below using paperclips to function as the flashlight switch.
2. Solder all the joints where wires are connected, including where the wires attach to the paperclips.
3. Install the flashlight assembly in a piece of cardstock making sure the light bulb is pointed toward one end of the tube and the paperclips are accessible through the other end of the tube.



Experiment!

Try adding additional light bulbs to make your flashlight extra bright! How do the light bulbs have to be connected to make sure they are both bright?