

# Task Creation Instructions Connect The Wires

## Materials:

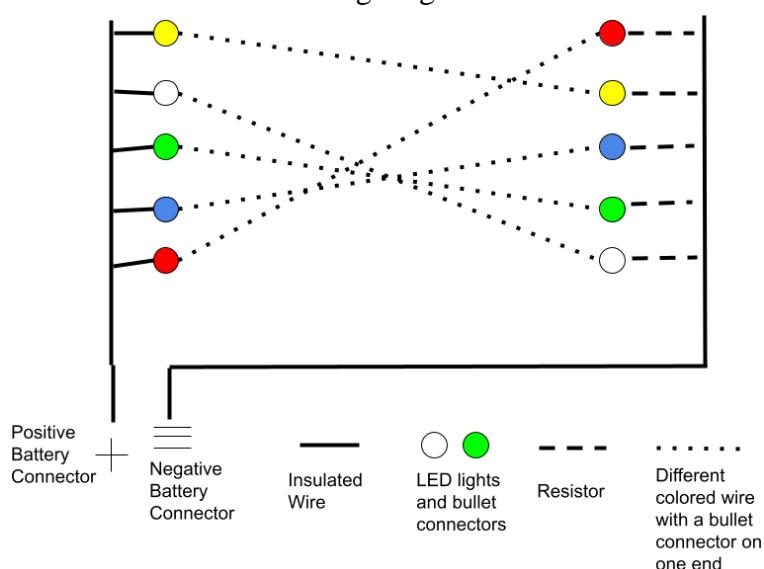
- 9v Battery
- 9v Battery Connector
- LED Lights (Different Colors)
- Homemade Electrical Box or Panel
- Copper Wire
- Resistors
- Bullet Connectors
- Solder and Soldering Iron

## Set Up Instructions:

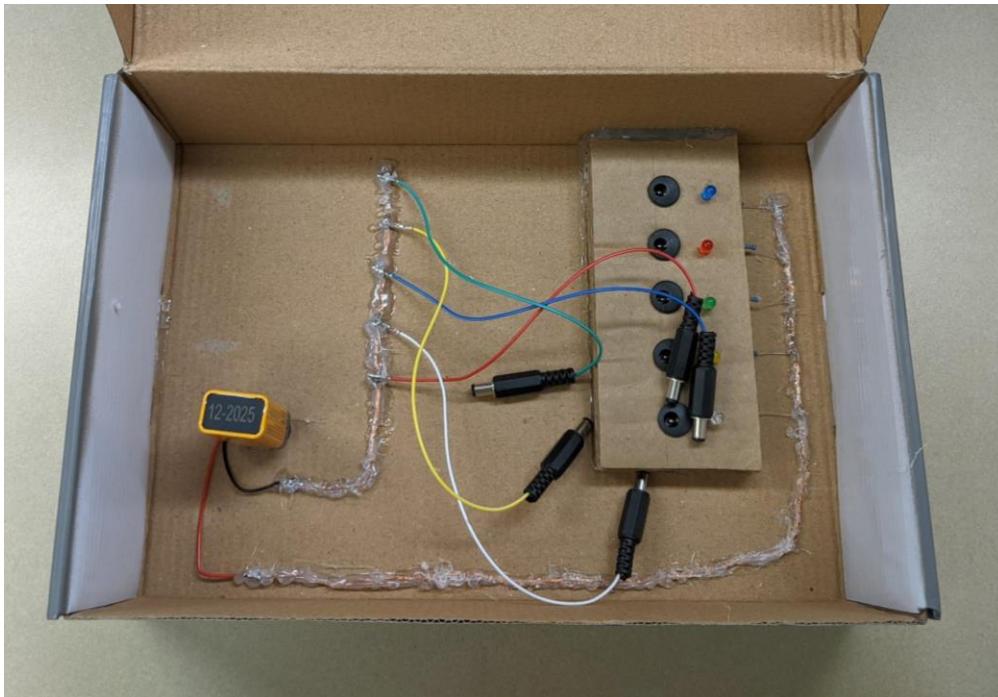
1. Make an electrical box or panel to hold all the electric goodness.



2. Sketch out your circuit. Make sure everything is going to fit and you'll have enough room to anchor it all in there. I used the following diagram.



3. Then put all the pieces together. I made a cardboard riser so I wouldn't have to connect wires through the back of the box. I also used a hot glue gun to anchor the wires so they wouldn't move around. When you're soldering make sure that all the connections are sturdy or some of the more excited kids might break them. Also make sure you change the order of the wires and lights to make it interesting.



4. Then it's up to the kids! With this configuration, the led will light up no matter the color of wire that connects to it so it's on the honor system. Feel free to make one that won't though, but it is a bit more work. Enjoy!

