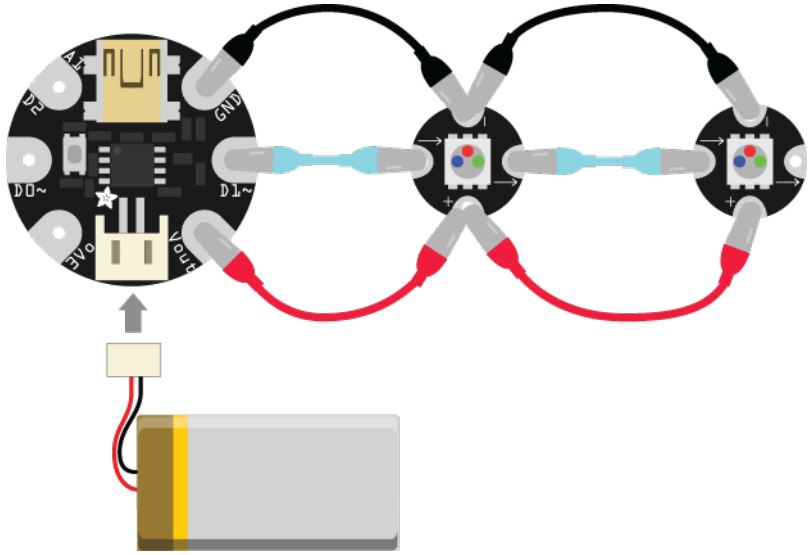
Wiring

Wearable electronics are loads of fun. In this first project you'll learn how to make the Neo-Pixel LEDs flash different colours. Let's start by wiring up the board.

Follow the instructions and use the diagram to help you.



Warning: Make sure you connect the wires to the correct pads on the boards. Connecting to the wrong pad will stop the circuit from working. If your circuit doesn't work compare it to the diagram above and pay attention to the labels on each pad.

1. Connect Ground: Take the black pair of wires and attach one wire to "GND" on the Gemma board. Attach the other end to the '-' pad on the Neo-Pixel board. Take the second black wire and connect the two '-' pads on the Neo-Pixel boards.

Ground is part of all electrical circuits. When combined with power it allows electricity to flow from the battery to power your circuits.

2. Connect the Power: Take the red pair of wires and connect one end to the VOut pad on the Gemma board. Connect the other end of the wire to the + pad on the first Neo-Pixel. Use the second wire to connect the two '+' pads on the Neo-Pixel boards.

When using electronics the power wire is usually coloured red and the ground is usually black.

3. Connect the Data: Take one of the third set of wires and connect to the 'D1~' pad on the Gemma board. Connect the other end of the wire to --> pad that is pointing into the board (look at the diagram to make sure you don't get mixed up). Using the other wire connect the --> pad on the first board that is pointing away from the centre of the board to the --> pad on the other board. The --> pad on the second board should point inwards.

The data line allows the instructions from the Gemma board to reach the Neo-Pixels and tell them what colour to be.

4. Plug in the battery: Plug in the battery in the white slot on the Gemma board. Observe the pretty lights!