Test Circuit

This circuit is to be used with E-Textile components such as the Button Button and Stroke Sensor. It allows you to see if your component works correctly.
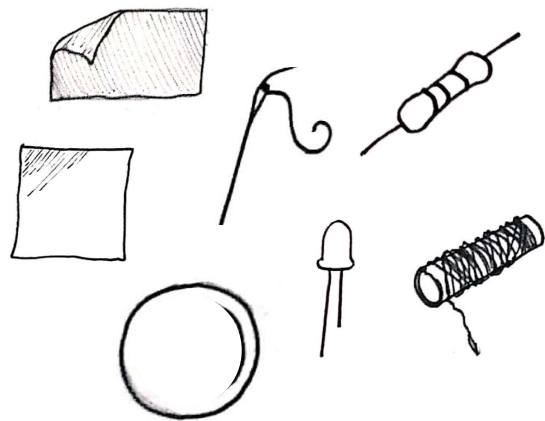
When connecting your component to the Test Circuit, if the component has been built right, the LED should light up when it is used.

What you need:

CONDUCTIVE THREAD
CONDUCTIVE FABRIC
NORMAL FABRIC
NEEDLE AND THREAD

LED
RESISTOR (47 OHM)

BATTERY CR2032
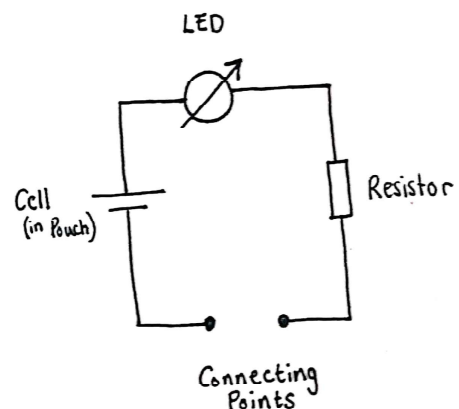
How it Works

Test by touching the 2 triangles together and watch the LED light up!

Now, using crocodile clips, connect the component you want to test to the triangles. This will complete the circuit and the LED will light up according to the component.

Circuit Diagram

LED

Cell (in Pouch)

Resistor

Connecting Points

BUILD ILLUSTRATION

STEP 1

Cut out your piece of base fabric and two triangles of conductive fabric. Sew the triangles into position as shown in the image, using a running stitch.

Coil the ends of the LED and resistor. For the LED it is a good idea to coil the ends differently so that you know which side is positive and which is negative.

Normal thread
Conductive thread
Normal fabric
Conductive fabric

Sew the resistor and LED into place using normal thread. From one end of the LED use conductive thread to sew down and form a connecting point which will sit under the battery.

STEP 2

Using conductive thread, sew from the LED to the resistor. Then seperately sew from the resistor to the conductive fabric.

Battery Pouch (for Cell)

LED

Resistor 47Ω

10cm

3cm

3cm

2.5cm

10cm

Connecting Points

Place the coin battery on top of the connecting point previously stitched in Step 1. Make sure it is the correct way round for the LED. Cover the battery with a square piece of fabric and sew into place. It is best to sew precisely around the edge of the battery so that the fabric holds it firmly in position. Using conductive thread, sew from the top piece of fabric to the second peice of the conductive fabric.

27