

**Step 1** - Once you have printed your template, it's time to fold it in half.



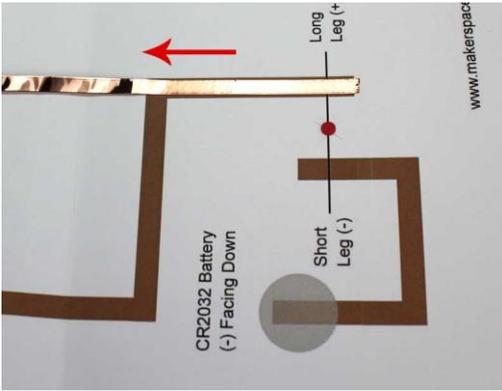
Using a razor, cut a small "X" in the middle of the heart. When you open the card, you should see the X on the circuit below. This is where the LED should be placed and should be close to the red circle on the template.



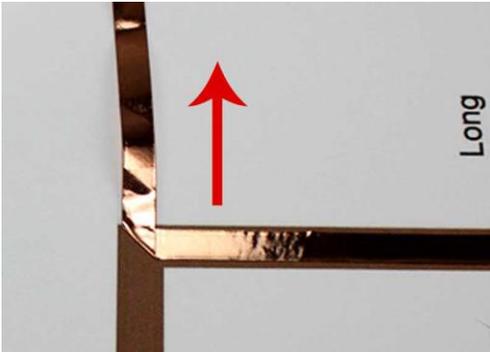
## **Step 2 – Apply The Copper Tape**

Now it's time to apply the copper tape to all of the brown lines on the template.

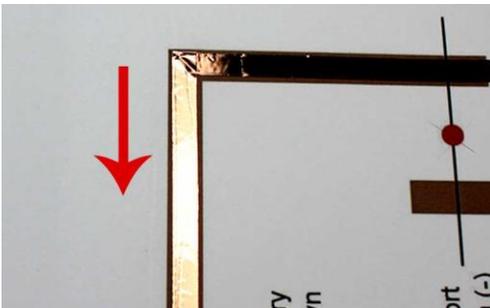
We recommend applying a single piece of copper versus cutting it at the corners. The continuous piece of copper will help with it's conductivity ensuring the LED lights.



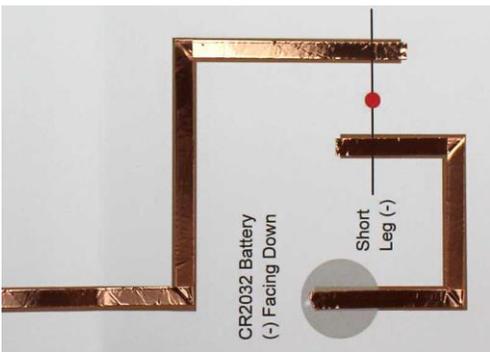
Begin by applying the copper tape in a straight line to the corner.



When you get to the corner, fold the copper tape up in the opposite direction in which you are going.



Next, use your fingernail to make a line in the copper tape at the corner. Fold the tape straight down along the brown line.

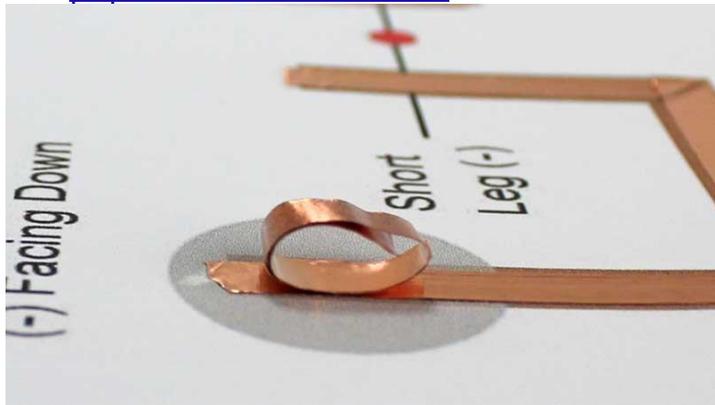


Do this with all the circuits on the template. Smooth the copper tape with your finger once it's applied.

## Step 3 – Connect The Battery

Cut a small piece of your copper tape and roll it into a ball with the sticky side facing out.

**NOTE:** Make sure your copper tape has “conductive adhesive” like the tape we have in our [paper circuit starter kits](#). This ensures the battery connects with the circuit properly.



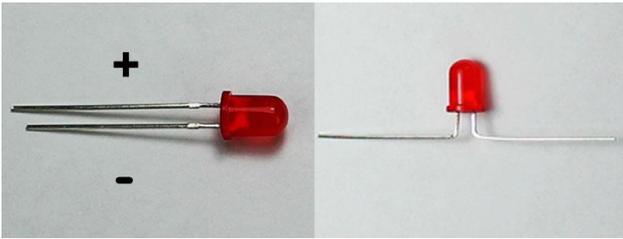
Place your CR2032 coin cell battery on top of the copper ball making sure the negative (-) side is facing down.



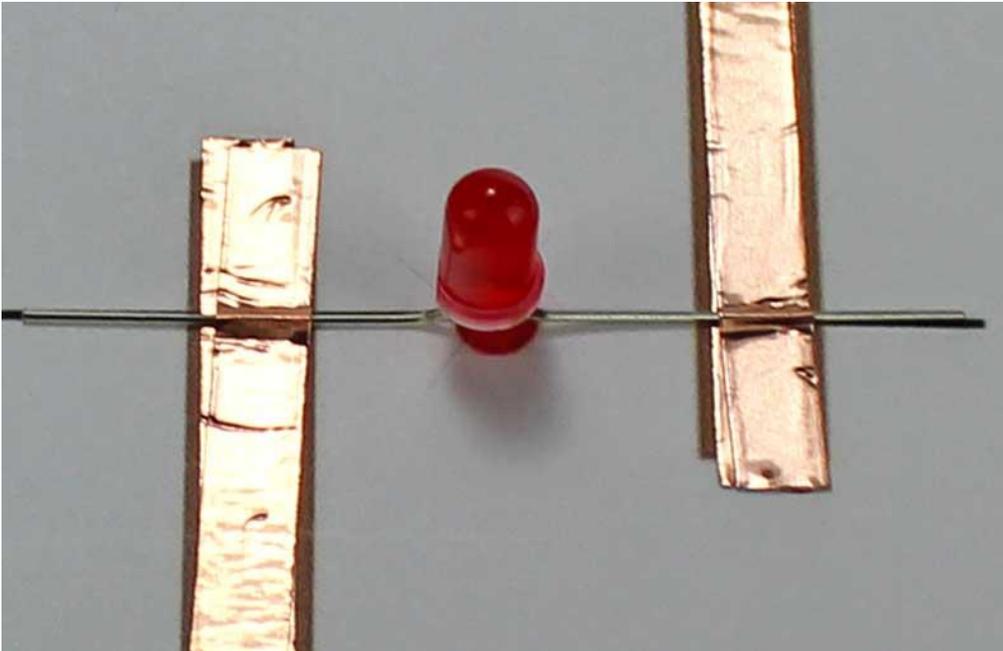
## Step 4 – Attach The LED

The next step is to attach the LED to the project template. Before you do this, you need to make sure which side is positive and which is negative.

Look at your LED and find the long leg. This will be the positive (+) side and the short leg is the (-) negative side. Bend both legs at a 90 degree angle but make sure to remember which leg is positive.



Find the red circle on your template and there should be the "X" that you cut earlier. Place the LED on top of the "X". Use copper tape to secure each leg to the copper tape below. Remember to put the long leg of the LED on the side marked (+). Rub the copper tape to ensure everything is making firm contact.



## Step 5 – Test The Circuits

Fold the card in half and the LED should fit right through the "x" you cut. Push the "press" button on the card and it should light up.

If you are having any issues, try the following:

1. Verify that your battery and LED are both working. Place the LED directly onto the battery and it should light.
2. Make sure the negative side of the battery is facing DOWN on the template.
3. Ensure the long leg of the LED is on the side marked (+).
4. Make sure you are using copper tape with conductive adhesive.