

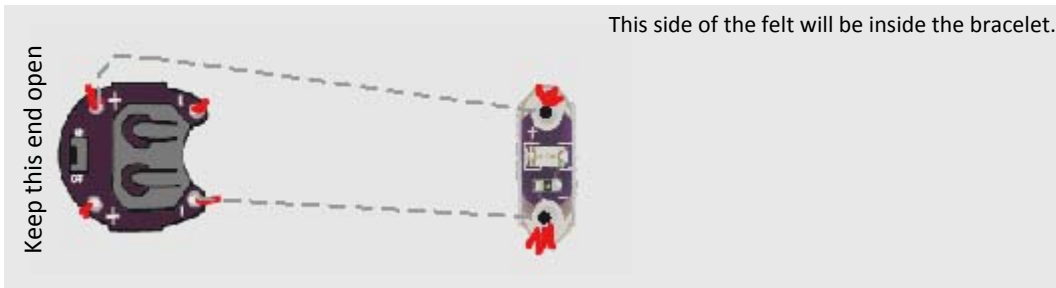
LED Bracelet

TCIPG

TRUSTWORTHY CYBER INFRASTRUCTURE FOR THE POWER GRID

Two strips of felt will be layered to form the bracelet.

1. Use **regular sewing thread** to attach the battery holder to one side of the layer of felt that will be next to your skin.
2. Use **regular sewing thread** to attach the LED to the same side of this layer of felt.
3. Use **conductive thread** to sew traces from the positive tab of the battery holder to the positive tab of the LED and from the negative tab of the battery holder to the negative tab of the LED.



4. Flip the bottom layer over and use **regular thread** to sew the stud parts of the two snaps to the end that does not have the battery.



5. Place the top layer over the bottom layer and mark where the LED will shine through.
6. Incorporate the LED as you embroider and stitch beads and other decorations to the outside of the top layer.
7. Use regular sewing thread to attach the socket parts of the two snaps to the end of the outside of the top layer.



8. Connect the two layers with regular sewing thread. Sew around both long edges and the short edge that is not near the battery holder.
9. Leave the short end near the battery holder open.
10. Insert the battery and turn on the switch. Then snap the bracelet onto your wrist!!!

MATERIALS

- 1 Coin battery
- 1 Battery holder
- 2 Metal snaps
- LEDs
- Needle
- Conductive thread (shown as grey stitches in the drawings)
- Regular sewing thread (shown as red stitches in the drawings)
- 2 strips of felt material, 8-9 inches long and 1.5-2 inches wide



Troubleshooting Your Circuit:

LEDs don't light, blink, or don't stay lit

Double check that your battery is secured and that the positive tab of the battery is connected to the positive tab of the LED

Be sure the conductive thread traces don't cross each other.

