



D.I.Y. i *heart* FASHION CUFF

INSPIRED BY PAPER GIRLS EPISODE 1: "SOMETHING FISHY"

In Collaboration With
CURIOUS JANE

In 'Something Fishy', Reese dazzles Caily on the runway with an LED light-up dress creation. Make your very own fashion accessory designed with circuits in this trendy D.I.Y. project.

looking for items online?
this list is clickable!

maker checklist

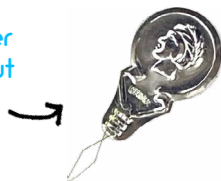
things you may need to order

- 1 piece adhesive craft foam (approx 6x9)
- conductive thread
- 1 light-up LED heart (Teknikio) or red LED
- 1 3v coin battery holder (Teknikio)
- 1 3v coin battery
- 1 set of snaps

things you may have at home

- needle + thread
- scissors
- ruler + pencil

a needle threader is not essential but it can help!



fabric scrap in a favorite pattern



i *heart* sushi!

STEP 1: Create Your Cuff

measure and cut the craft foam to fit your wrist, leaving enough overlap to add the snap. ours is 2-inches x 7-inches.

remove the backing; stick the foam to the back of your fabric; trim the excess.

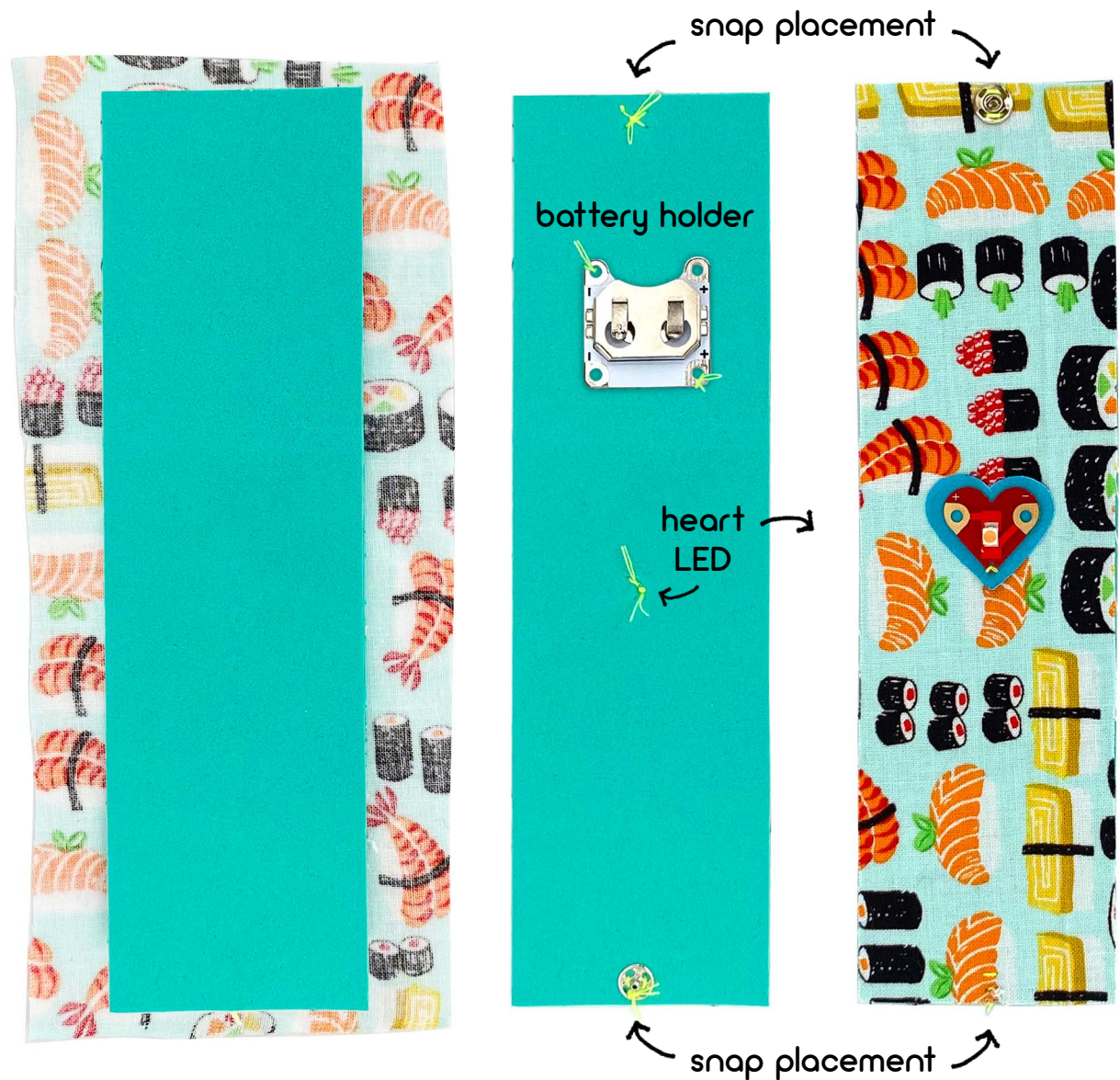
STEP 2: Tack the Components

NOTE: tacking the components down with regular thread helps hold them while sewing with conductive thread. but just use a few stitches! this allows good contact and connectivity with the conductive thread.

place the snaps and sew into place. this step is tricky! one snap will be on the front side at the top of the cuff; the other will be on the back side at the bottom of the cuff. be sure they "snap" properly when the cuff is wrapped around your wrist.

place your LED heart on the front of the cuff, and tack into place with a small bit of regular thread or hot glue.

place the battery holder on the back of the cuff, near the top, between the snap and the heart LED. tack into place.



STEP 3: Wire Your Circuit

plan your circuit on the back side of the cuff. take your time. you can even draw directly onto the foam with pencil if this helps provide a guide.

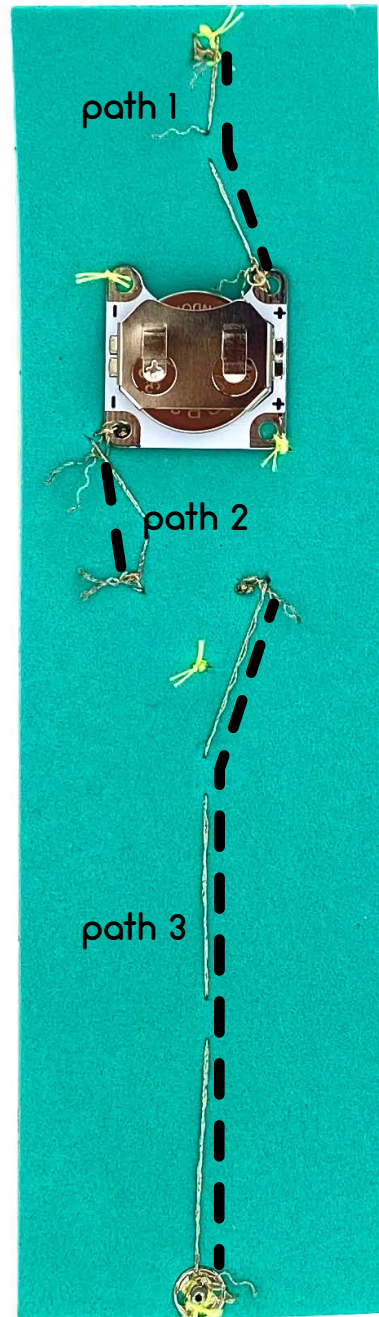
NOTE: you will sew 3 discreet paths in order to wire your circuit with the conductive thread. at the start- and end-point of each path, sew the thread in a few loops around the component for good connectivity. tie off securely, and trim (but not too close).

TIPS: conductive thread can be tricky to sew with – it helps to double-up the thread in the needle and to use lengths that are not too long.

path.1 connect the top snap to the anode (+) lead of the battery holder. tie off securely.

path.2 connect the negative (-) lead of the battery holder to the negative (-) lead of the heart LED. tie off securely.

path.3 connect the bottom snap to the cathode (+) lead of the LED. tie off securely.



STEP 4: Test it Out!

add your power source and try it on! insert the battery, positive side up, then snap the cuff on your wrist. the LED will light up!



How it Works

snapping the cuff completes the circuit, allowing power to travel in a through the LED via the conductive thread. when you snap the snaps, it is like turning on the light switch. 'sew' cool!