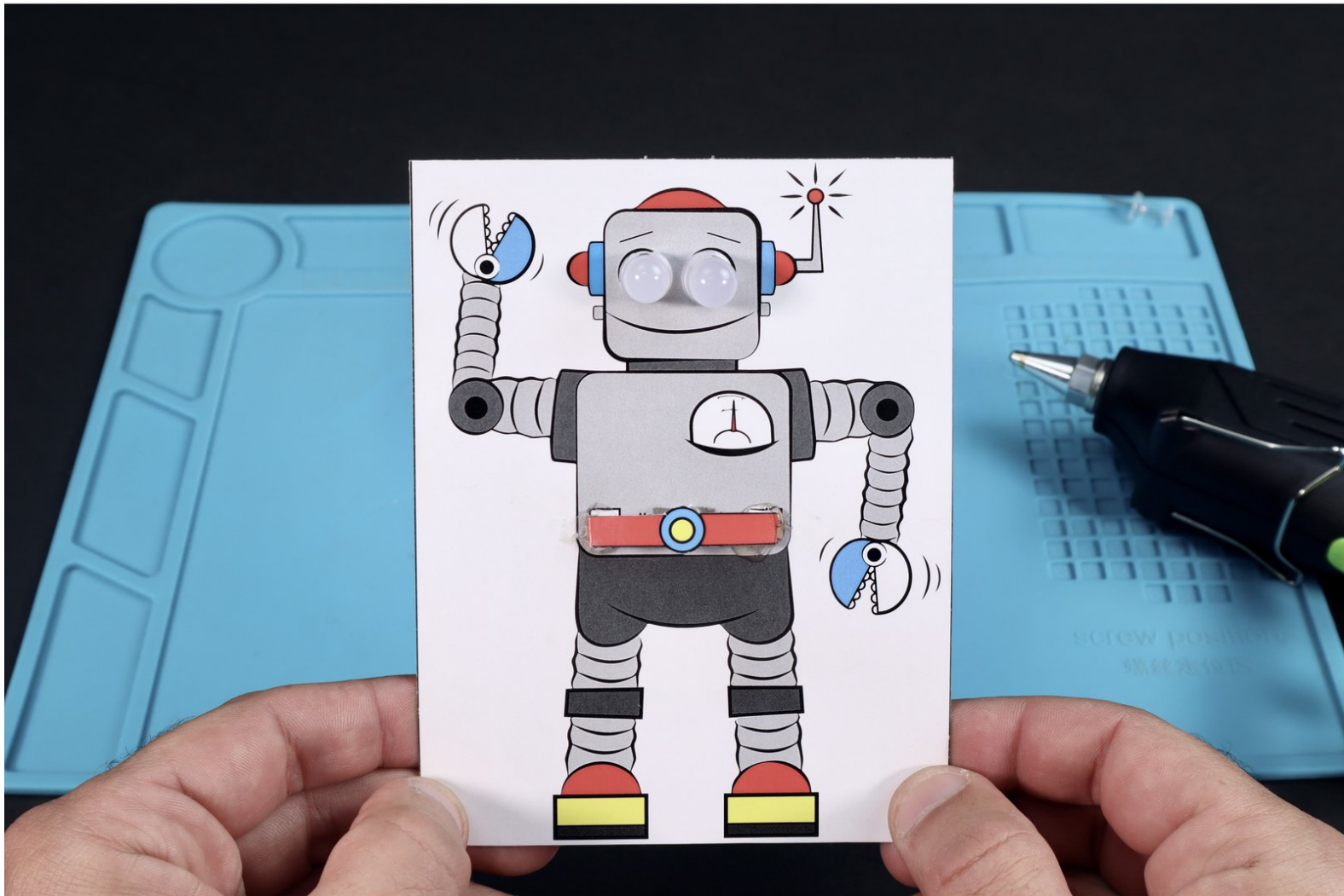




Belt Bot Card

Use the downloadable template and these set-by-step instructions to create a touch-activated, light-up circuitry project. Color it any way you'd like!

Written By: Andy Wallus





TOOLS:

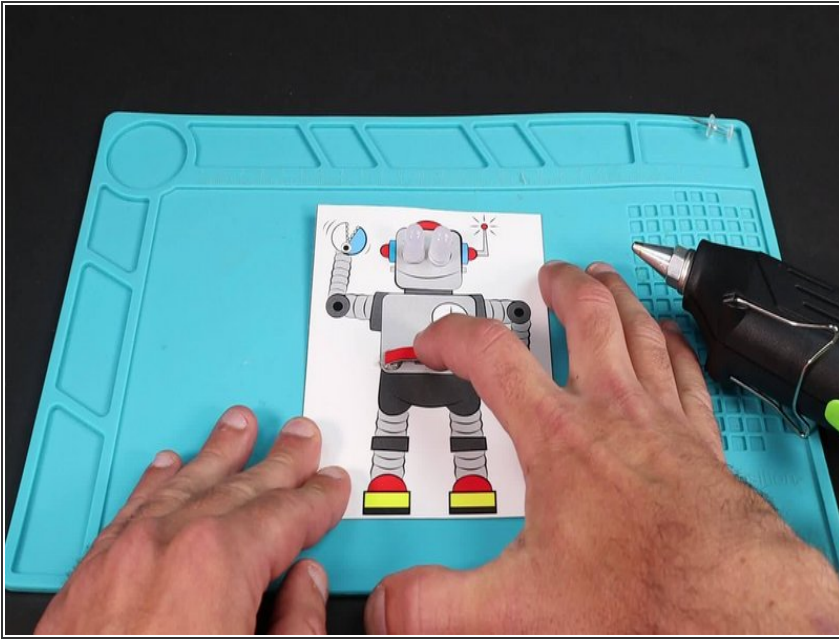
- [Scissors](#) (1)
- [X-ACTO Knife](#) (1)
- [Hot Glue Gun](#) (1)
- [Push Pin](#) (1)



PARTS:

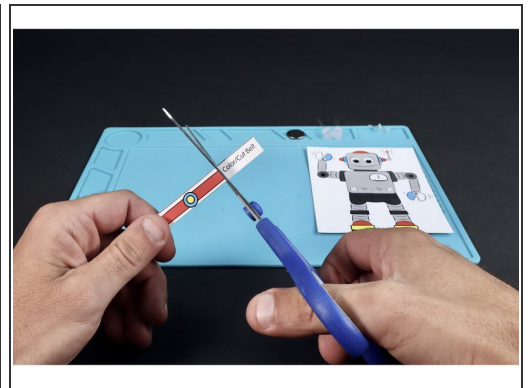
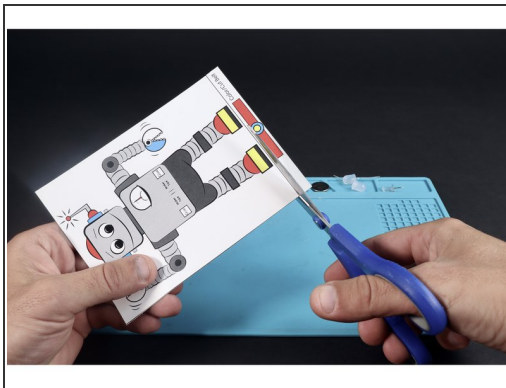
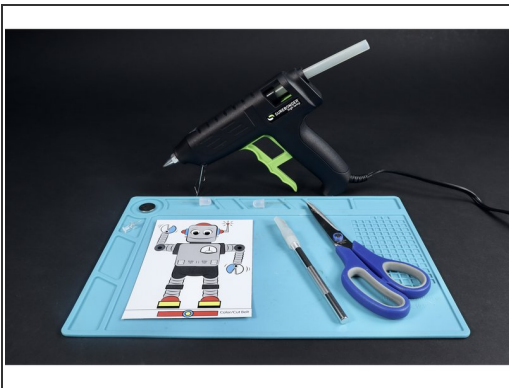
- [Paper Circuits Kit](#) (1)
- [Printable Template](#) (1)

Step 1 — Belt Bot Card



- Press on the belt buckle to bring the conductive tape on the back of it into contact with the two small tape chunks on the card below.

Step 2



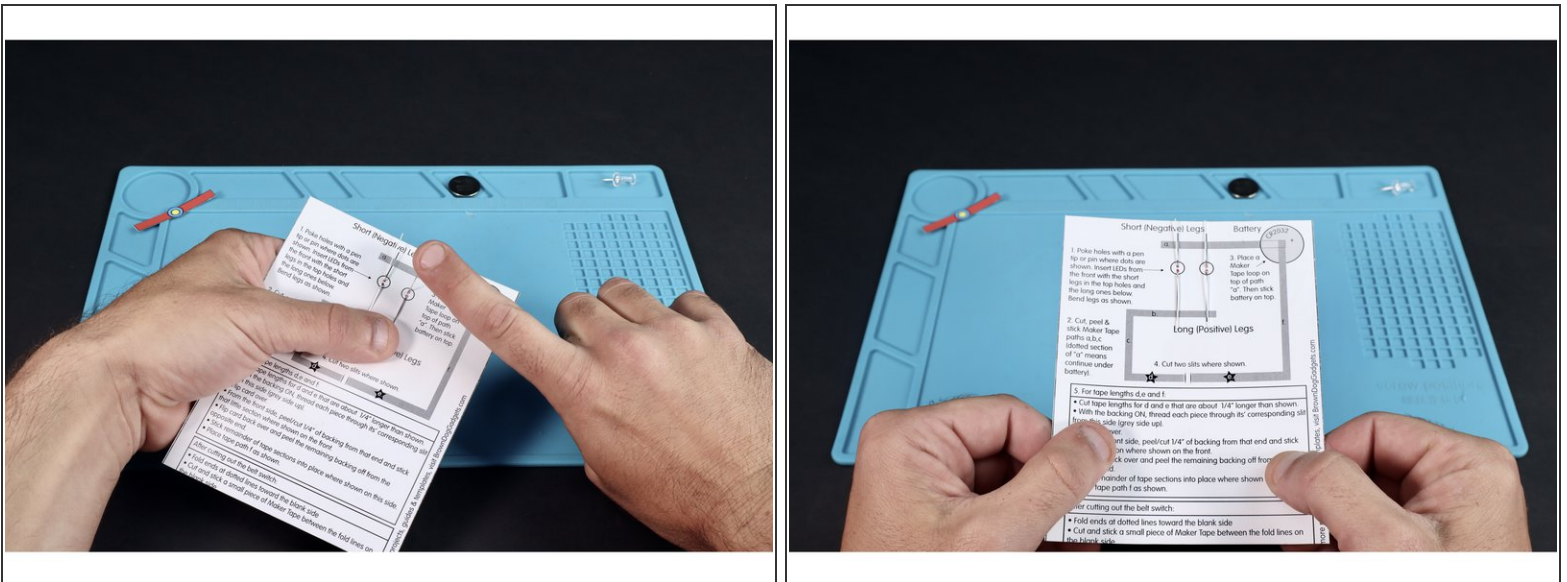
- **Print** out the template and **gather** the listed tools and materials.
- **Cut along bottom line** to separate belt from robot.
- Take your time and **cut belt out**. Set aside.

Step 3



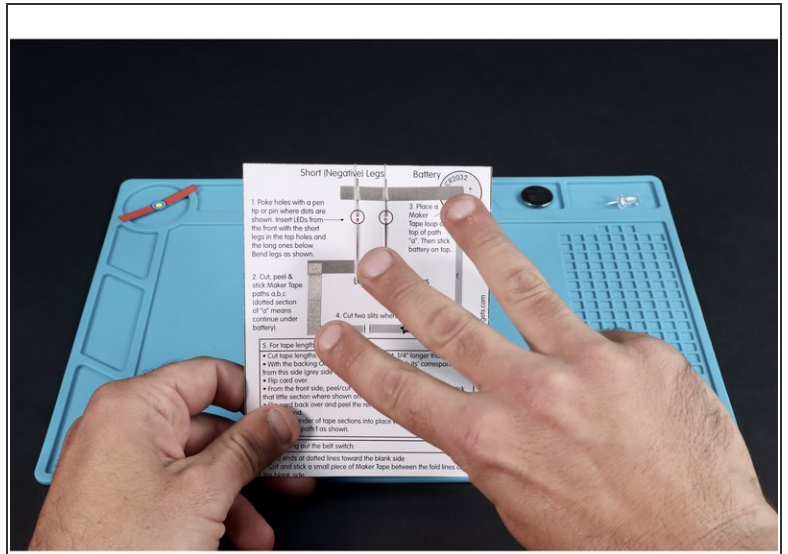
- Using a thumbtack or push pin, **poke holes** where shown, using the 4 small dots as a guide.
- Each vertical column of dots is a place to feed a single LED's legs through. **Feed the legs of each of the LEDs through their pair of holes from the front.** Make sure to feed the short legs through the topmost holes and the longer legs through the lower holes.

Step 4



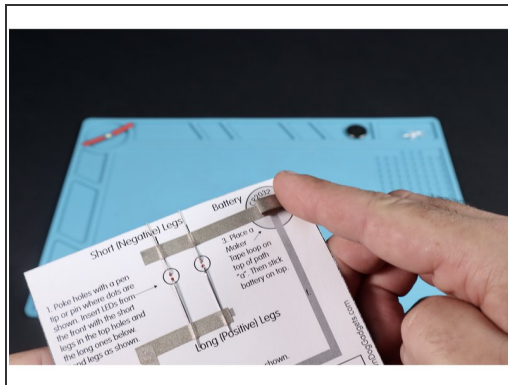
- **Bend the legs** of the two LEDs in opposite directions as shown.

Step 5



- **Measure and cut** Maker Tape sections for tape paths "a","b" and "c".
- **Stick those three tape sections into place** where shown for pathways a,b,c. Tape paths "a" and "b" go **OVER** the LED legs.

Step 6



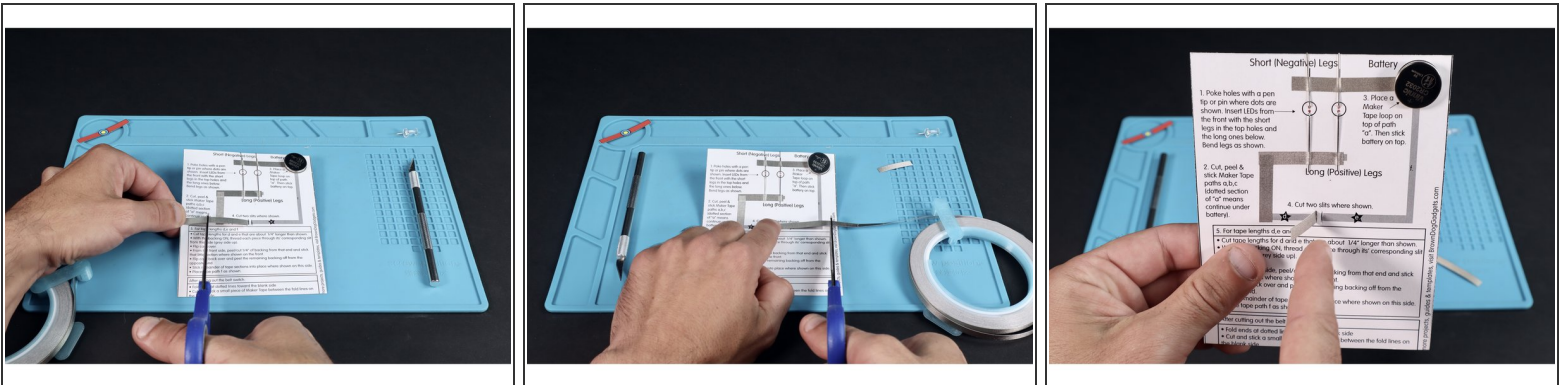
- **Cut** a short length of Maker Tape and **roll** it into a loop (sticky side out).
- **Stick that loop** onto existing tape path "a".
- **Stick your battery** (positive side up) onto the tape loop.

Step 7



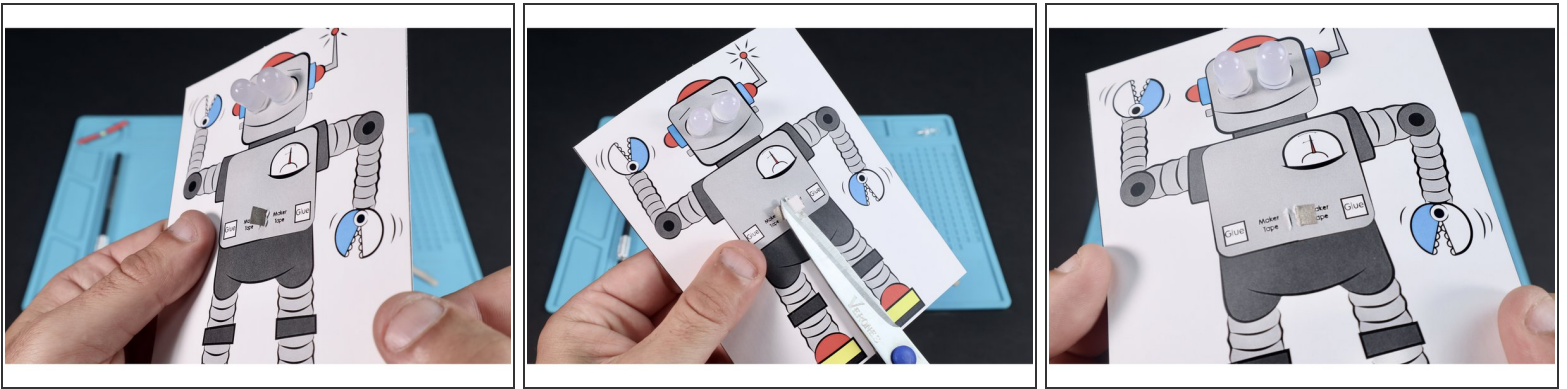
- Using an X-ACTO/Craft knife, **cut the two small vertical slits** shown between paths "d" and "e". Be careful to maintain the paper gap between them.

Step 8



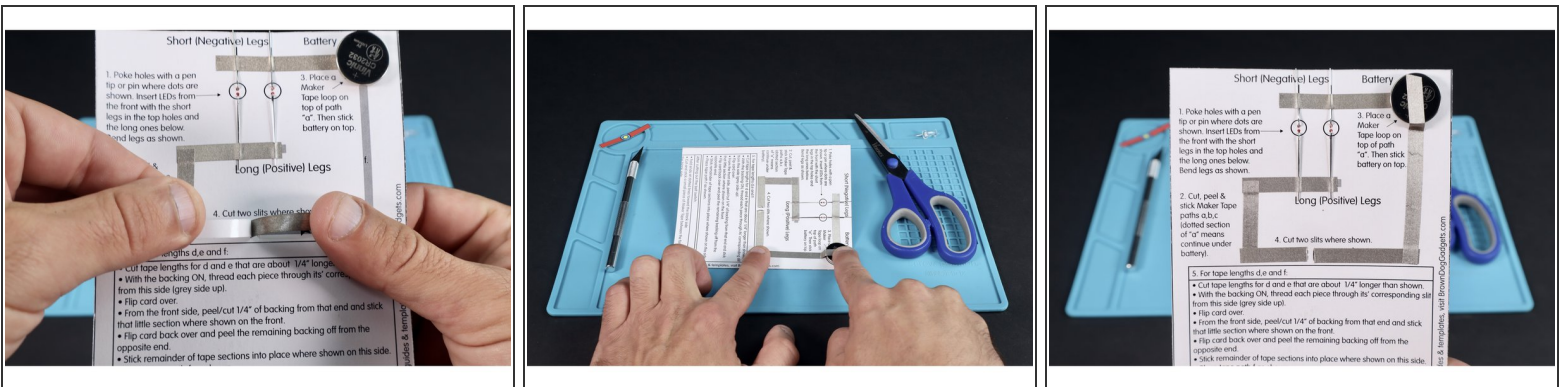
- **Measure and cut** the tape length for path "d" so it is about 1/4" longer than shown.
- **Measure and cut** the tape length for path "e" so it's also about 1/4" longer than shown.
- **With the backing kept ON**, thread the tape section for "d" through its' slot from the back so the backing faces left and the tape faces right as shown.

Step 9



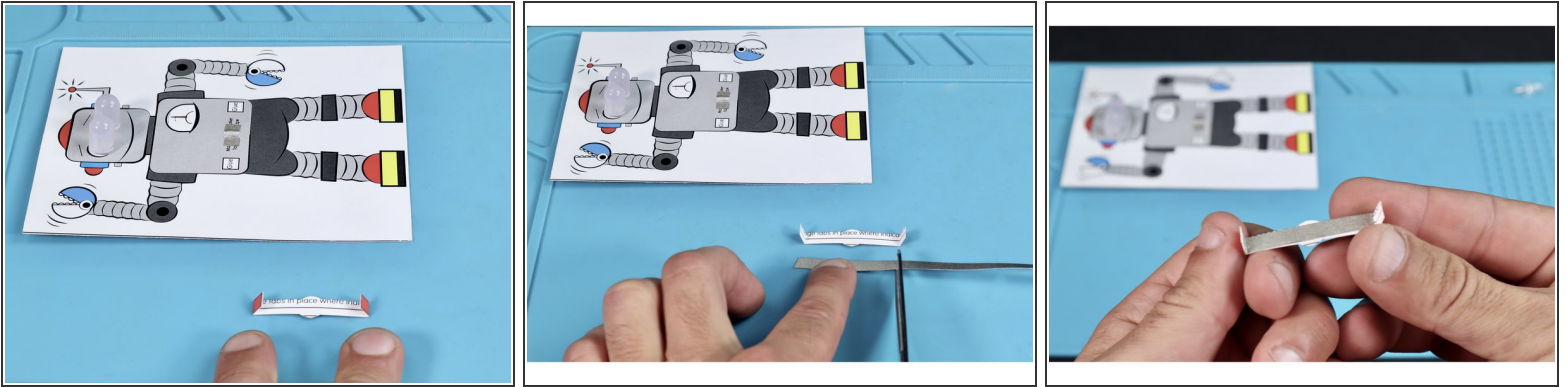
- **Turn card over. Adjust** how much of section "d" is threaded through so that only that 1/4" excess is showing.
- **Peel** the backing of that excess **and cut** to reveal the sticky side.
- **Stick** that little section down **atop the nearest of the two areas labeled "Maker Tape"**. When finished it should look like photo 3 and have the remainder of the tape path hanging out of the back side with the backing still on it.

Step 10



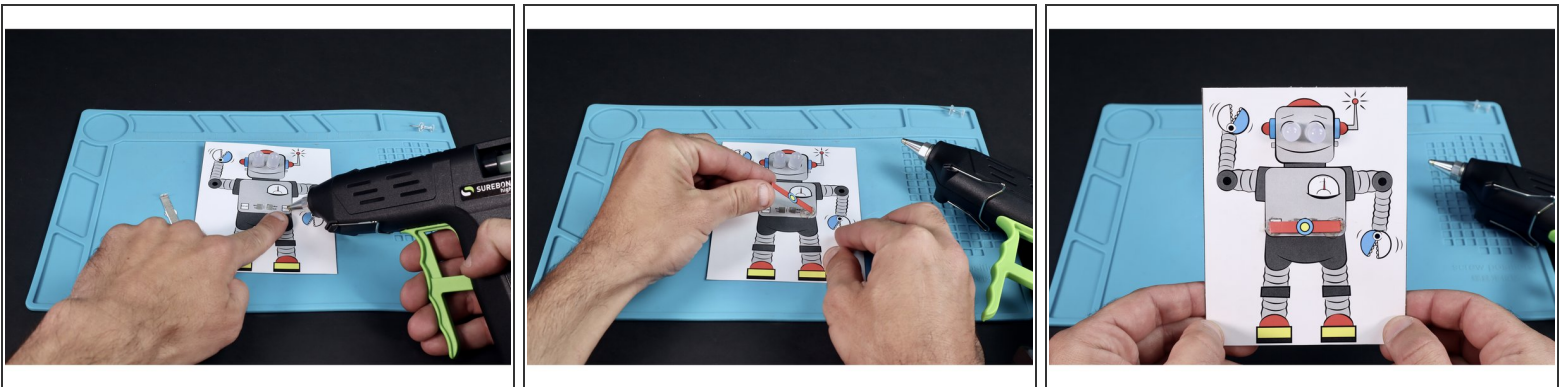
- **Flip card to back and peel the backing from** the remainder of **path "d"**. **Stick** into place where shown. **Repeat** the entire process you used for path "d" **for path "e"**.
- **Measure, cut and stick path "f"** in place so that the upper section is atop the battery. **Your finished circuit should look like the last photo.**

Step 11



- **Fold the edges of the belt on the dotted lines** found on the front of the belt. Fold **AWAY** from the front **TOWARD** the back.
- **Measure, cut and stick** a piece of Maker Tape on the back between the two new fold lines.

Step 12



- With a glue gun, **apply a small dot of glue** where indicated in the first photo.
- **With the belt faced UP**, lay the "x" side of one of the edge tabs in the glue and wait for the glue to cool. **Note: Use a pencil or popsicle stick instead of your finger if you feel the need to press the tab into the glue.**
- **Repeat the process for the last tab** so that the belt looks like the final photo. If done correctly, the conductive portion of the back will NOT lay flat against the rest of the card. **Pushing the buckle down** into contact with the two small Maker Tape nubs **will complete the circuit** and turn the LED eyes on.