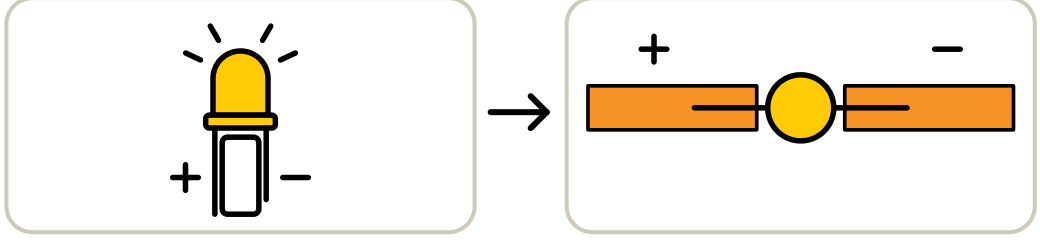
institute of imagination

Trouble-shooting paper circuits

Five things to do as you build. If the LED does not light, check them in order.

1 Test the LED on the coin cell battery first.

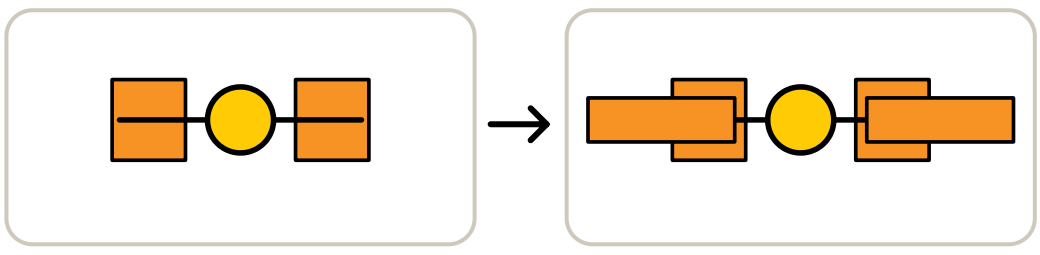
Long leg on the + side. If it lights, the LED and the battery both work, and you can stick them down.



test it on the battery — then stick it down

2 Put a small piece of copper tape under each LED leg.

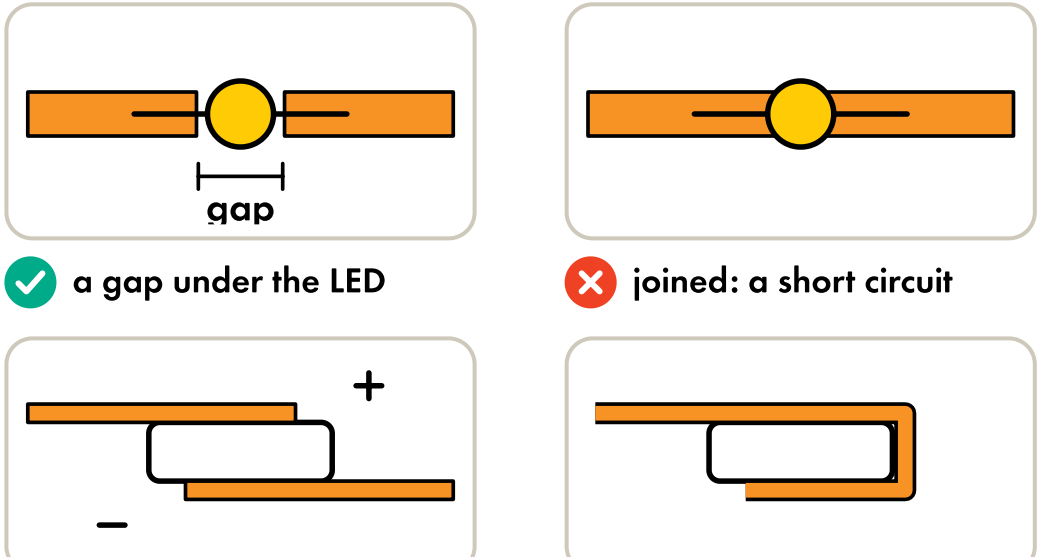
Then lay the tape run on top, so each leg sits between two layers of copper tape. Short piece below, long run on top.



a small piece under each leg — the tape run on top

3 Keep a gap between the + and the - tape runs.

Under the LED, the two runs stay apart. At the battery, one run touches the + side and the other the - side. Tape wrapped round the battery joins the two sides.



✓ a gap under the LED

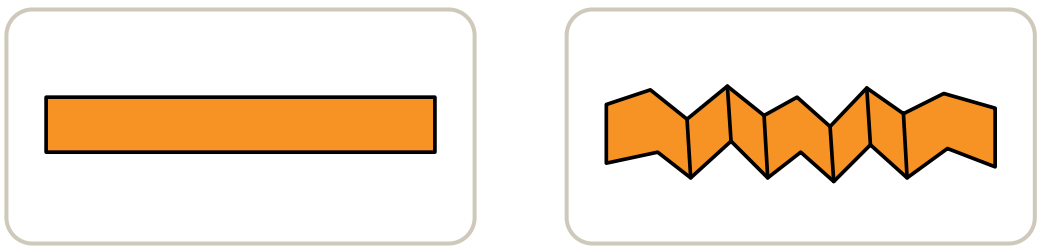
✗ joined: a short circuit

✓ one run on each side

✗ wrapped round: a short circuit

4 Smooth the copper tape flat as you stick it down.

Peel the backing a little at a time and press the tape down with a finger. Crumpled tape can tear or lift off the card.



✓ flat and smooth

✗ crumpled

5 Bend the LED legs gently, once.

A leg bent back and forth can snap off.



✓ bent out once, gently

✗ bent back and forth