

SPOOKY CIRCUITS

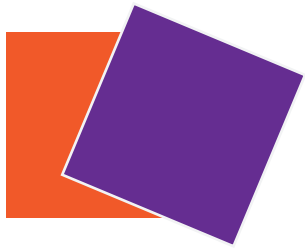


INNOVATION WYRKSHOP

INNOVATEHER

CLUB

MATERIALS PROVIDED



origami paper



coin cell battery



copper tape

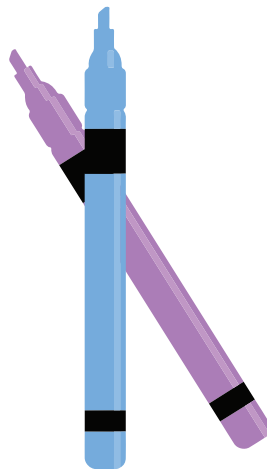


stickers



LED

MATERIALS NEEDED



markers

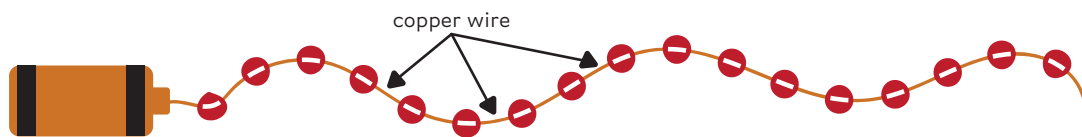
WHAT ARE CIRCUITS?

A circuit is a complete circular path for electricity to flow through. In a circuit there are typically four major things happening:

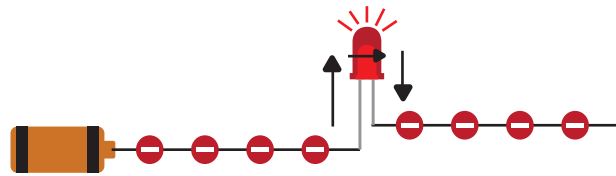
- 1) Electrons come out of a power source (i.e. a battery)



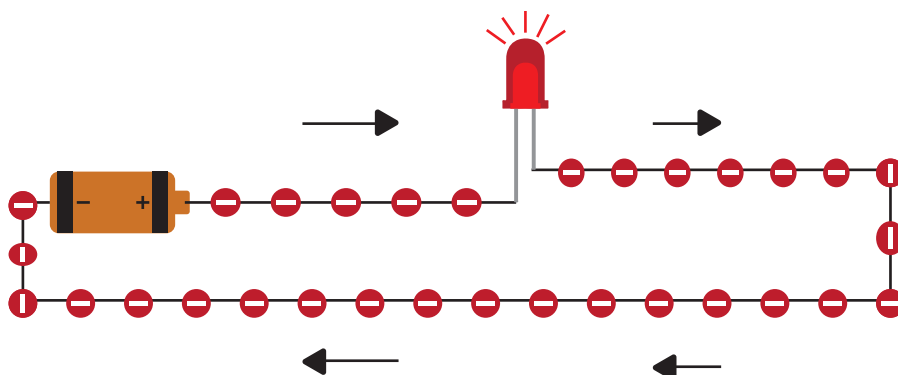
- 2) The electrons pass through conductors (something electricity can travel through)



- 3) They go through a load (something that consumes energy)



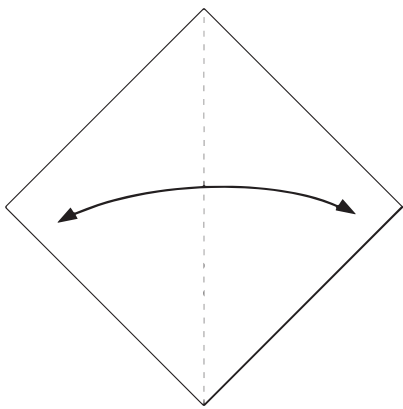
- 4) The electrons return to the source and start over again!



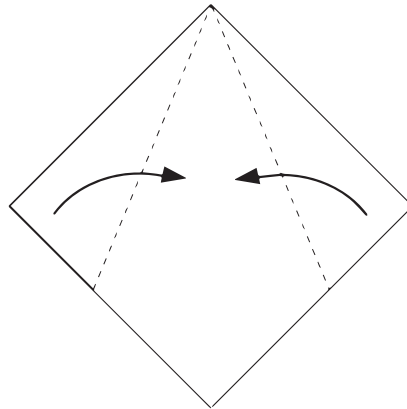
MAKING SPOOKY CIRCUITS

STEP 1: Start by making a spooky halloween-themed origami! Choose between a ghost or a skull below!

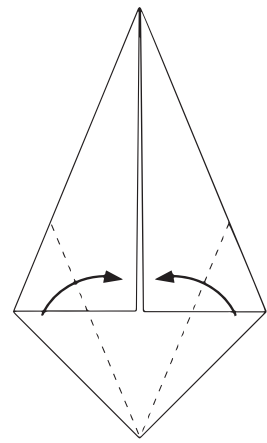
Making a Ghost:



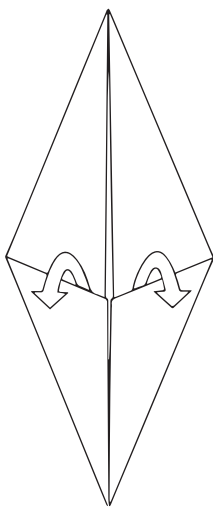
1 Fold in half to make a crease and fold back



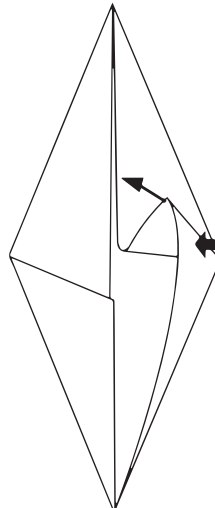
2 Fold to meet the center line



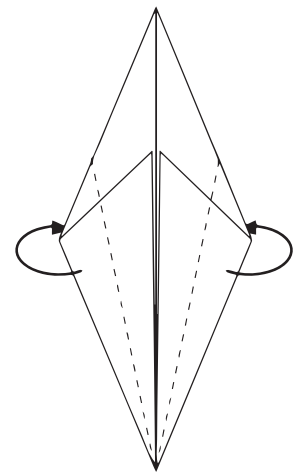
3 Fold to meet the center line



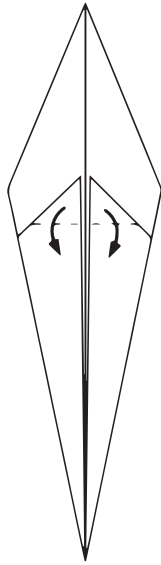
4 Open the pocket from 



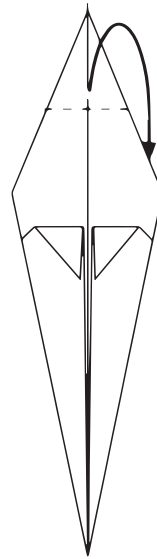
5 Flatten the both pockets



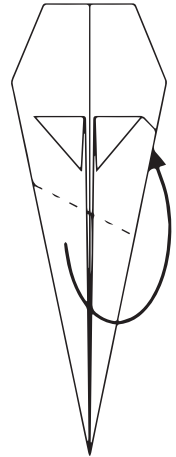
6 Fold backward in the dotted line



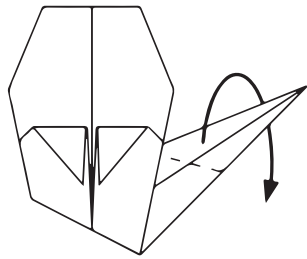
7 Fold in the dotted line



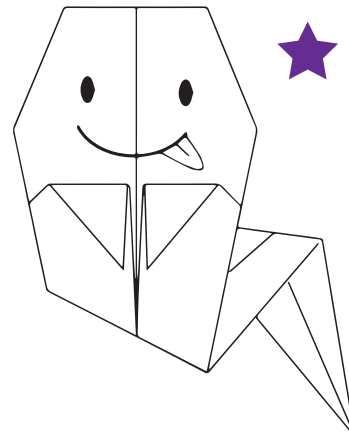
8 Fold backward in the dotted line



9 Fold backward in the dotted line



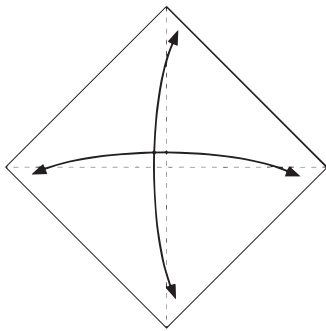
10 Fold backward in the dotted line



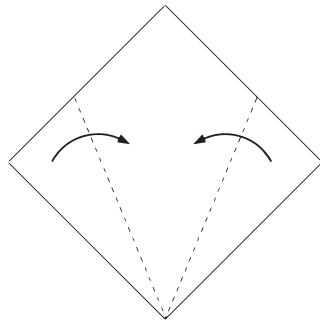
use markers to draw the face!

11 Draw a face and finished

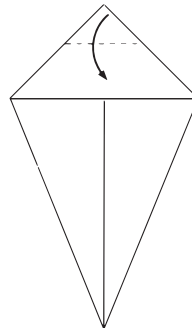
Making a Skull:



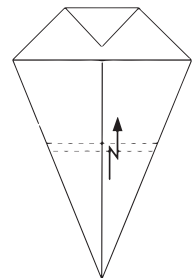
1 Fold in the dotted lines to make creases and fold back



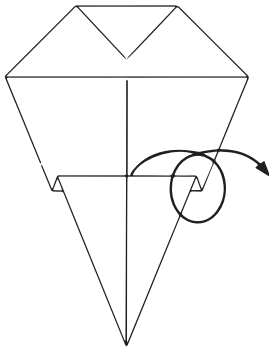
2 Fold to meet the center line



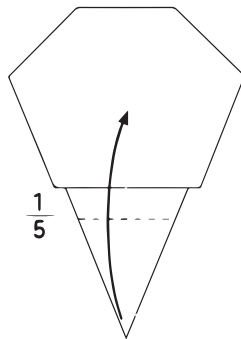
3 Fold in the dotted line



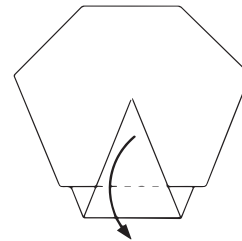
4 Step fold in the dotted line



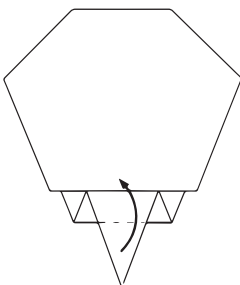
5 Turn over



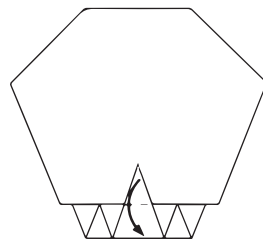
6 Fold in the dotted line



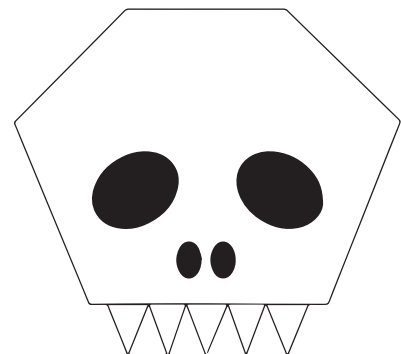
7 Fold in the dotted line



8 Fold in the dotted line

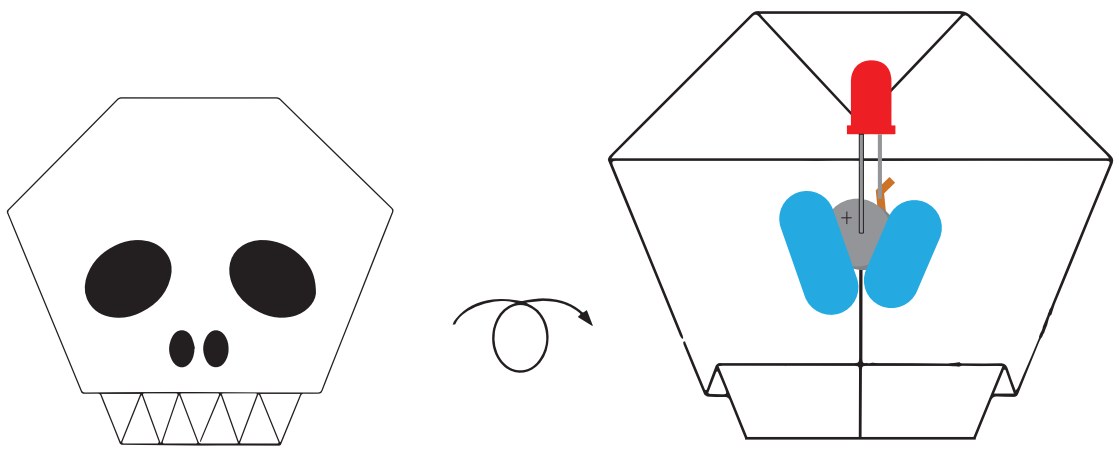
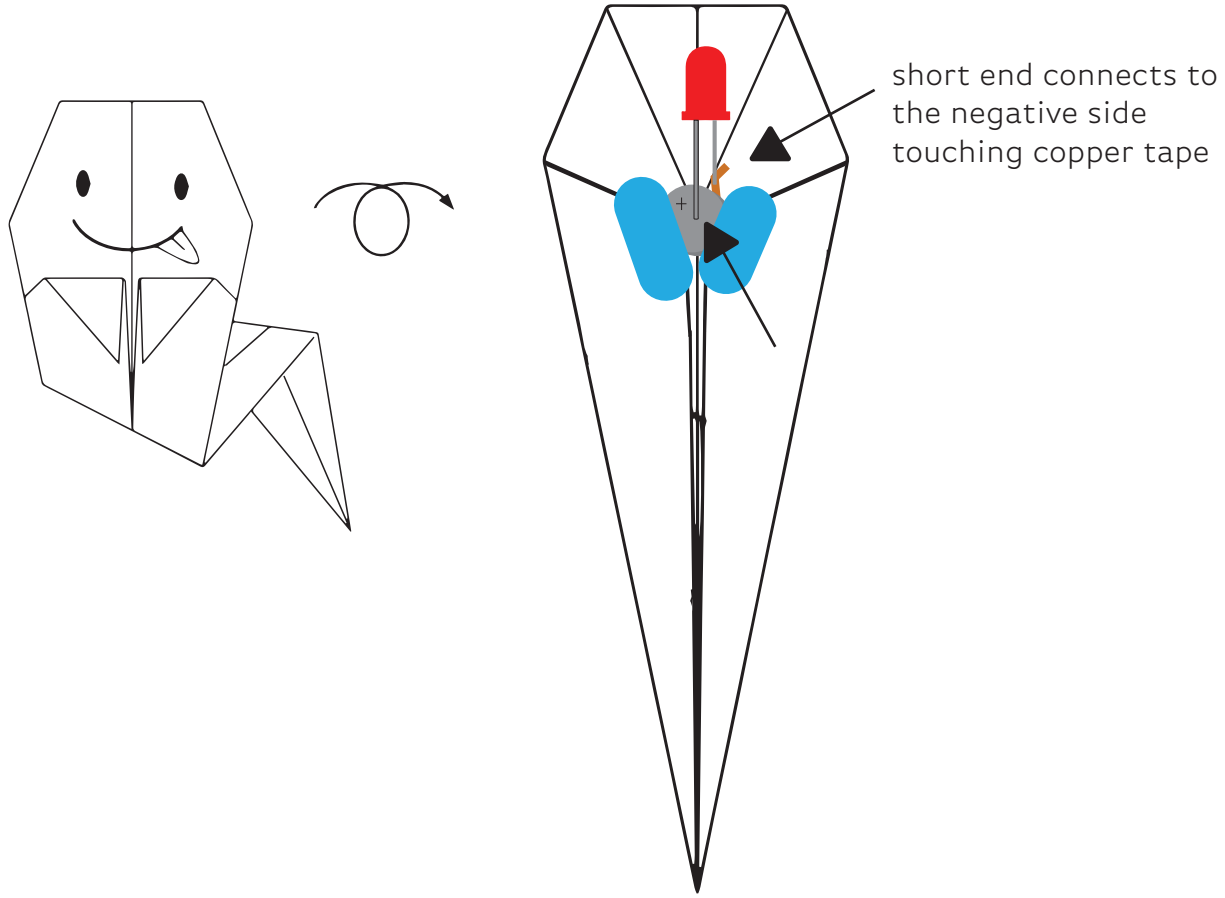


9 Fold in the dotted line



10 Draw a face and finished

STEP 2: Make the circuit! Using your battery, stickers, copper tape, and LED, create a complete circuit on the back of your origami to light it up!



could you find a way for two LEDs to go behind the skull eyes? What would that look like?