

Paper Circuit Jack-o-Lantern

Create a simple circuit to light up a jack-o-lantern picture.

Supplies Needed:

- Orange cardstock
- Black marker
- Pencil
- Scissors
- 1 Coin cell battery (recommended size CR2032)
- Adhesive copper tape
- 1 5 mm LED bulb
- Masking tape or clear tape
- 1 strong paper clip or binder clip



Directions:

1. Using a black marker draw a jack-o-lantern on an orange piece of cardstock.
2. Use scissors to cut small holes in the two eyes.
3. Gently push both leads of the LED bulb through the paper from the front to the back.
4. Turn your paper over to the back side. Flatten out the LED bulb leads and make note of which one is the positive lead (longer lead is positive) and which one is the negative lead (shorter lead is negative).
5. Decide which corner to put the battery and fold the corner over. Make one side of the fold positive and one side negative.



6. Use the copper tape and start taping. Tape from where the negative side of the cell battery will be to the negative leads of the LED bulbs. Then tape from where the positive side of the cell battery will be to the positive leads of the LED bulbs. Make some copper tape underneath each LED bulb lead and also above of the LED bulb lead.



7. Put the cell battery in the corner with the positive side of the cell battery on the positive side of the tape, and the negative side of the cell battery on the negative side of the tape.



8. Your jack-o-lantern's eyes should now be lit up.

Tip: If the lights will flicker a bit add extra strips of copper tape over the top of the LED bulb leads to keep them steady.

Remove the battery when not in use to ensure its longevity.