

## **POPSICLE STICK LED FLASHLIGHT**

Explore circuits by building your own flashlight! A circuit is a complete circular path that electricity flows through.

## **SUPPLIES**

- Scissors
- Large craft stick
- CR2032 3-volt lithium coin battery
- LED light (any color)

- Copper tape
- Medium binder clip
- Translucent tape

## **ACTIVITY**

- 1. With adult supervision, cut 11/4" off the end of your craft stick so that you have a straight edge on one side.
- 2. Test your battery and LED light by sliding your lithium coin battery between the prongs of the LED light. The long leg is positive and the short leg is negative. Once it lights up, place your LED light on the tip of the curved end of your craft stick.
  - TIP: If your LED lights up, your battery works! If not, switch the LED light around so the legs are on the opposite side of your first try.
- 3. Cut a strip of copper tape slightly shorter than the length of your craft stick. Guide the tape from the curved tip, completely covering the LED prongs, down towards the cut end of the stick. Repeat on the other side.
- 4. Add the binder clip to the bottom of the craft stick with the prongs flipped up. Use transparent tape (or any non-conductive tape) to secure the battery in place. Only cover the top of the battery with the tape so that the metal prongs of your clips can make contact with the battery.
- 5. Light it up! The flashlight should turn on and off when you lift and lower the metal prong of the binder clip.

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