

Kids Science@ the Library

Light-Up Card



You'll need:

- Snowman card template
- One LED Diode Light
- 1/4 inch copper tape (2 strips at 6 and 7 inches)
- Coin battery (Style 2032)
- Scotch tape
- Scissors

- 1.** Color and decorate the front of your card template.
- 2.** Poke a hole through the template for the LED light using your scissors.
- 3.** Open your card to see the pattern for the copper tape. Place the copper tape following the lines on the template. Fold the tape gently at the corners.
- 4.** See the circle that says "LED"? Carefully bend the legs of the LED light so it looks like it is doing the splits. Tape the legs firmly on top of the copper tape with the light in the middle over the circle.
- 5.** Fold the corner of the card on the dotted line and fold back again.
- 6.** Place the coin battery on the circle that reads "battery". Test your paper circuit by folding the corner and pressing the battery. If it does not light up, flip the battery over and try again.
- 7.** Tape the battery in place by covering only 1/3 of the battery's surface.
- 8.** Enjoy your paper circuit!

If your light doesn't illuminate:

- Make sure the 2 legs are making contact with the copper tape.
- Is your tape torn? That will cause a short circuit and you should replace the tape.
- Is your tape a continuous circle? There should be a gap where the LED light goes and a gap by the battery.
- Is your battery working? Try another one.