



# Science Log - 5<sup>th</sup>

## Topic: Electricity

### Learning Goals:

1. Create a model of a simple circuit and explain how it works.

What do you already KNOW about the topic?	What do you WANT to learn about the topic?	What did you LEARN about the topic?

## Vocabulary

Electric current	Continuous flow of negative charges (electrons)
Circuit	Pathway taken by an electric current
Closed circuit	Allows the movement of electrical energy
Open circuit	Prevents the movement of electrical energy
Conductors	Materials that electrical energy can move through
Insulators	Materials that do not conduct electricity well
Series circuit	Only one pathway for the current
Parallel circuit	Two or more pathways for a current
Lightning	The discharge of static electricity



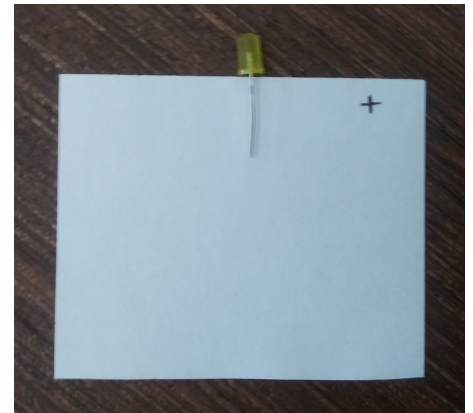
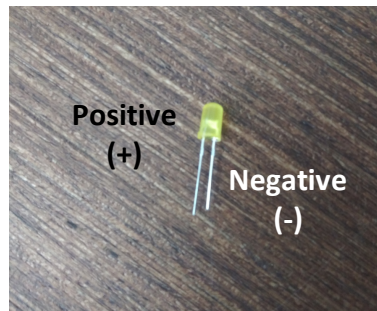
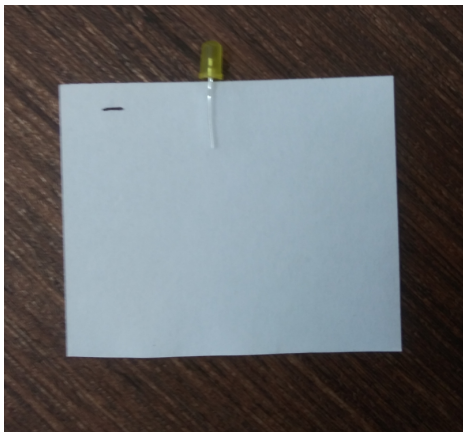
# Science Log - 5<sup>th</sup>

## Paper Flashlight

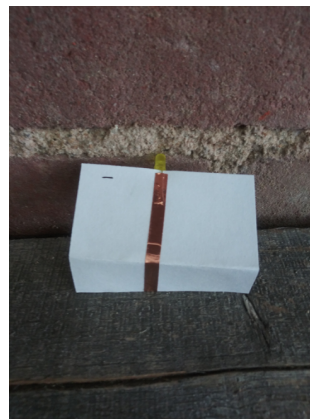
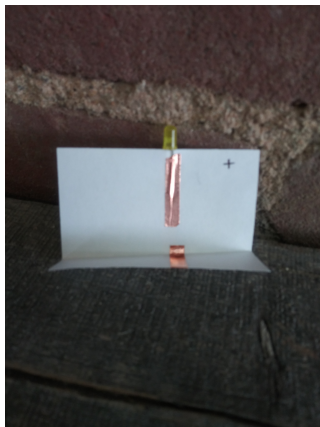
**Supplies:** index card, 3mm light bulb, copper tape (or aluminum foil and masking tape), round battery (#2032), pencil

**Directions:**

1. Cut the index card in half, which will give you two 3in x 2.5in pieces, you will only need one piece.
2. At the top of the 3in edge write negative (-) on one side of the card, and a positive (+) on the other side of the card.



3. Straddle the light bulb wires over that edge of the card with the short leg on the negative (-) side and the long leg on the positive (+) side.
4. Use the longer piece (3 inches) of copper tape to secure the negative (-) leg to the index card and wrap the excess tape around to the other side of the card.



5. Use the short piece ( inches) of copper tape to secure the positive (+) leg.
6. Fold about 1 inch of the bottom edge up towards the positive side.
7. Place the battery inside the fold so that it is touching both pieces of copper tape.