

Understanding Stuff

LED Project

Aim

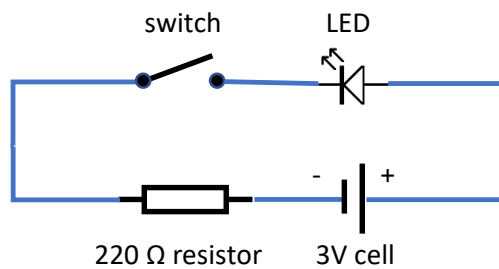
Make a torch using an LED and understand how an electrical circuit works.

Components

- Paddlepop stick
- copper tape
- LED
- Resistor (220 Ω)
- 3 volt cell



Circuit



Final Product



Construction Steps

1. Cut copper tape to lengths as shown.



2. Stick copper strip "C" to the Paddlepop stick. Then stick copper strip "D" to back of Paddlepop stick, leaving a small piece of the backing paper on the copper as shown.



3. Stick the battery cell (positive or "+" side) to the last bit of copper strip "D" then fold it over so that the negative side is resting on the end of copper strip "C". **WARNING:** Be sure that copper strip "D" does **not** wrap around to the negative side of the battery cell.



4. Wrap some sticky-tape around the battery cell to hold it in place. Then slide the LED on to the Paddlepop stick and hold it down with one of the short copper strips as shown.
NOTE: Check your polarity (positive/negative) of the LED. The anode (positive side) of the LED should be against copper strip "D".



5. Bend the ends of the resistor as shown.



6. Stick the resistor on to copper strip "C" and secure it with the last small copper strip.

