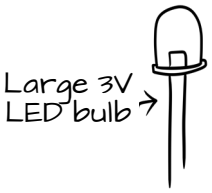
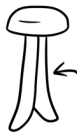
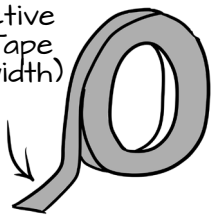
To-Go Cup Lantern

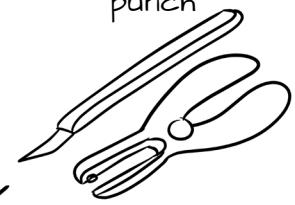
Supplies:







Tools:

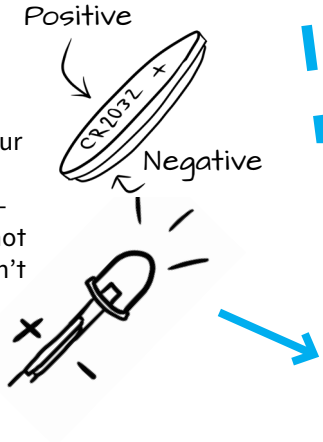


You will be making a To-Go Cup Lantern with an interrupted circuit loop. It turns on and off using the tab on the lid. This project is highly customizable, just make sure your circuit is complete so the battery connects to the LED, then make it your own!

Step One:

- Test your LED and battery.

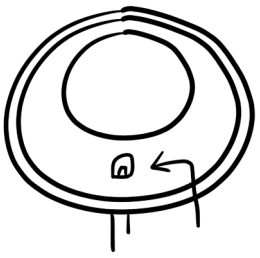
Place your battery between both LED pins on your bulb. On the bulb the longer pin is positive (+), and the shorter prong is negative (-). On the battery the face is (+), and (-) is the back. If it does not turn on try flipping the battery. If that still doesn't work your LED or battery might be defective.

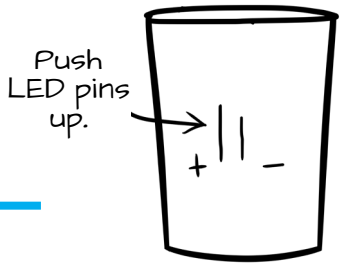


Step Two:

- Attach the LED through the cup.

Push the LED pins through from the inside of the cup near the middle. Holding the LED push both pins up so they are flush against the outside of the cup. Note which pin is positive and negative, and make sure they don't touch!

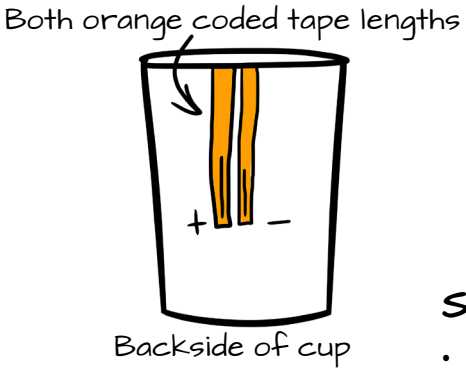




Step Three:

- Tape the LED pins to the cup.

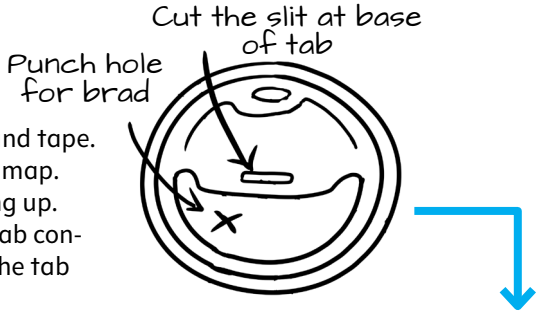
Use the orange coded tape lengths to cover the pins, and push the extra tape over to the inside of the cup. They should run parallel straight up the side of the cup.



Step Four:

- Cut holes in the lid for the battery and tape.

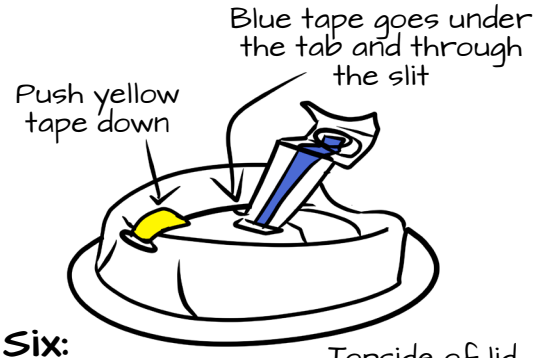
Punch a hole where you see an X on the map. Next, place it on the table top side facing up. From above, cut out the slit where the tab connects to the top of the cup. Do not cut the tab off of the cup.



Step Five:

- Place yellow tape on bottom of the lid.

Turn over the lid so you are looking at the underside. Use the yellow coded tape going from the back where it will connect to the cup, then place it along the right side in a semi-circle. Any extra tape push out through the drinking hole.



Step Six:

- Place blue tape under the tab.

Turn the lid topside placing the blue coded tape along the underside of the tab. Excess tape needs to be pushed through the slit at the base and pushed flat against the underside of the lid. Next, push down the excess yellow tape from step five. When we push down the tab it will close the circuit and be the on/off switch at the end.

Step Seven:

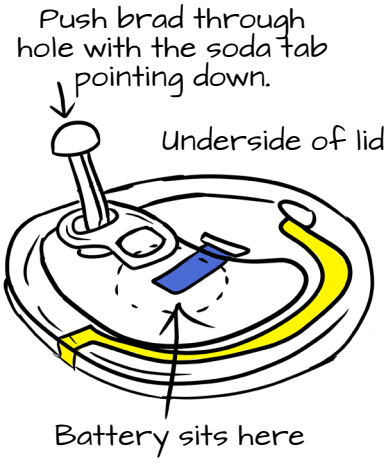
- Prepare the soda tab.

Bend it slightly near the middle with pliers. This bend will help secure the battery against the underside of the lid.

Step Eight:

- Attach soda tab to underside of lid.

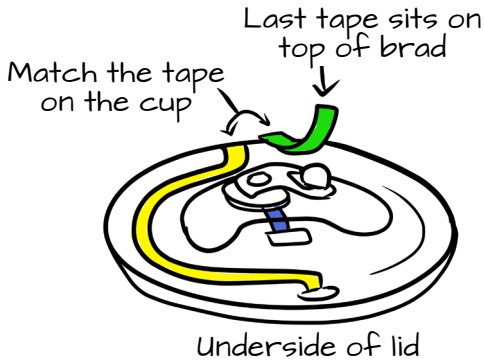
Place your soda tab so that the bend points down, covering the rest of the nylon tape you pushed through the slit in step six. Push the brad through one side of the soda tab, then down the punched hole. Open the brad as you normally would on the top of the lid.



Step Nine:

- Place the battery and green tape.

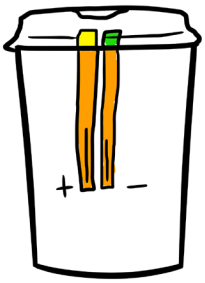
Slide the battery under the soda tab. The last green coded tape sits over the brad and soda tab, connecting it to the tape on the back of the cup and your LED.

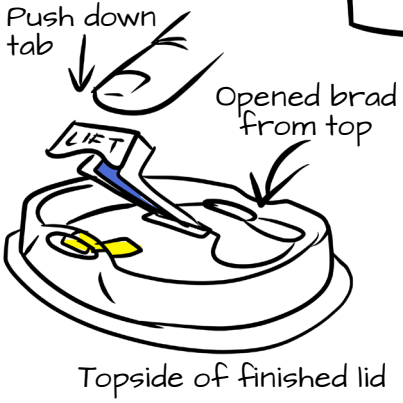


Step Ten:

- Line up your lid tape to those on your cup and push down tab.

Put your lid on your cup matching your (+) and (-) tape lines on the cup to the ones on your lid. Push down the lid tab switch. If it doesn't turn on, try flipping your battery, and check your tape lines everywhere. The tape can be repositioned easily if you need to!





Need some help?
Not sure if you're doing it right?
Check out the YouTube tutorial.

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