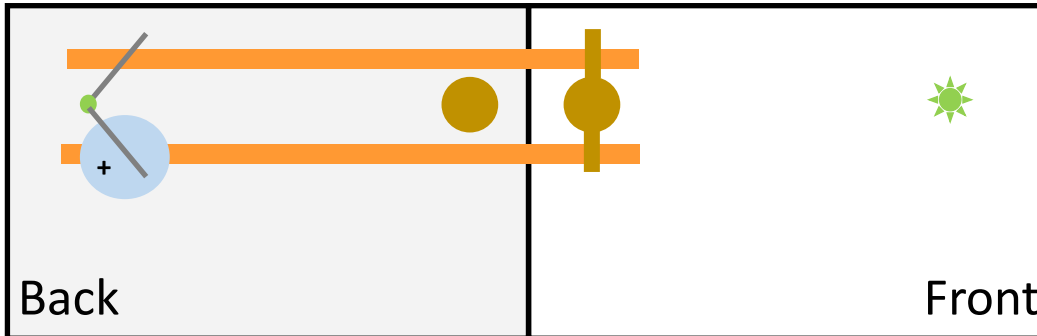


Make a Card that Lights Up

1. Decide what you want to draw.
2. Plan where the light will be in your drawing, and where the switch will be.
3. Make your drawing.
4. Use a pen to poke a small hole where the light will go, and use the hole punch to make a hole where your switch will go. Put the fastener in from the back and spread its legs open flat on the front of the card. Put the light in from the front and spread its legs open flat on the back of the card.
5. Starting on the back, and wrapping around to the front: Draw a straight line from the top leg of the light past the hole for the switch and over onto the other side till it reaches the top leg of the switch. Then draw a parallel line from the bottom leg of the light around to the bottom leg of the switch. The lines must NOT touch each other!



6. Put the copper tape on the lines you drew, starting on the front and wrapping to the back. Do NOT tape down the legs of the LED at this time, or the legs of the fastener. Just move them out of your way for now.
7. Set up the switch. Turn the fastener so the legs are NOT touching copper tape. Label that as the "off" position. Then turn it so both legs are touching copper tape. Make sure they lay flat so they have good contact with the copper. Label that as the "on" position and leave the switch in the on position for now.
8. Plan where the battery will go. Put it on the back of the card next to the hole for the light. It will need to go on top of one of the pieces of tape, but must NOT touch the other piece of tape. Put it so the positive side (the smooth side with the + on it) is facing up.
9. Turn the light so that one leg (A) is touching one piece of copper tape and the other leg (B) is *on top* of the positive side of the battery. (So, the battery is on top of the copper tape, the leg of the light is on top of the battery.) Did the light turn on? Hurray!!! If it didn't turn on, try turning the light around so the other leg (B) is on top of the battery. Now is the light on? Hurray!!! **
10. Tape the legs of the light and the battery down. (Second picture)

** If it's still not working, trouble-shoot: Make sure the two lines of copper tape are NOT touching each other, and they're NOT touching the head of the fastener on the back of the card. Make sure both legs of the fastener ARE touching the copper tape on the front. Make sure on the back, one leg of the bulb is touching one line of copper tape, and the other is on top of the battery, which is on top of the copper tape.

