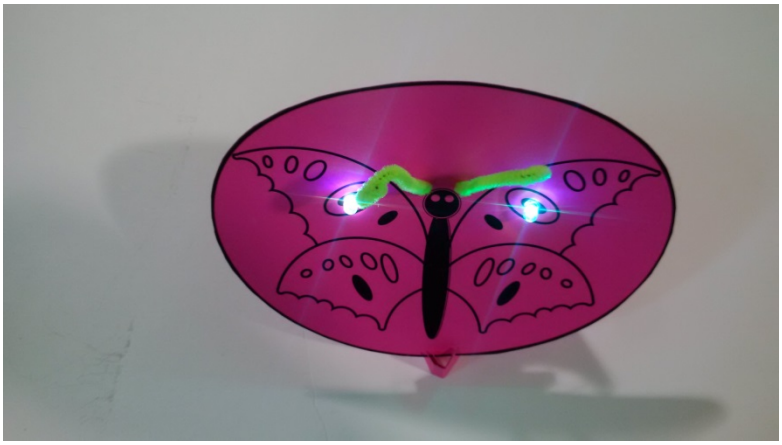
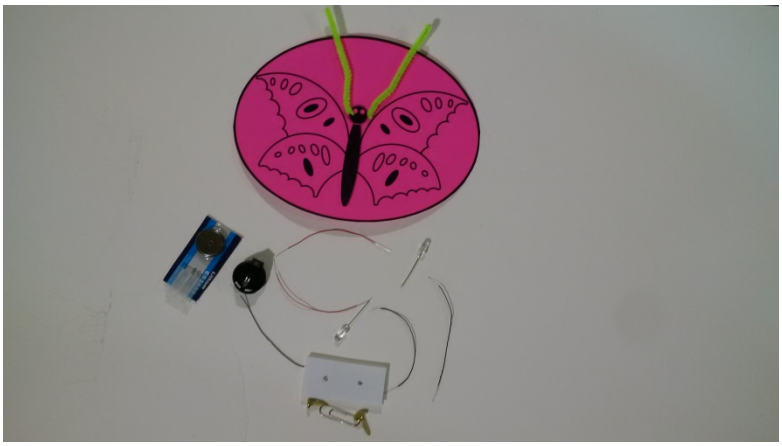
BUTERFLY BLINKY-BOT INSTRUCTABLE



WESTERN CANADIAN ROBOTICS SOCIETY

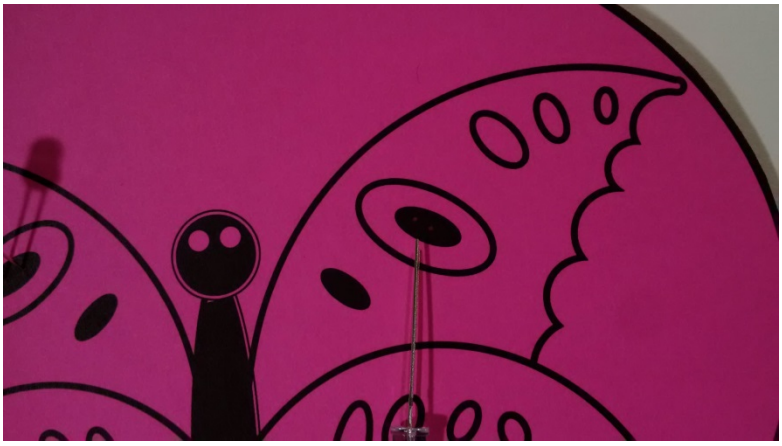


Get the supplies:

1 – BUTERFLY body printed on black cardstock
3 – 3 inch pieces of black AWG 30 wire (stripped 1/4 - 3/8 inch on both ends)
2 – 3 inch pieces of red AWG 30 wire (stripped 1/4 - 3/8 inch on both ends)
1 – coin cell battery holder
1 – 3V coin cell battery (CR 2032)
2 – fast blink multi-colored LEDs
1 – paper clip
2 – brads (~1/2 inch)
1 – 1 inch x 2 inch corrugated cardboard or plastic piece, with 2 holes punched 1 inch apart
1 – 3/4 x3/4 inch square corrugated cardboard or plastic piece
1 – pin holder
1 – toothpick
1 – straight pin

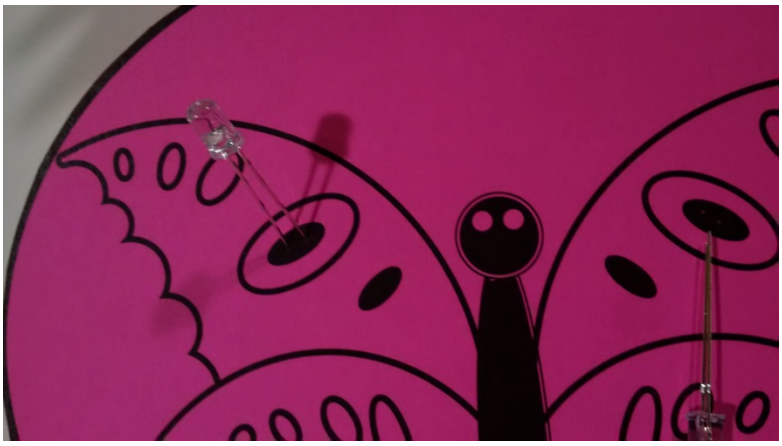
Assemble the tools:

safety glasses
hot glue gun
white glue or glue stick
scissors
wire cutters
wire wrap tool
soldering iron
solder



Cut out the BUTERFLY

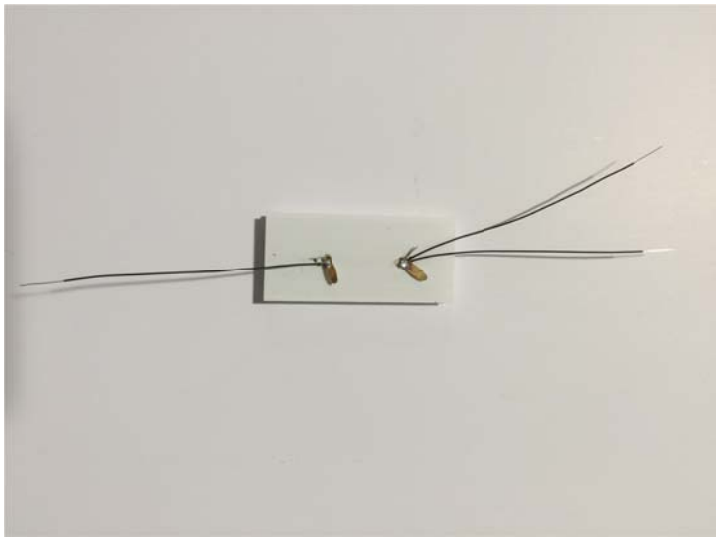
and you have the stand.



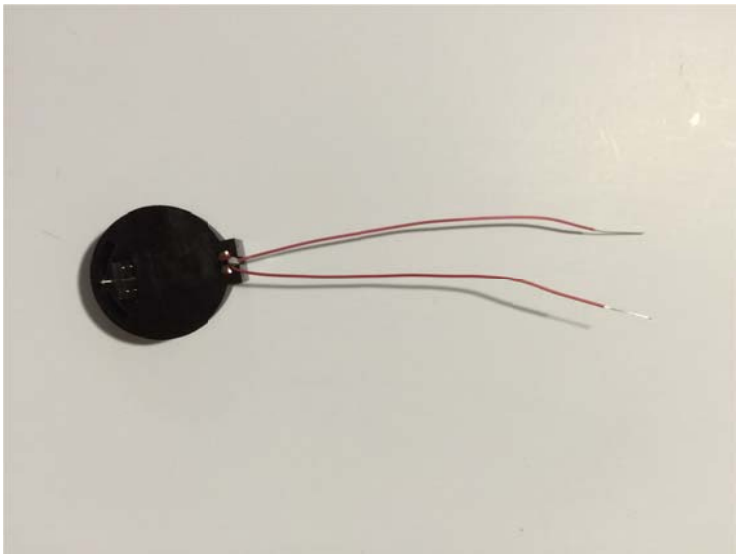
1. Using a straight pin, punch two holes for the LEDs in each of the eyes.

2. Install the LEDs through the holes. Place a small dab of glue under each LED.

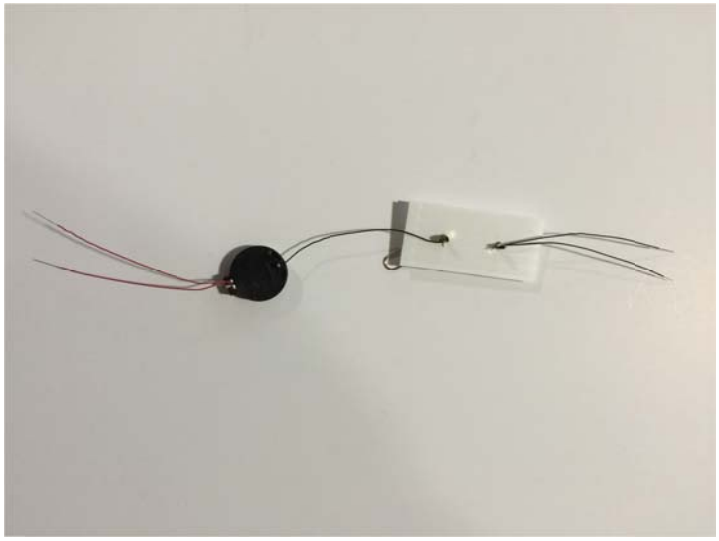
1. Assemble the switch from the corrugated rectangle, the two brads, and the paperclip according to the above picture.



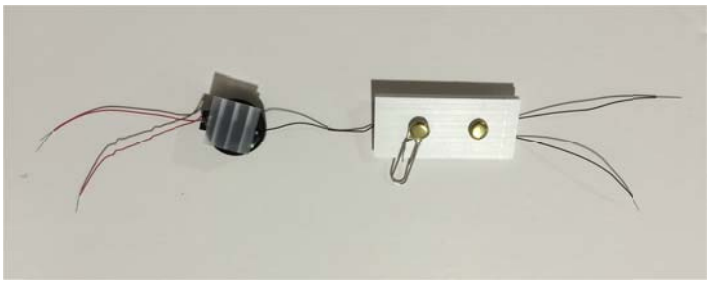
1. On the bottom of the switch, attach two black wires to one brad and one black wire to other brad. Solder in place.



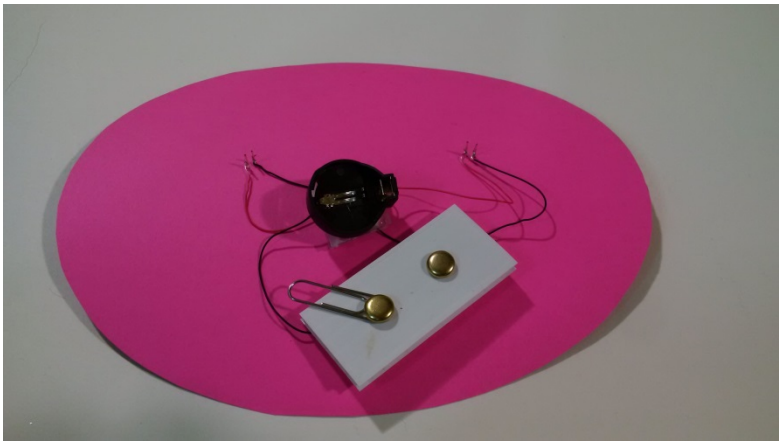
1. Using the wire wrap tool, attach two red wires to positive (larger) end of battery holder. Solder in place.



1. Using the wire wrap tool, attach the single black wire from the switch to the negative (smaller) end of the battery holder. Solder in place.

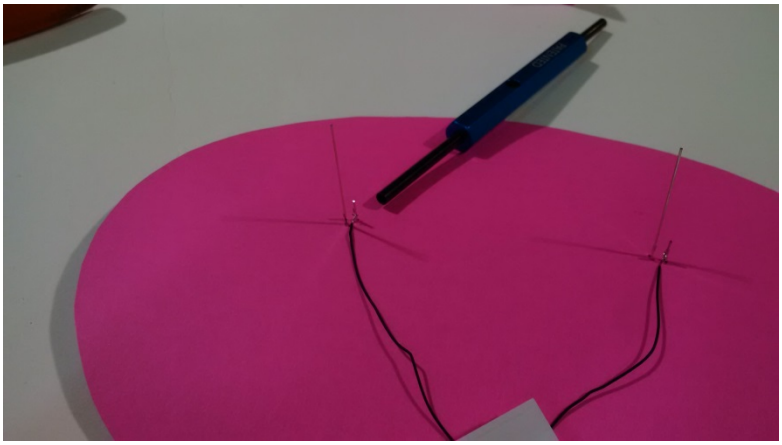


1. Hot glue the small corrugated square to the back of the battery holder.



1. Hot glue the switch in the center of the butterfly body, making sure that the black wires will reach the LEDs. (You may need to trim the switch.)

2. Hot glue the battery holder in the center of the butterfly body, making sure that the red wires will reach the LEDs.



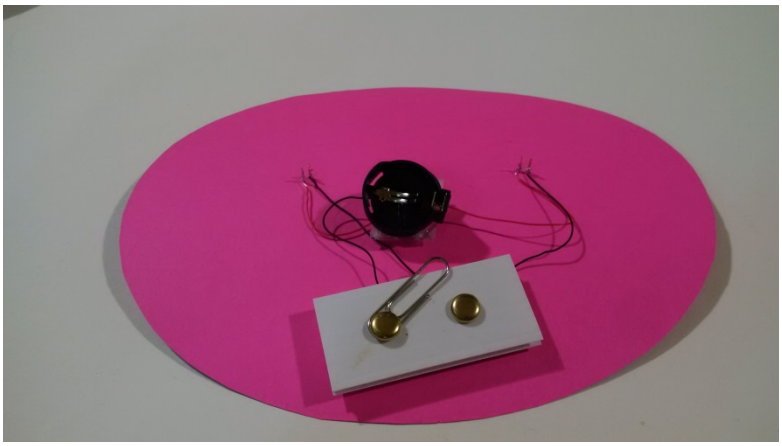
1. After putting on safety glasses, trim the two longer leads of the LEDs to ~1/4 inch.

2. Using the wire wrap tool, attach the two red wires to each of the cut LED leads. Solder in place.

3. After putting on safety glasses, trim the two remaining LED leads to ~1/4 inch.

4. Using the wire wrap tool, attach the two black wires to each of the remaining leads. Solder in place

5. Then putting on safety glasses agasin, trim the two remaining LED leads to ~1/4 inch



1. Using the wire wrap tool, attach the two black wires to each of the remaining leads. Solder in place.

2. If needed, put on safety glasses and trim the LED leads again.

    1. Install the battery so the + side is facing up.

1. Close the paperclip switch and VOILA!

Western Canadian Robotics Society

Meetings: Saturdays from 10am to 12pm

At: Calgary Aero Space Museum
4629 McCall Way NE Calgary AB
T2E 8A5

Website: www.robotgames.com

Email: info@robotgames.com