Playable Fashion: Buzzkill

Sample Slide Show

Kaho Abe & Ramsey Nasser

What if these were functional?

Walmart.com

Etsy, GoFollowRabbits

Nintendo Power Glove, (1989)

Peregrine Game Glove (2010)

Laser Tag

vice.com

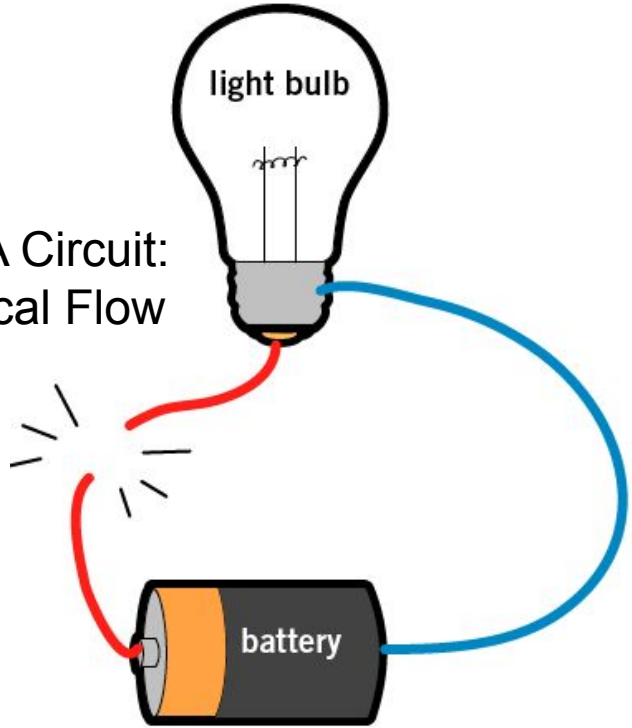
Cosplay

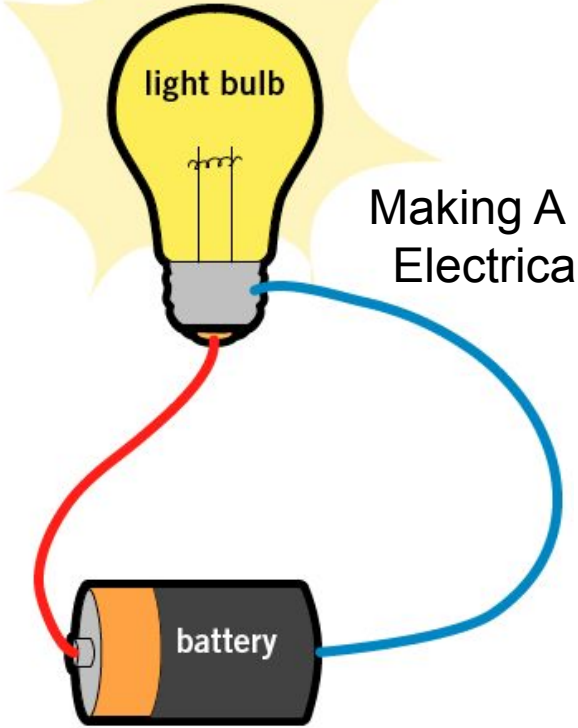
LARPing (Live Action Role Playing)

LARPING.org

Making and Breaking a Electric Circuit

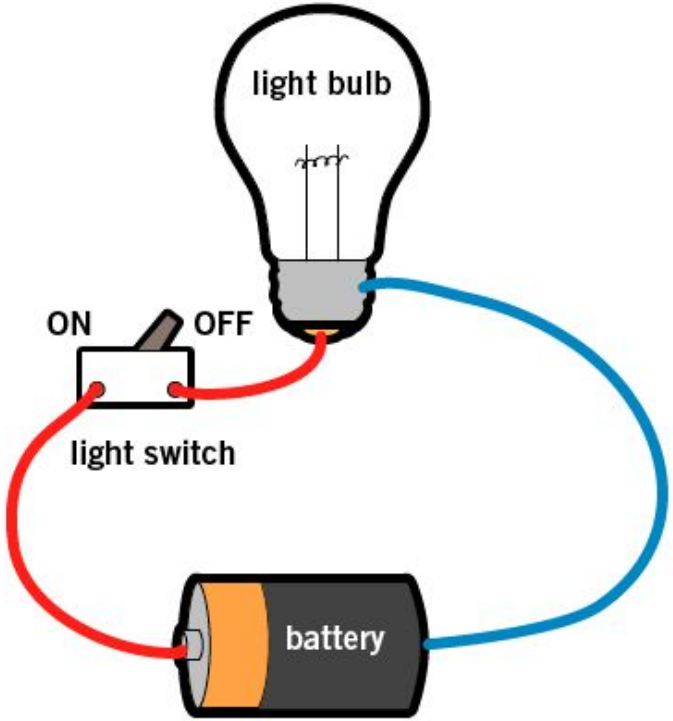
Breaking A Circuit:
No Electrical Flow

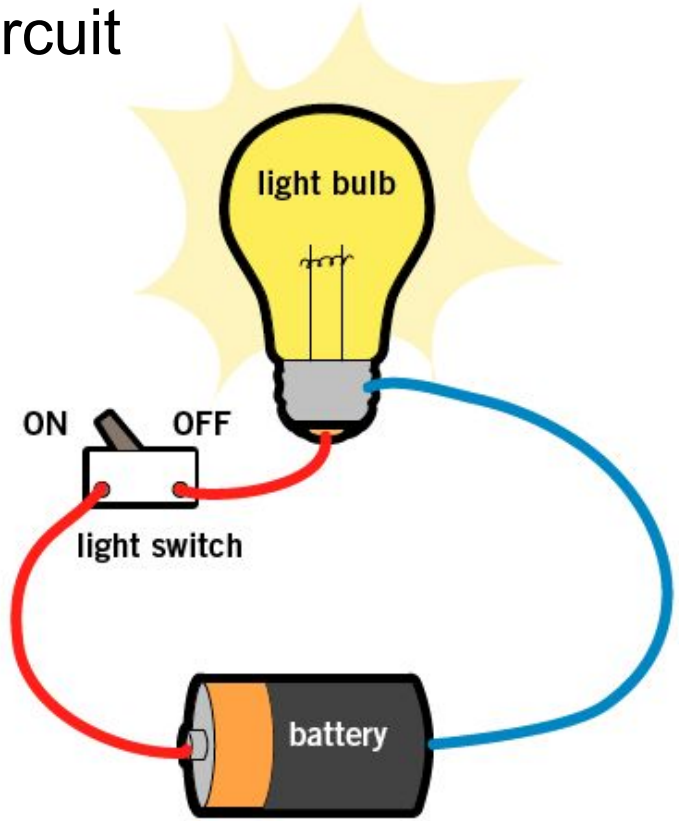




Making A Circuit:
Electrical Flow

Making and Breaking a Electric Circuit

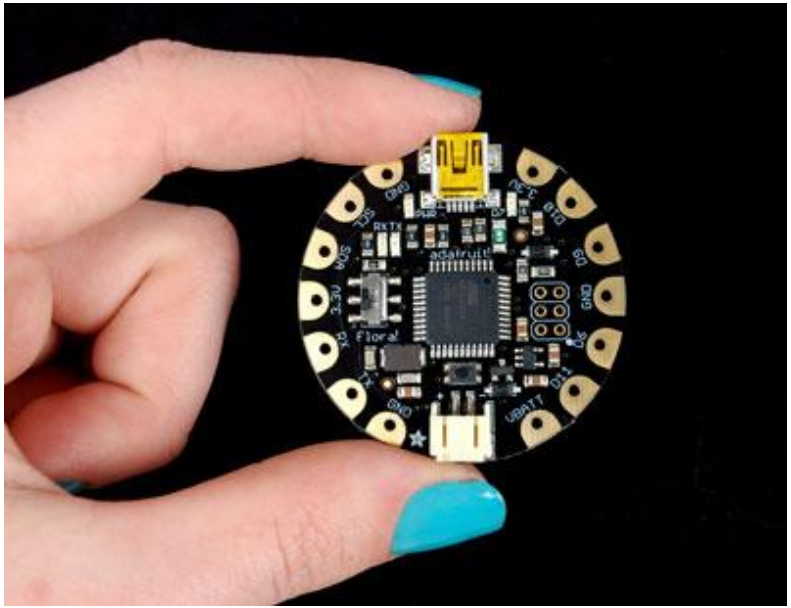




This concept exists all around us!

A keyboard and mouse is a bunch of switches!

FLORA from Adafruit



- Flora is a development system for programming microprocessors especially for wearable projects.
- Flora is open-source.
- Flora is based on the Arduino and uses the Arduino software to program.

Adafruit Flora Website Getting Started with Flora

Let’s make the gloves!

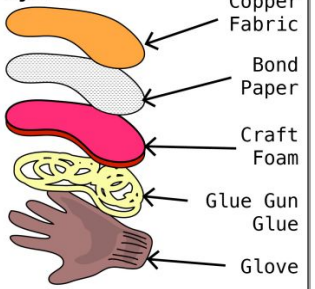
Playable Fashion Weekend Workshop: Glove Worksheet

with Kaho Abe & Ramsey Nasser
November 2013 at Eyebeam Art & Technology Center

Materials:
- Copper Fabric (LessEMF)
- Work Gloves (Home Depot)
- Bonding Paper (Amazon)
- Craft Foam (craft stores)
- Flora & USB cord
- 2 Alligator Clips

Tools:
- Glue gun
- Scissors
- an Iron
- Scrap cotton fabric

Layers:

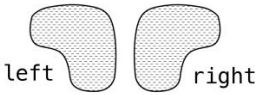


TEMPLATE FOR CONDUCTIVE PADS

Cutting:
- Cut 2 pieces of Color Foam
- Cut 2 pieces of Copper Fabric
- Cut 2 pieces of Bonding Paper

** For bonding paper, note smooth and rough sides. Must cut mirrored paid for right and left gloves.

Cut along dotted line



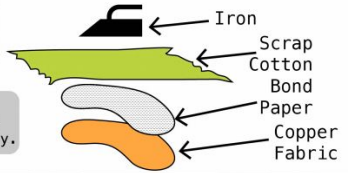
Note: make sure you print at full scale or the scale of the template will be changed.

Step 1:
Place bonding paper rough side down, on top of copper piece. Cover with scrap cotton fabric, and iron for 3 seconds. Make sure you cover all areas.

tip: use scrap cotton fabric when ironing to stop iron from getting destroyed with glue from bonding paper.

tip: don’t over use iron or glue will get all over the place.

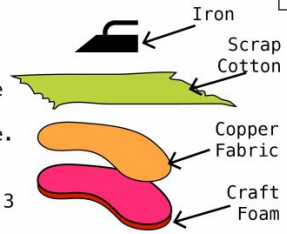
tip: steam should be turned off on iron to melt the glue properly.



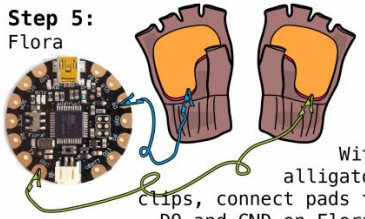
Step 2:
Wait til it’s cool to the touch. Carefully peel paper from glue. There should remain a adhesive layer on the copper piece.

Step 4:
Use glue gun to glue copper/foam piece down to glove, copper side up.

Step 3:
Place copper piece, adhesive side down, on top of foam piece. Cover with scrap cotton and iron for 3 seconds.



Step 5:
Flora

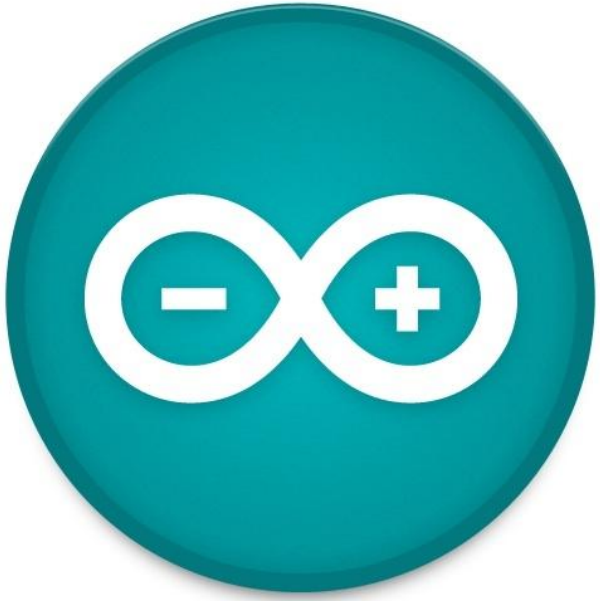


With alligator clips, connect pads to D9 and GND on Flora.

Arduino Code

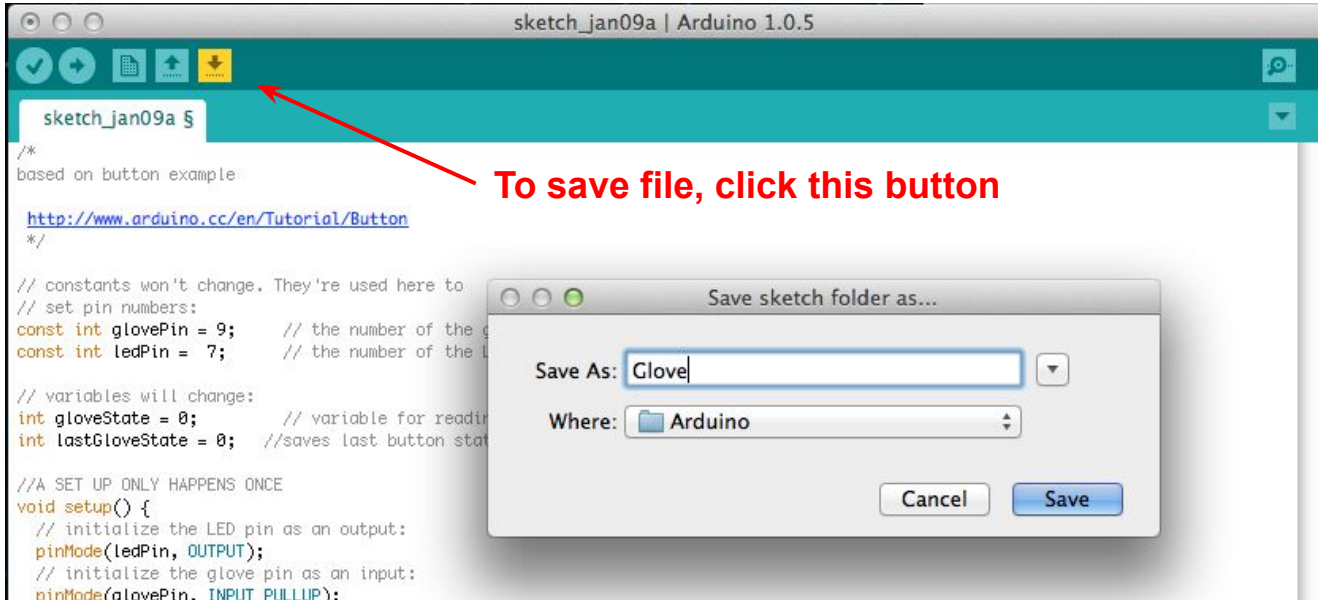
- Use “Adafruit Arduino”
- Code can be found here

http://bit.ly/2tam7Hy



Cut & Paste into Adafruit Arduino IDE

- Cut and paste code into Adafruit Arduino IDE window
- Save Arduino file with new name (whatever you want!)



Connect Flora Controller to Computer via USB and Upload Code

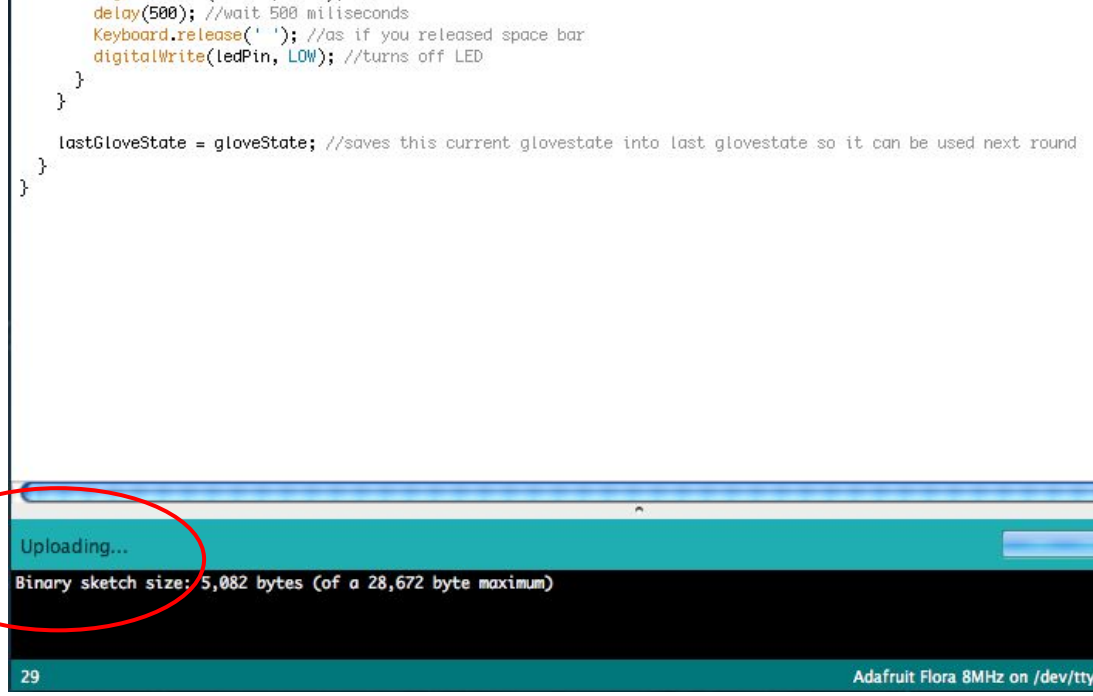
Make sure in Adafruit Arduino:

Tools >> Board >> Flora

Tools >> Serial Port >> USB (either one should work)

Uploading

You can check status at bottom left of IDE.



Then open a Text Edit App & Test Gloves! Does it type out a space when you clap?

Review Code

variables

setup()

occurs once at start

loop()

occurs over and over again