## EQUIPMENT AND MATERIAL

Merced Energy, Battery Park





#### THIRD HAND

The third hand is an adjustable tool used to hold components while you are soldering.

They can be used to hold wires, PCBs, etc.

They may damage wires, but you can mitigate the damage using shrink wrap.





#### **SOLDER**

2 types: lead solder and lead-free solder

Lead-free solder requires more heat

Lead-free solder joints are grainy and rough. They are lower quality than lead solder.

Lead solder is recommended because it is easier to work with and requires lower temperatures.





#### **FLUX**

Usually made of rosin

Comes in paste form

Reduces oxides that form whenever hot metals are in contact with the air.

It also helps the solder stay in liquid form.

Many solders come with flux in the core.



# **EQUIPMENT**

Soldering iron & stand

Third hand

Wet sponge

Solder

Flux

Fire extinguisher









### **SAFETY**



Wash hands before and after soldering especially if you are using lead solder!



Wear eye protection



No jewelry



Handle with care as the soldering iron is very hot



Always return soldering iron to its stand



Make sure whatever you're soldering is not connected to electricity

### THANK YOU!

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