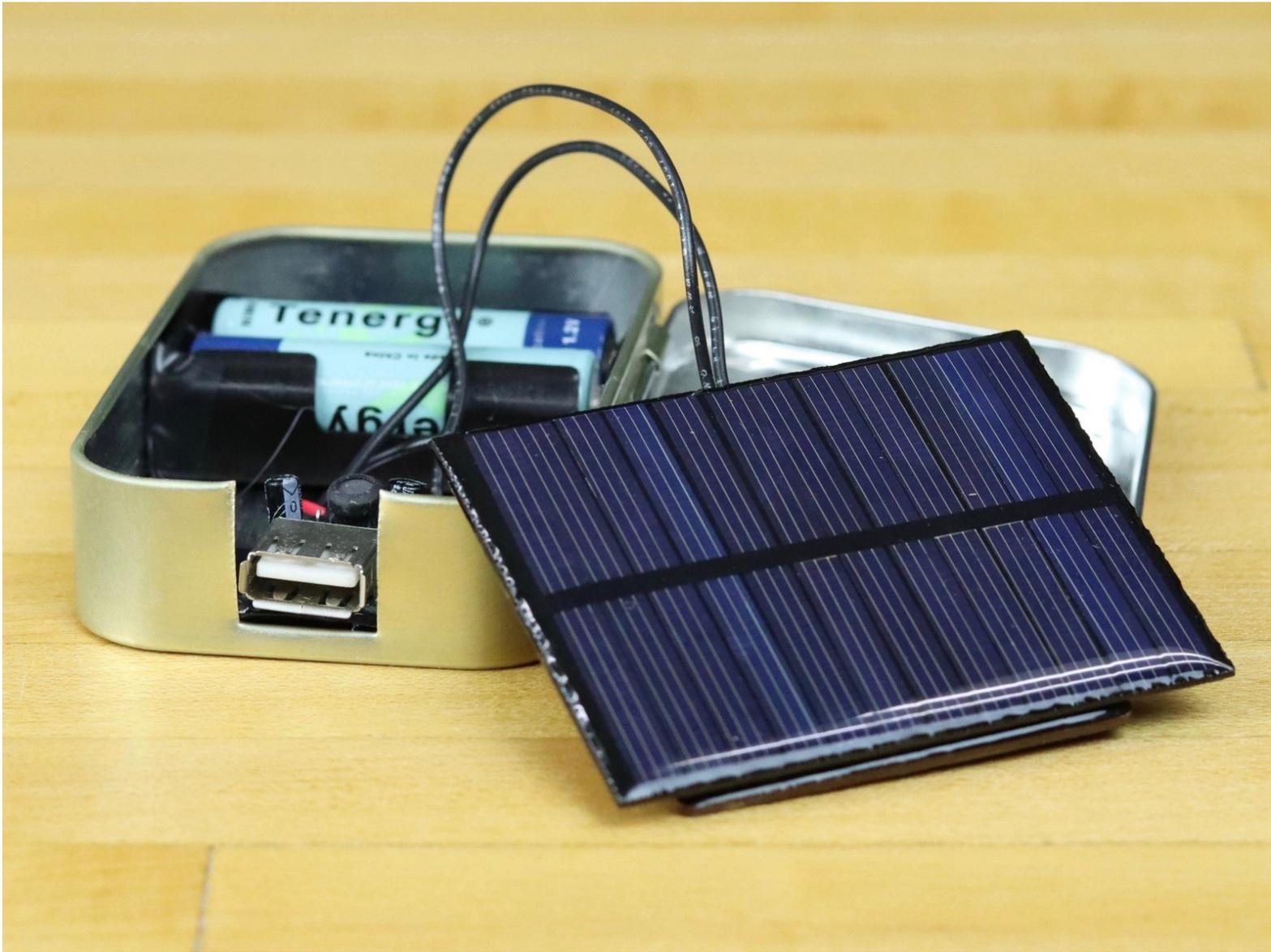




Solar USB Charger 1.0

Guide and directions on how to make the Solar USB Charger 1.0 Kit.

Written By: Joshua



INTRODUCTION

Note: This kit has been replaced with a newer version. Check out the [Solar USB Charger 2.0 Kit](#).

Build a basic Solar USB charger in 15-25 minutes with this simple soldering kit.

The printable PDF has updated directions to reflect the new USB circuit that we're using.



TOOLS:

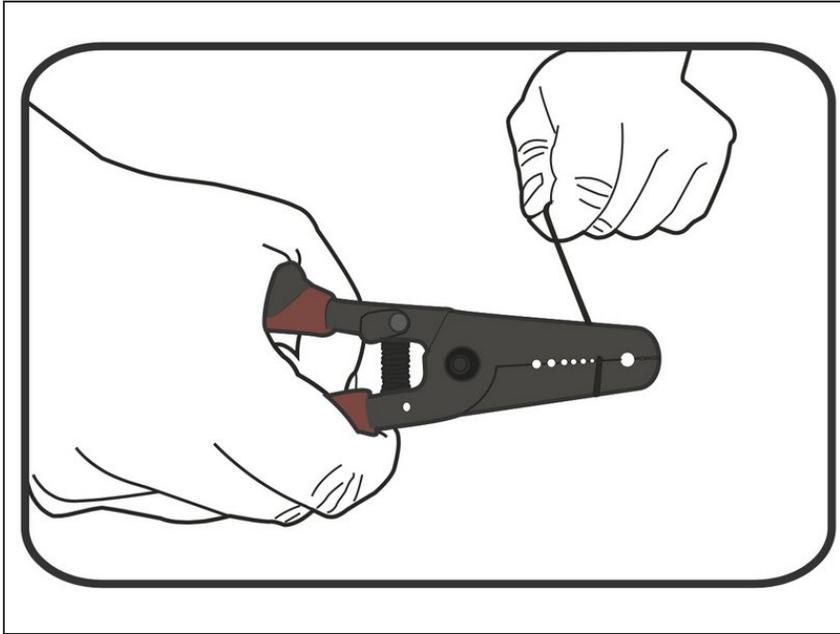
- [Soldering Iron](#) (1)
- [Hot Glue Gun](#) (1)
- [Wire Strippers](#) (1)



PARTS:

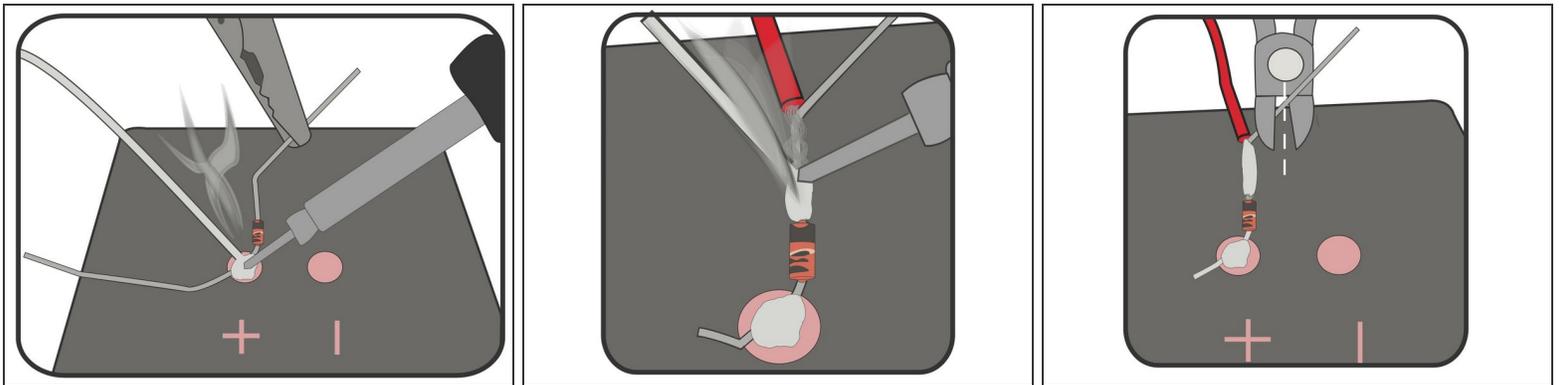
- [Solar USB Charger 1.0 Kit](#) (1)

Step 1 — Strip the Wires



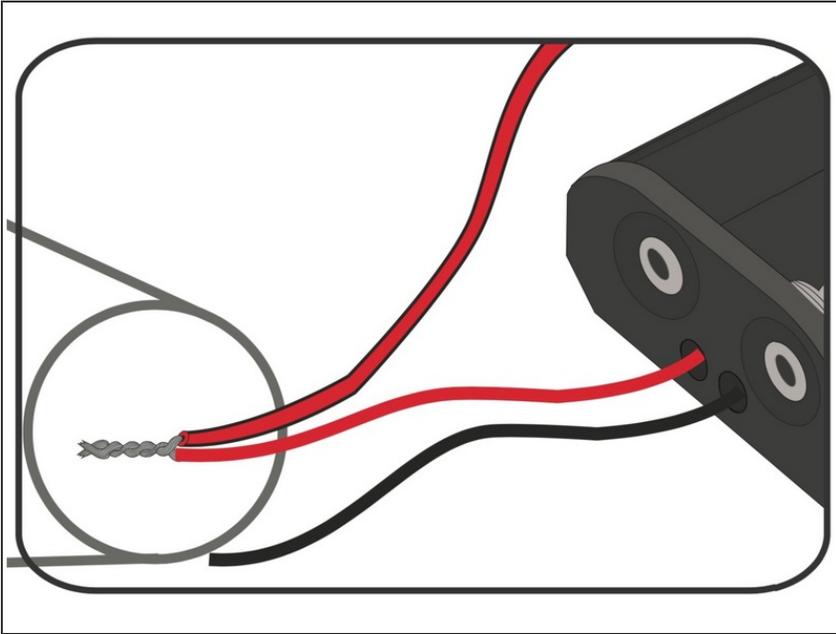
- Strip the ends of all wires, including the Battery Holder.

Step 2 — Solder the Diode



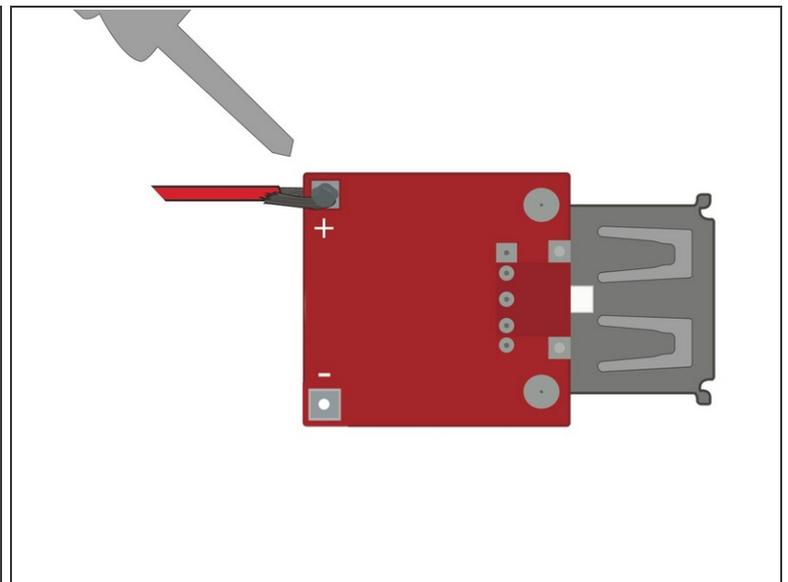
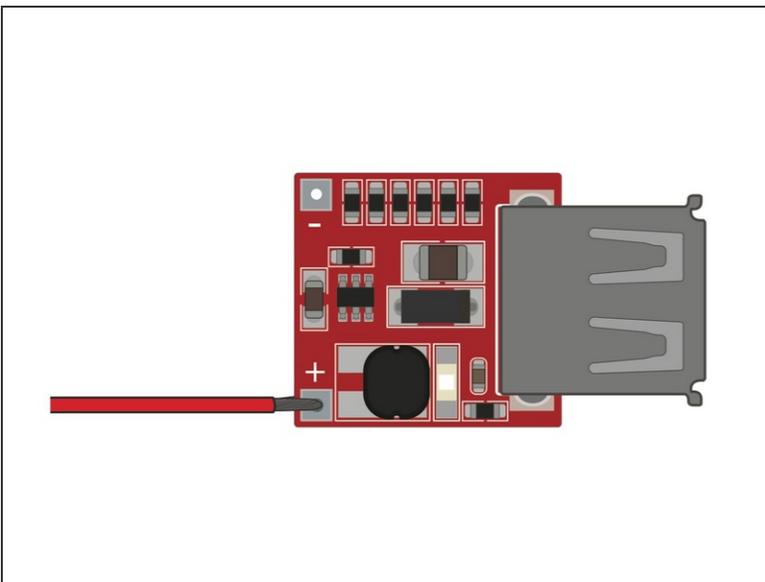
- Solder the Diode to the (+) Positive solder point on the Solar Cell.
- Note: The Diode has a black bar on it. That side is soldered to the Red wire and the non black bar side is soldered to the Solar Cell.
- Twist one end of your Red wire around the other side of the Diode. Solder into place.
- Snip off excess parts of the Diode legs.

Step 3 — Twist the Red Wires



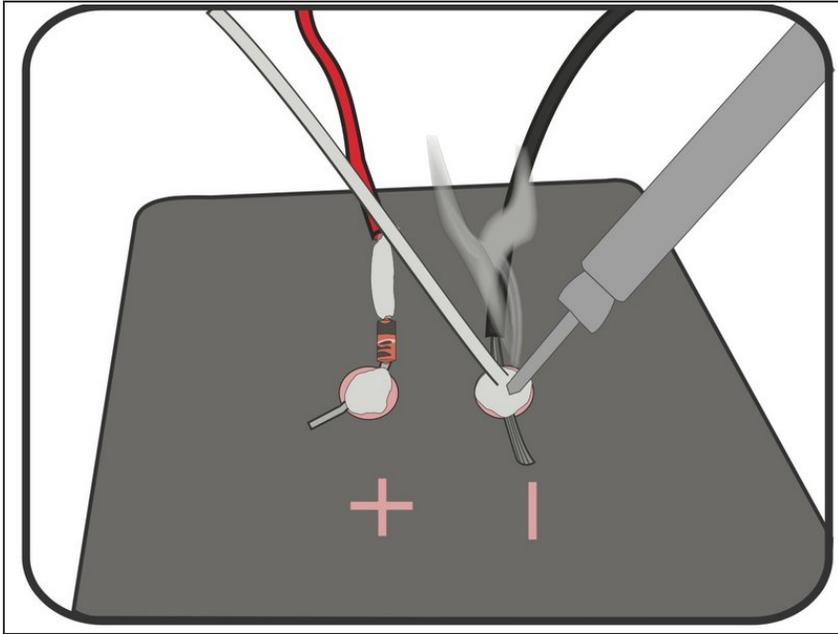
- Twist the Red wire from the Solar Cell together with the Red wire from the Battery Holder.

Step 4 — Solder the USB Circuit Positive Wire



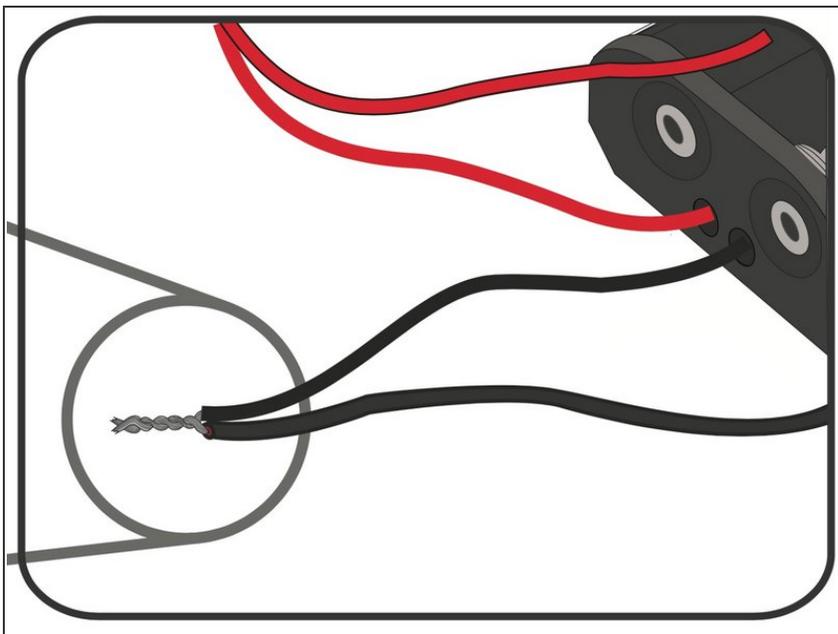
- Solder the Red wire coming off the switch to the (+) Positive terminal on the USB Circuit.

Step 5 — Solder the Solar Cell



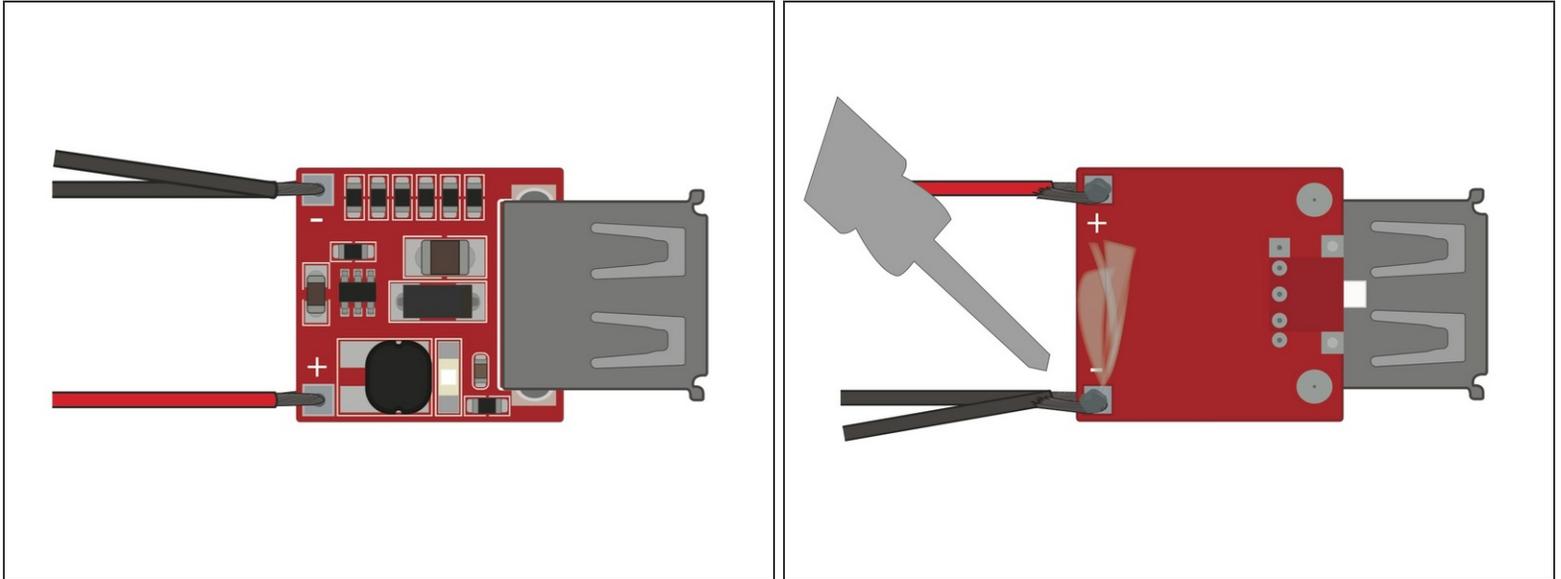
- Solder your Black wire to the (-) Negative side of the Solar Cell.

Step 6 — Twist the Black Wires



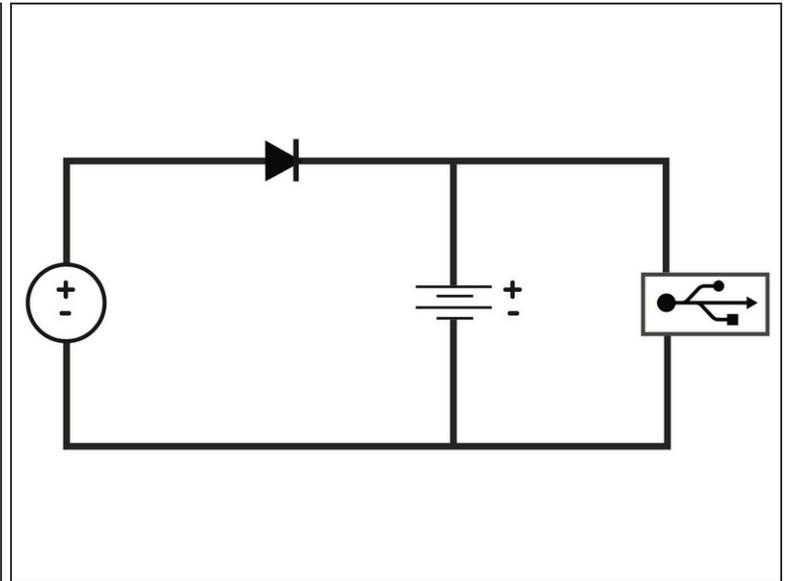
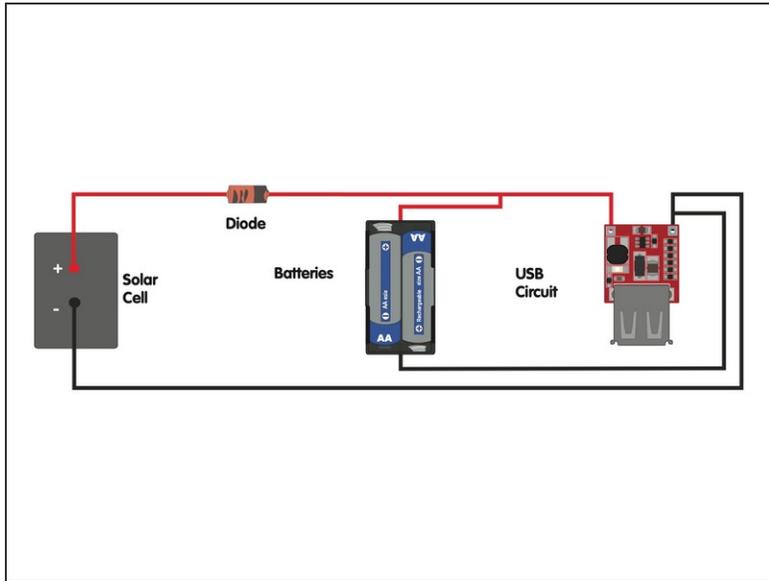
- Twist the Black wire from the Solar Cell together with the Black Wire from the Battery Holder.

Step 7 — Solder the USB Circuit Negative Wires



- Solder the two Black wires to the (-) Negative terminal on the USB Circuit.

Step 8 — Troubleshooting



- The rechargeable AA Batteries used in the kit may be dead, charge them up quickly with a wall AA charger.
- In a pinch, use regular AA Batteries for a quick test. **NEVER try to charge regular AA Batteries.**
- Check out the diagrams in this step if you're worried you missed something.
- When in doubt, try a different USB device.

Step 9 — Enclosures



- While an Altoids tin works well, it is metal and conductive.
- Using a Dollar Store plastic food container or cheap wooden box is always a good solution.