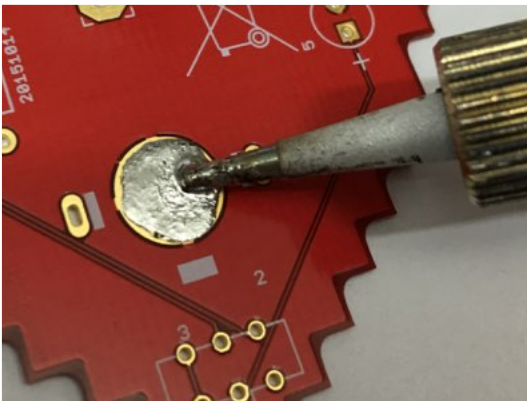


# SOLDER YOUR OWN GLOWING INTERNETDAGARNA BADGE

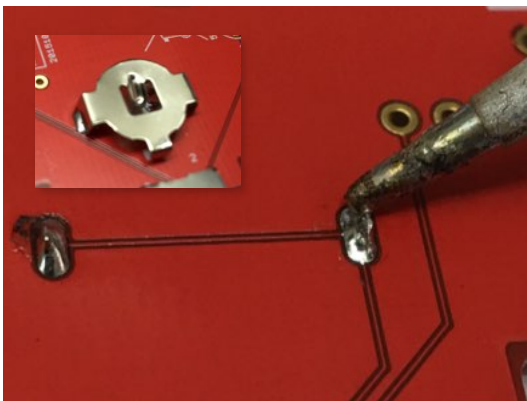
1: Collect what you need to build the badge.



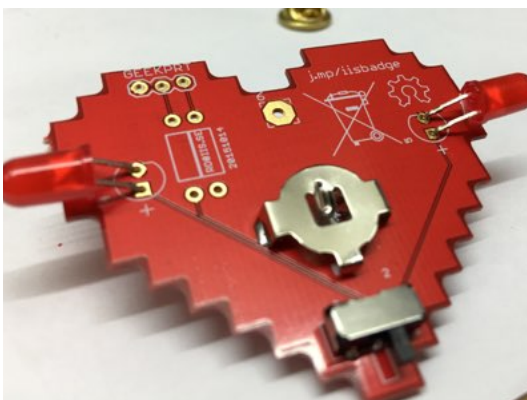
2: Heat and tin the battery connector with some solder. Not too thick!



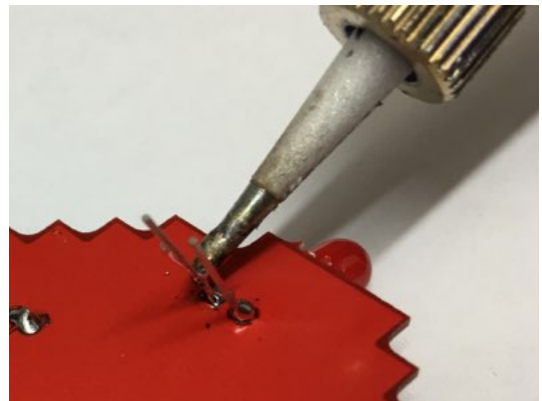
3: Solder the battery holder. Battery should go in at the top (see picture below for correct orientation).



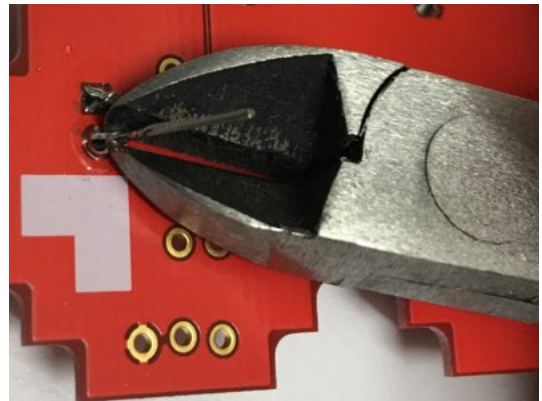
4. Place LEDs. Long leg in the square hole, short leg in the round hole. Bend legs before soldering to make the LEDs stand out.



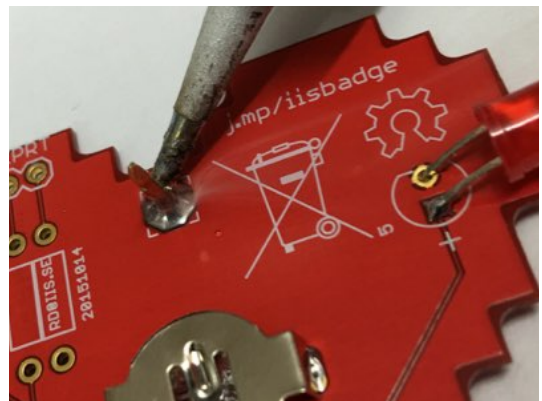
5. Solder all four legs of the LEDs.



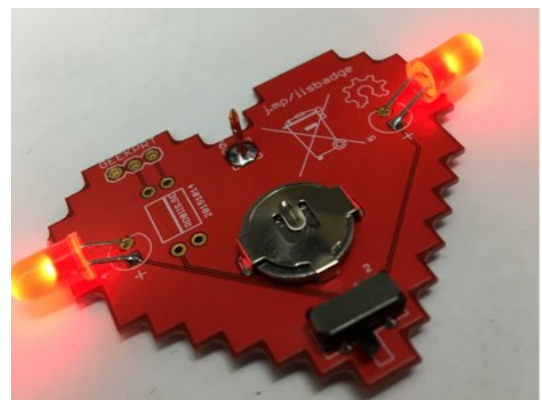
6. Cut the legs of the LEDs using a wire-cutter. Don't cut too close to the badge!

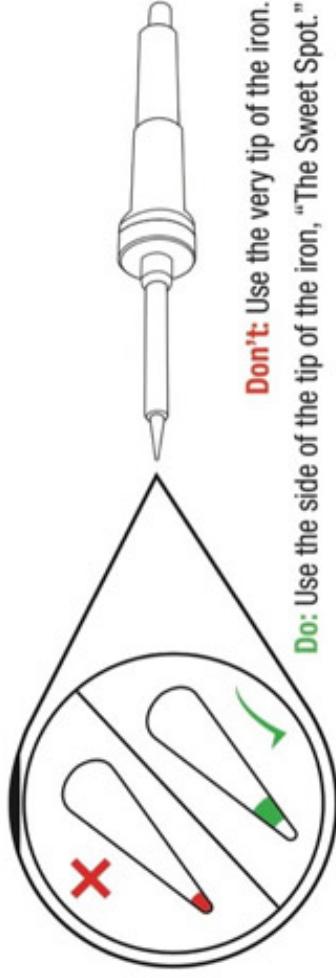


7. Insert the pin from the front and solder it. This is what you stick into your shirt. Don't forget the clasp!



8. Connect battery (plus-side up) and turn on the switch! TADA!! Use the GEEKPRT for more Arduino-fun, parts on request.





**Don't:** Use the very tip of the iron.

**Do:** Use the side of the tip of the iron, "The Sweet Spot."



**Do:** Touch the iron to the component leg and metal ring at the same time.



**Do:** While continuing to hold the iron in contact with the leg and metal ring, feed solder into the joint.



**Don't:** Glob the solder straight onto the iron and try to apply the solder with the iron.



**Do:** Use a sponge to clean your iron whenever black oxidation builds up on the tip.



**A** Solder flows around the leg and fills the hole - forming a volcano-shaped mound of solder.



**B** **Error:** Solder balls up on the leg, not connecting the leg to the metal ring.  
**Solution:** Add flux, then touch up with iron.



**C** **Error:** Bad Connection (i.e. it doesn't look like a volcano)  
**Solution:** Flux then add solder.



**D** **Error:** Bad Connection...and ugly...oh so ugly.  
**Solution:** Flux then add solder.



**E** **Error:** Too much solder connecting adjacent legs (aka a solder jumper).  
**Solution:** Wick off excess solder.

