

2015

Soldering

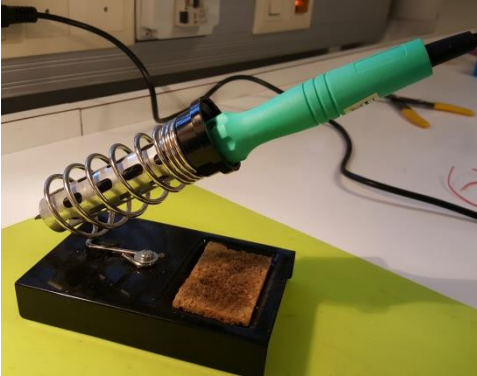


Ahlström Emilia & Horelli Iida

POM1YTN

10/14/2015

WHAT YOU NEED



Soldering iron & wet sponge



Helping hand



Wire strippers



LED-light



Solder



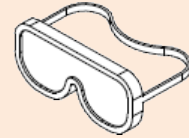
Conducting wire



Fume extractor & table protector

SAFETY

- Before you start, put on a safety jacket and wear safety goggles.
- Be careful with the soldering iron – **it is hot!**
- Remember to always put the iron back to its stand when you are not using it.
- Always use a heat resistant table protector.

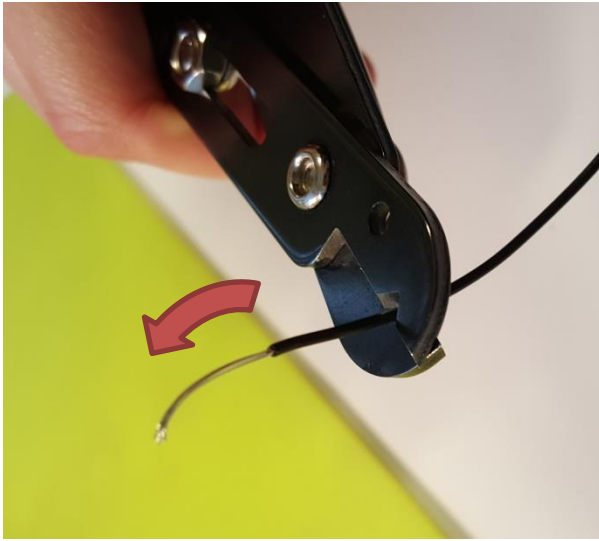


HOW TO SOLDER...

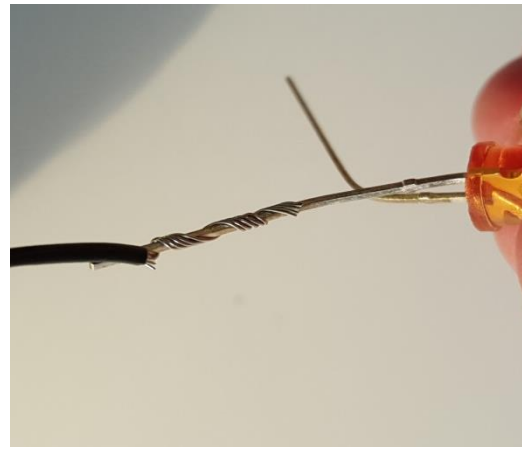
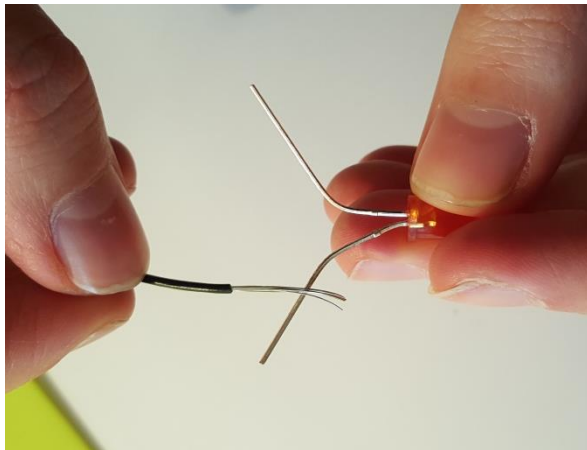
1. Make sure you have a table protector and turn on the fume extractor. Warm up the soldering iron. Make sure it is in its stand when you plug it in. Wet the sponge.
2. While waiting for the iron to warm up, take the wire strippers and cut a piece of conducting wire (approximately 10 cm).



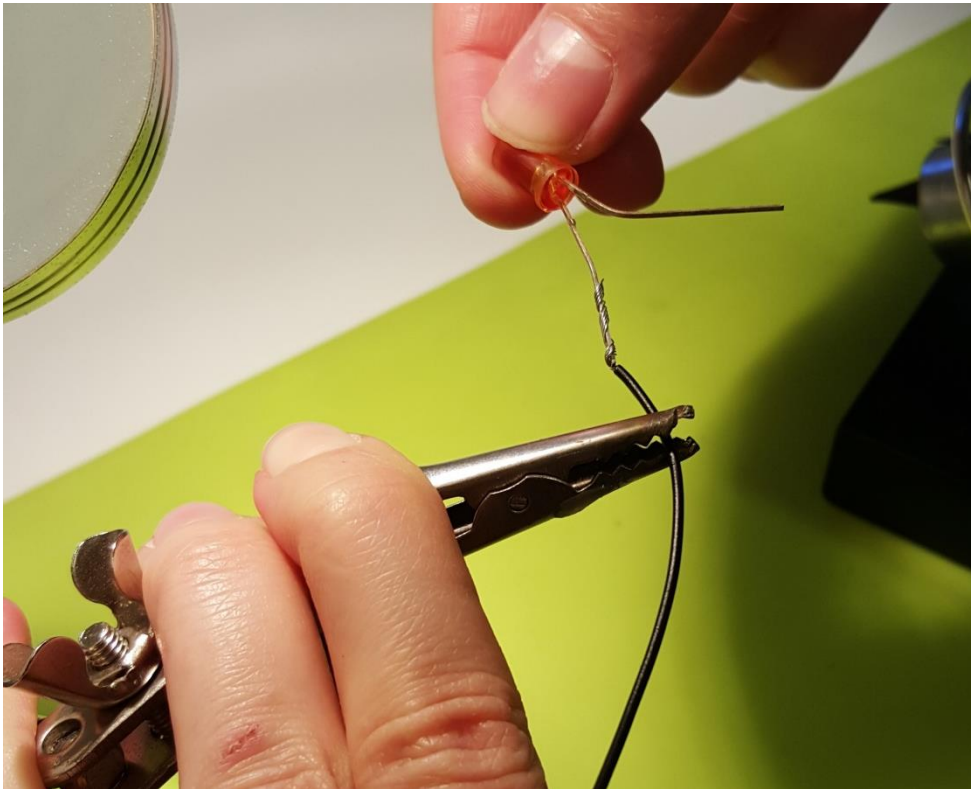
3. Use the wire strippers to strip 1-2 cm from the tip of the conducting wire by pulling the wire strippers along the conducting wire.



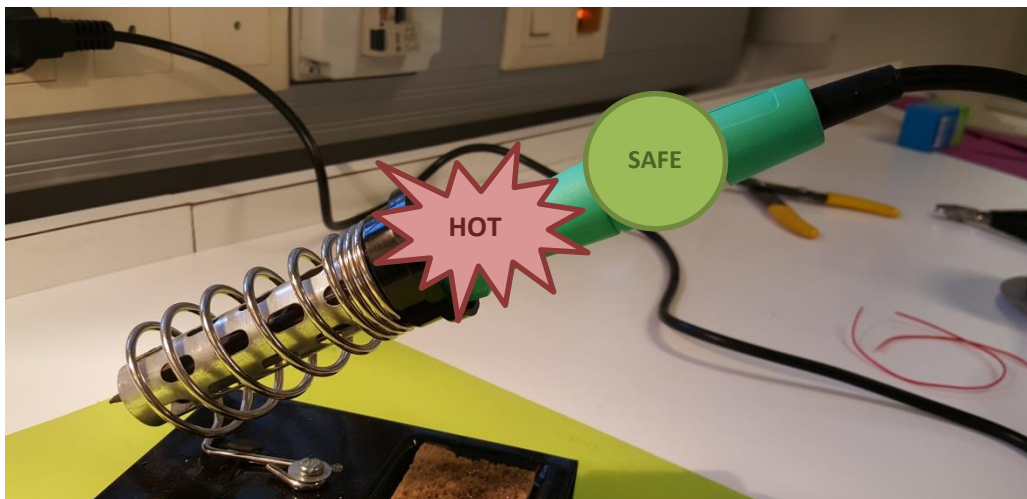
4. Connect the stripped wire to the leg of the LED-light by first making the leg and the wire cross and then twirling them around each other tightly.



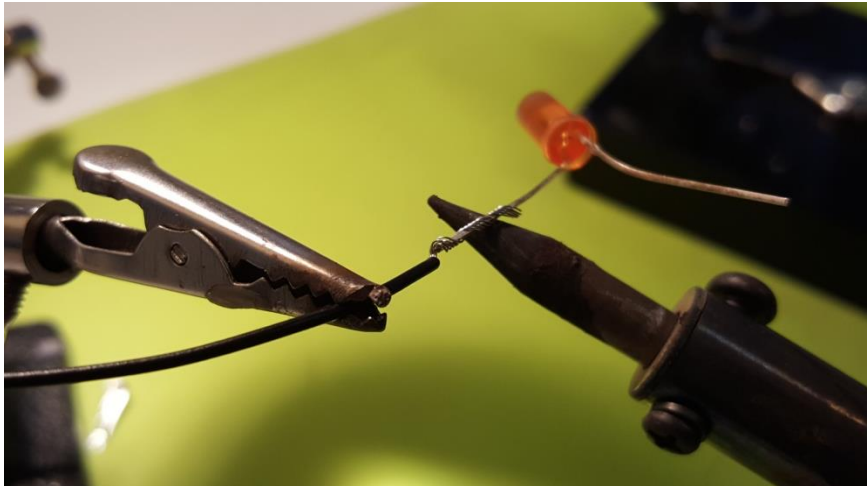
5. Attach the wire and the LED-light to the helping hand.



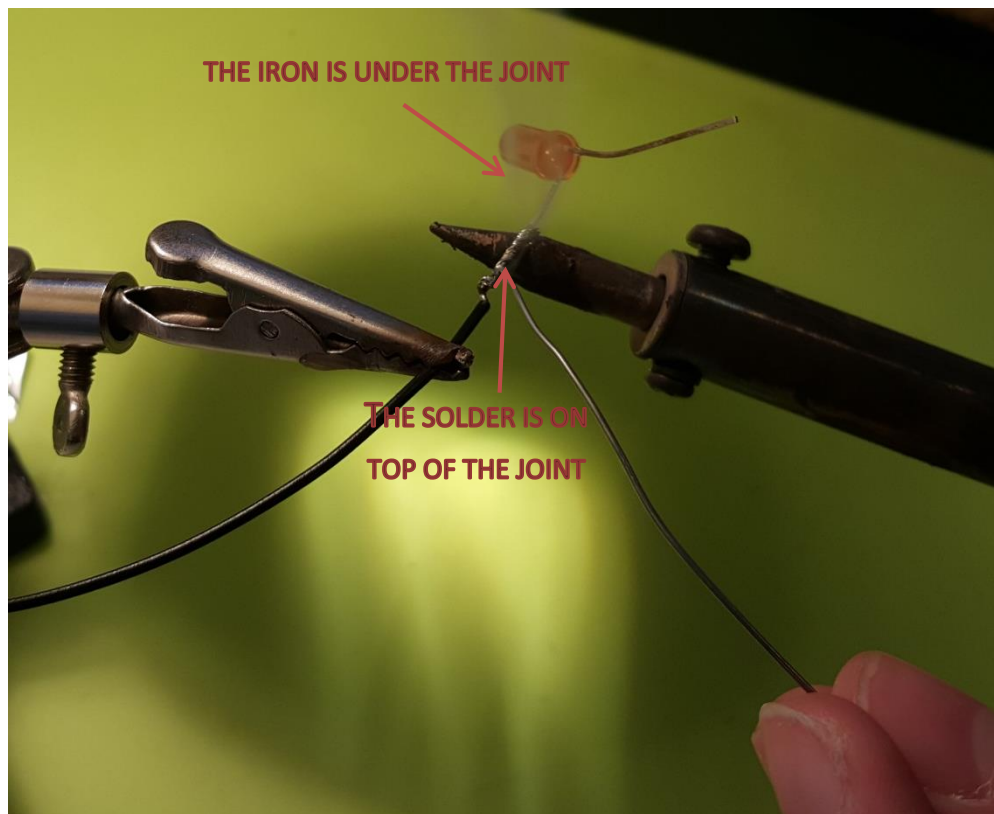
6. Take the soldering iron out of its stand. Do not touch the base of the handle as it might be hot. Be careful not to burn the power cable of the iron.



7. Heat up the joint part by slowly moving the iron against it.



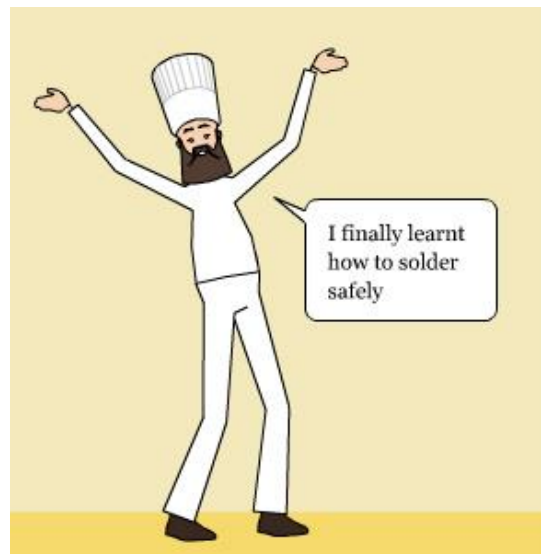
8. Take the solder and keep heating the joint so that the solder melts to it. Remember to only heat the conducting wire, not the solder. Be careful with your fingers! Do not touch the joint part when you are done, as it is really hot.



9. After soldering, clean the iron by wiping it to the sponge and put it back to its stand.



10. Plug off the soldering iron. Be careful not to touch it, it takes a while for the iron to cool off.



DIFFERENTIATION

- Lowering the desk so that people in wheelchair are able to reach it.
- Paying attention to children who have difficulties with concentrating so that they do not hurt themselves or other students
- If someone is scared of soldering, they can practice with the power off at first to gain confidence.
- More advanced students can spend time helping other students.