burned finger.jpg  
burned finger.jpg

Never point a hot soldering iron at another person, grab the wrong end (duh), or hold it your hand and gesture while you talk. If you are not soldering, a hot soldering iron should be in its holder. Respect the heat!

**solder station.jpg**

Some types of soldering irons allow you to adjust the iron's temperature, so always solder at the recommended temperature for the application. Soldering at too high of a temperature can cause the solder to spatter and could also damage sensitive components. Solder the projects for this class at**650 degrees Fahrenheit.**

demon.jpg

If you leave the solder station for even a short amount of time,**turn it off**! If you leave your solder station on when you leave class, scary demons will swoop down from wherever demons hang and accost you! This is unpleasant; don't let it to happen to you.

glasses.jpg

Molten solder can spatter, and leads that have been cut may fly through the air, so you should always wear **safety glasses** to protect your eyes.



**Wear clothing that covers your arms and legs** so that your skin is not exposed.**Do not wear loose, baggy sleeves** or other clothing or **jewelry** that might get in the way. If you have long hair, tie it back. Why risk starting your hair on fire?



exhale man.png

Some of the **fumes** given off by solder and flux contain harmful chemicals. Avoid breathing these flumes as much as possible. If the smoke is getting sucked in with your breath, try exhaling through your mouth and blowing the fumes out of the way.

snacks.jpg

If breathing fumes is harmful, it follows that accidentally ingesting these chemicals while eating is also potentially bad. Besides, greasy or dirty fingerprints can harm printed circuit boards. So, **no eating or drinking while soldering!**

**scratch.jpg**



Also, avoid **touching your hands to your face or eyes** at any time when working with solder. If you have any cuts on your hands, make sure they are covered with bandages before soldering.



fire extinguisher.jpg

Because soldering is a high-heat application, there is the risk of fire, even with the proper safety precautions. Make sure that a multi-purpose **dry chemical extinguisher**is easily accessible to your soldering area. Ask your teacher is there one nearby.

ESD mat.jpg

You must also use the proper work surface when soldering. Make sure the surface on your worktable is heat-resistant or covered with a heat-resistant / ESD mat, so that the heat from the soldering iron will not cause the surface to ignite.



Always **devote your full attention** to the task at hand when soldering. Pay attention! Follow directions!

clean workspace.jpg

When you have completed your project, or are finished soldering for the day, **clean your work area**! Throw all clipped leads away. Arrange the tools in an orderly manner.



While your solder pencil is still hot, melt a blob of solder on the end of the tip. This is called **tinning the tip**.

Turn the solder station off!

hand washing.jpg

When finished working, **wash your hands thoroughly** to remove any harmful chemicals.

**solder station.jpg**

In conclusion, please, please, please **turn off the solder station**! Perfectly good solder equipment has been ruined because someone (ahem) neglected to turn the solder station off.



(You already know about the demons, but did I mention the attack dog?)

attack dog.jpg