

Soldering and Electronics
Project Make, March/April 2023
Mr. Hays

We're going to learn to solder electronic parts and then build a small electronics kit with a partner.

1. First, watch the how to solder videos listed below. If you've never soldered before, please watch both videos. They are very informative. If you have done some soldering before, watch one or the other (or both if you know you could use the refresher.) The links are here and on the Google classroom:

Link 1: <https://www.youtube.com/watch?v=QKbJxytERvg>

Link 2: <https://www.youtube.com/watch?v=Qps9woUGkvl>

2. Second, review the soldering safety guidelines PDF on the Google classroom. If you have any questions, ask Mr. Hays. Soldering irons are very hot and can cause severe burns. Please be cautious and respectful. Click the option that tells me that you read the safety guideline PDF.

3. Third, we will practice soldering or learn to solder individually using some old kits and parts; at first we'll be focusing on how to solder, not worrying about making a circuit actually work. Mr. Hays will help you get going; other classmates who know how to solder can also help. Everyone checks out a solder kit from Mr. Hays and returns to show him when you are done.

4. Fourth, when you have completed the learn to solder assignment appropriately you will start the electronics kit process with a partner of your choice.

Carefully solder the kit together following the instructions provided. When done come to Mr. Hays for a battery check: we connect it to an actual battery and make sure it works. If it works, you get 100%. If it does not, we'll see what your grade will be. How careful were you in your build? Does it look like you were trying hard to succeed? Were you careless or sloppy? These questions will help Mr. Hays assign you and your partner a grade. You'll both be sharing the grade, so you please help each other do the build. That said, both people need to help solder to get credit.

Solder often contains lead, which is poisonous. Do not eat or drink while soldering or handling solder, clean up your area when you are done soldering, and wash your hands with soap at the class sink in the back when you are done.