**Uploading Code to Arduino** – Once code is uploaded to the Arduino it stays in the onboard memory forever. To upload code to the Arduino Follow these steps:

1. Download the Arduino IDE
2. Open the Arduino IDE
3. Connect Arduino to computer via compatible usb cable.   
   (\*\*NOTE: NOT ALL USB CABLES CONTAIN DATA LINES. CHEAP CABLES WILL PROVIDE POWER BUT BE UNABLE TO TRANSFER DATA / UPLOAD CODE\*\*)
4. Select the correct microcontroller board to upload to. Click “Tools” 🡪 “Board” and then navigate to the correct microcontroller model. We are using “Arduino Uno”.
5. Select the correct port. The port designates which USB port to communicate with the Arduino. Click “Tools” 🡪 “Port” then select the correct port which should be labeled with the model of microcontroller connected to computer. If no port is labeled unplug your USB then check the ports. Plug in your USB then check the ports again, there should be a suggested port that was not there, that is the one to select.A screenshot of a computer program

   Description automatically generated
6. Click “File” 🡪 “Save” to save your code and board settings.
7. Now that your board and port are set, simply click the green arrow at the top left corner of the IDE to start the upload! Alternatively, from the menu bar you can click “Sketch” 🡪 “Upload”.
8. Wait for your code to upload, text at the bottom of the IDE should indicate the status of the upload.
9. Once your code has successfully uploaded you can remove the Arduino! When powered it will run the code indefinitely.