What is it :

Arduino is an open-source platform used for building electronic devices. It consists of both a physical programmable circuit board and a piece of software that runs on a computer used to write and upload code to the physical board.

What is it used for :

The Arduino has become quite popular with people who are starting out with electronics. Unlike other programmable boards such as Raspberry Pi it does not need a separate piece of hardware (called a programmer) in order to load to the board you can simply use a USB cable. The Arduino uses a simplified version of C++, which makes it easier to learn how to program it.

What and why will I use it for :

I will be using the Arduino Uno. Which is one of the more popular boards in the arduino family and a good choice for a beginner. I will be creating a spirograph mentioned above using the Uno and specific Pressure Sensor (Honeywell RR Transducer ASDXRRX010ND7A5) to measure air flow. I am creating a spirograph to monitor the lung function of patients with CF.