# Calculating Piece Colour

## Setup:

* Can be performed at any time if ambient brightness is consistent (e.g., no flickering)
* Insert all green pieces
* Upload the Arduino code and open the Arduino IDE's serial monitor to collect data from the experiment.

## Method:

* Leave it running in the background
* Wait for a few hours
* Save the file as “green\_pieces.csv”
* The program will automatically test the pieces by changing the colour of the LED and measuring the effect on the LDR. You can complete other tasks if the Arduino IDE and Serial Monitor remain open.
* then repeat for the red and blue pieces saving as “red\_and\_blue\_pieces.csv”
* used run the calculating\_piece\_colour.py program to display the data in a 3d graph and output the expected reflectivity by colour to the terminal window
* copy this data into the Arduino program