

The Education University of Hong Kong
2021-2022 Quality Education Fund Thematic Network – Tertiary Institutes
STEM Project Team

SCHOOL: YING WA GIRLS' SCHOOL (S1)

TOPIC: PHOTOSYNTHESIS IN AQUATIC PLANTS

Coding



How many Leds will be used (as ? format)

- Colour:
- Red
 - Orange
 - Yellow
 - Green
 - Blue
 - Indigo
 - Violet
 - Purple
 - White
 - Black (x)

Color Chart	R	G	B	Color Name
	0	0	0	Black
	255	255	255	White
	224	224	224	Light Gray
	128	128	128	Gray
	64	64	64	Dark Gray
	255	0	0	Red
	255	96	208	Pink
	160	32	255	Purple
	80	208	255	Light Blue
	0	32	255	Blue
	96	255	128	Yellow-Green
	0	192	0	Green
	255	224	32	Yellow
	255	160	16	Orange
	160	128	96	Brown
	255	208	160	Pale Pink

Search...

Basic

Input

Music

Led

Radio

Loop

Log

Variables

Math

NeoPixel

more

Advanced

set strip to NeoPixel at pin P0 with 30 leds as RGB (GRB format)

1 to strip range from 0 with 1 leds

2 to strip range from 1 with 1 leds

3 to strip range from 2 with 1 leds

4 to strip range from 3 with 1 leds

5 to strip range from 4 with 1 leds

6 to strip range from 5 with 1 leds

7 to strip range from 6 with 1 leds

8 to strip range from 7 with 1 leds

9 to strip range from 8 with 1 leds

10 to strip range from 9 with 1 leds

1 show color red

2 show color orange

3 show color yellow

4 show color green

5 show color blue

6 show color purple

7 show color white

8 show color black

How many Leds will be used

Which Leds (0,1,2,3...)

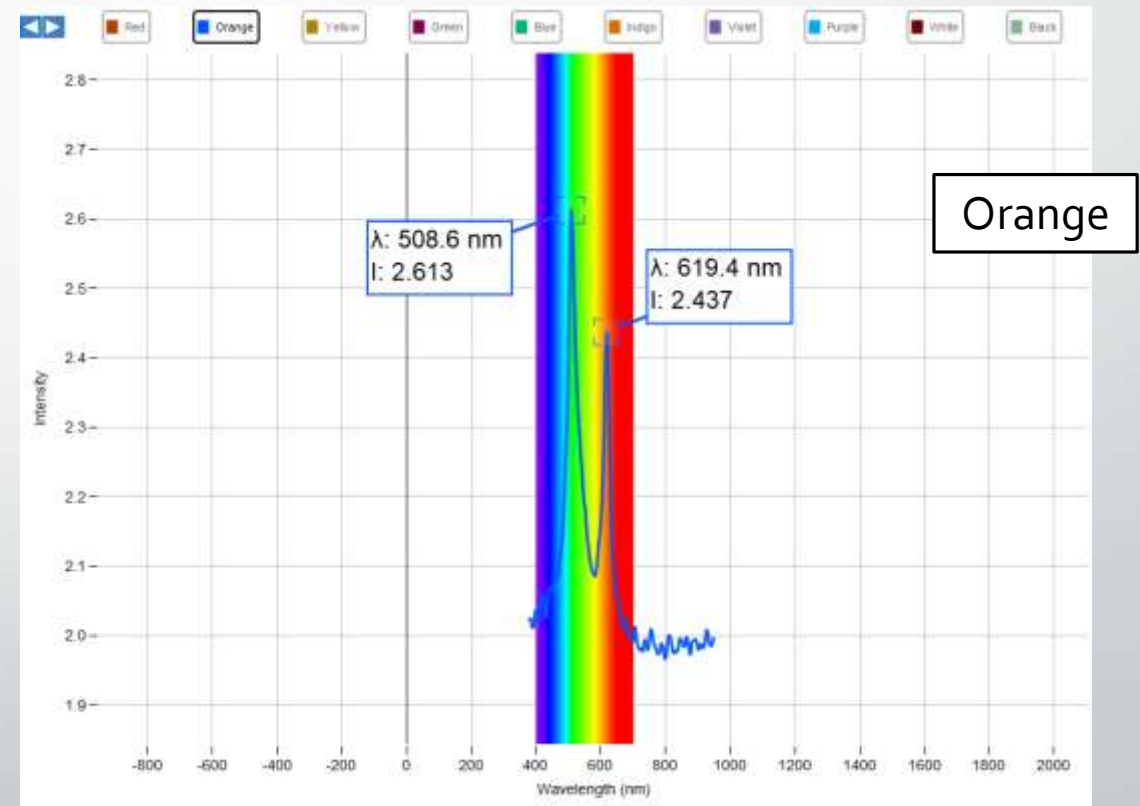
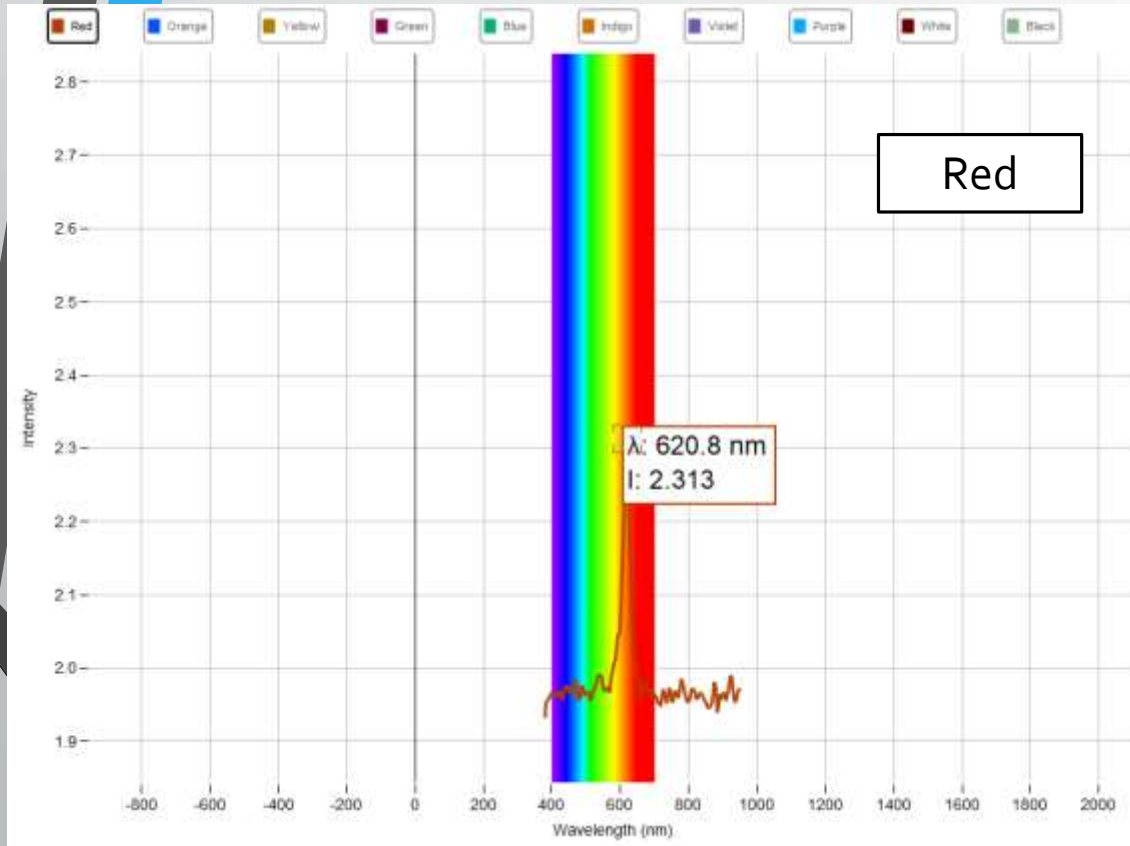
Number of Leds in this strip

NEOPIXEL LED Strip



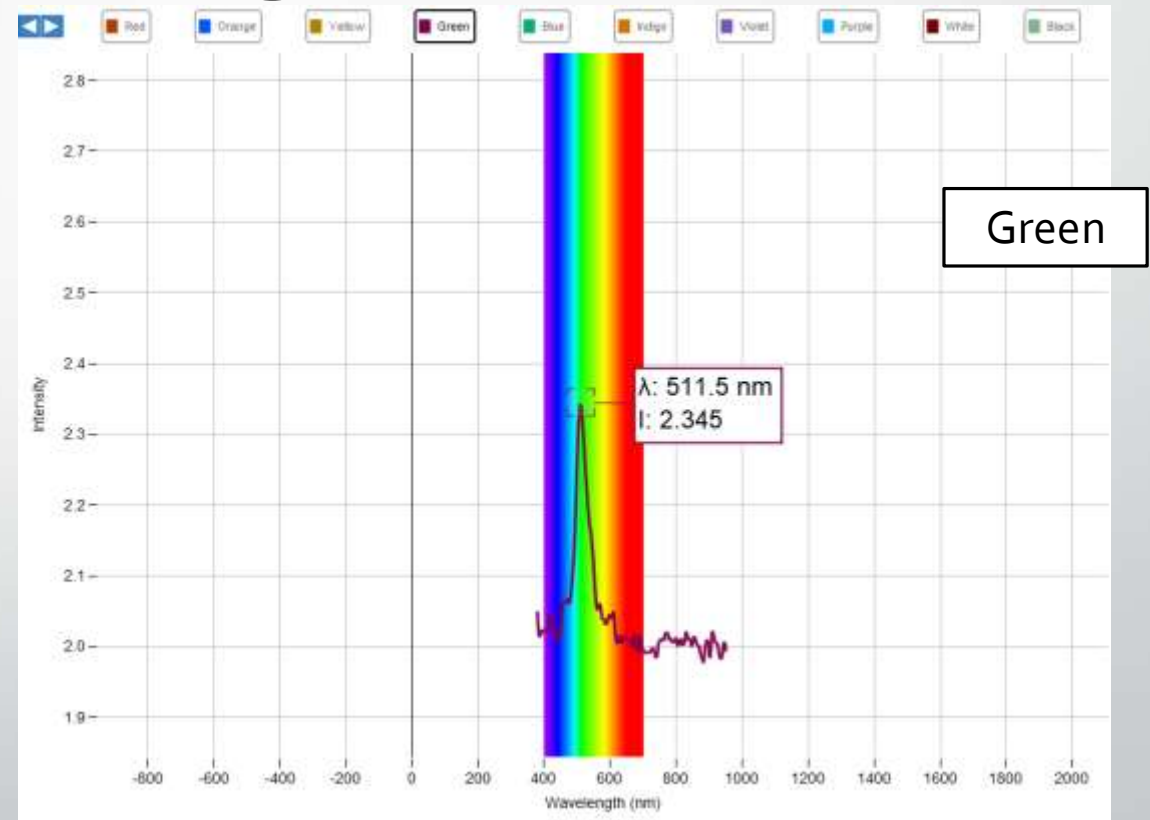
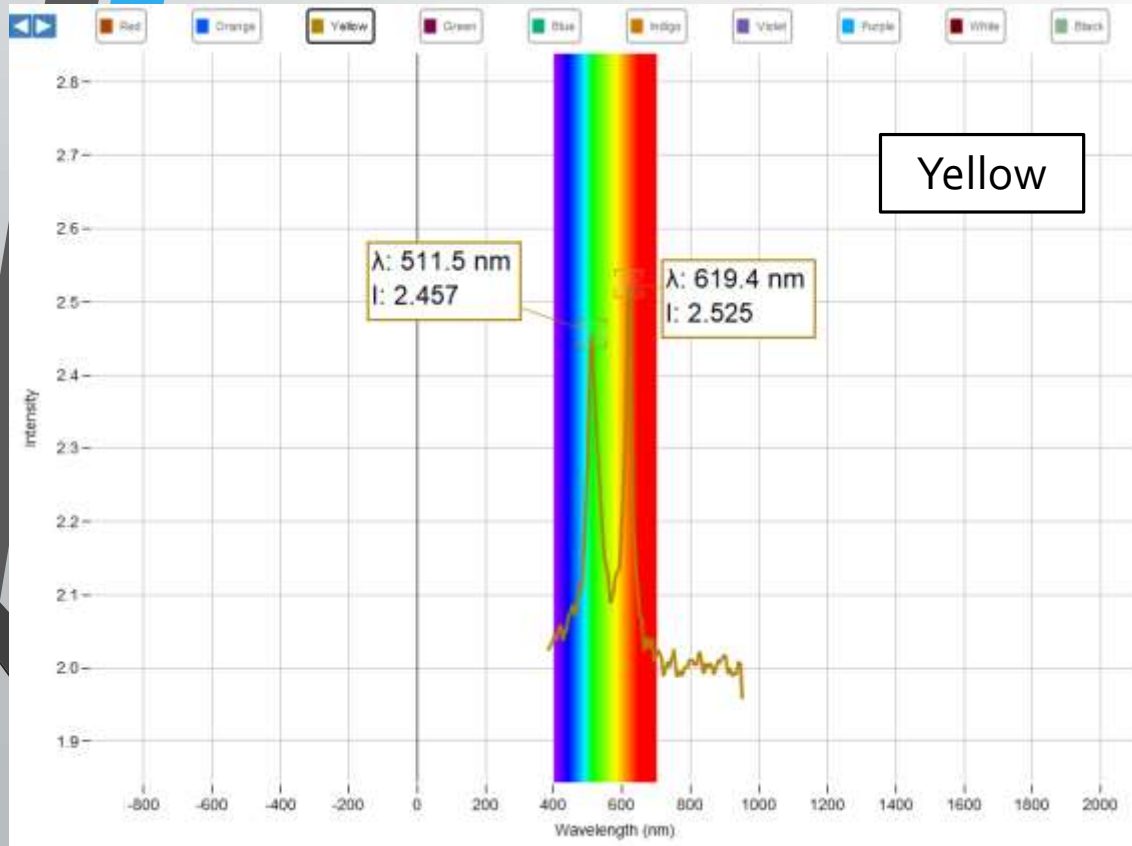
Colour: Red Orange Yellow Green Blue Indigo Violet Purple White Black (x)

NEOPIXEL LED Strip Intensity & Wavelength(nm) (1)

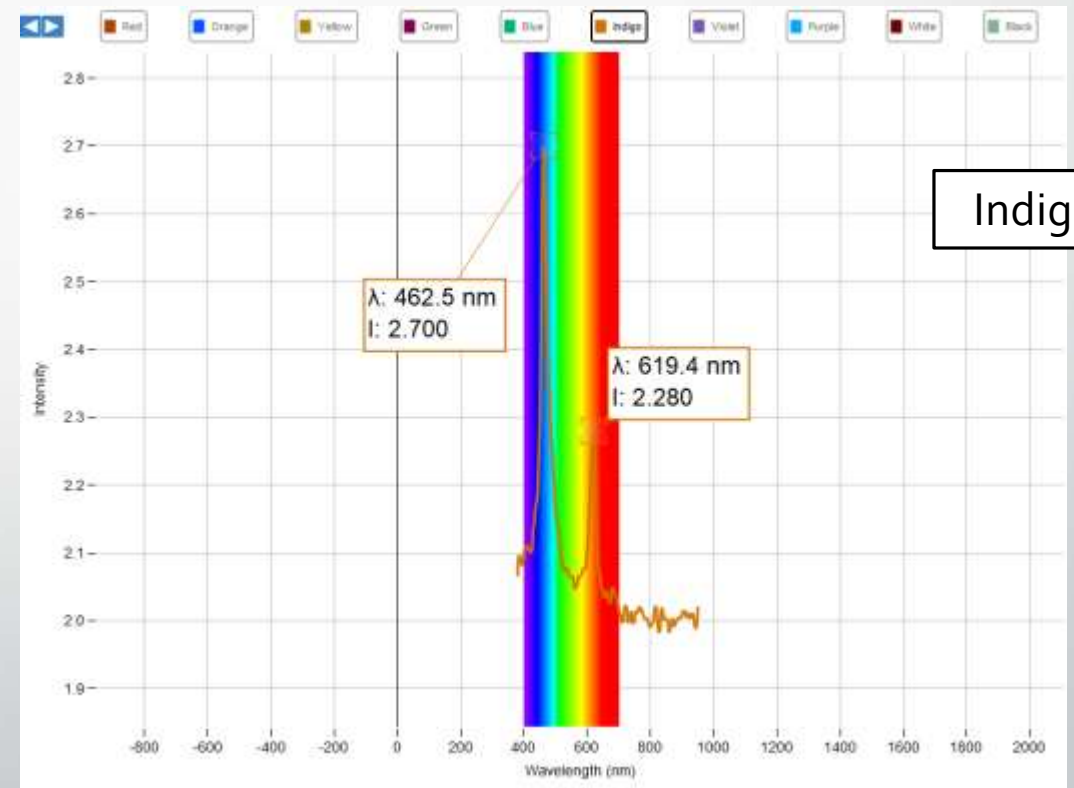
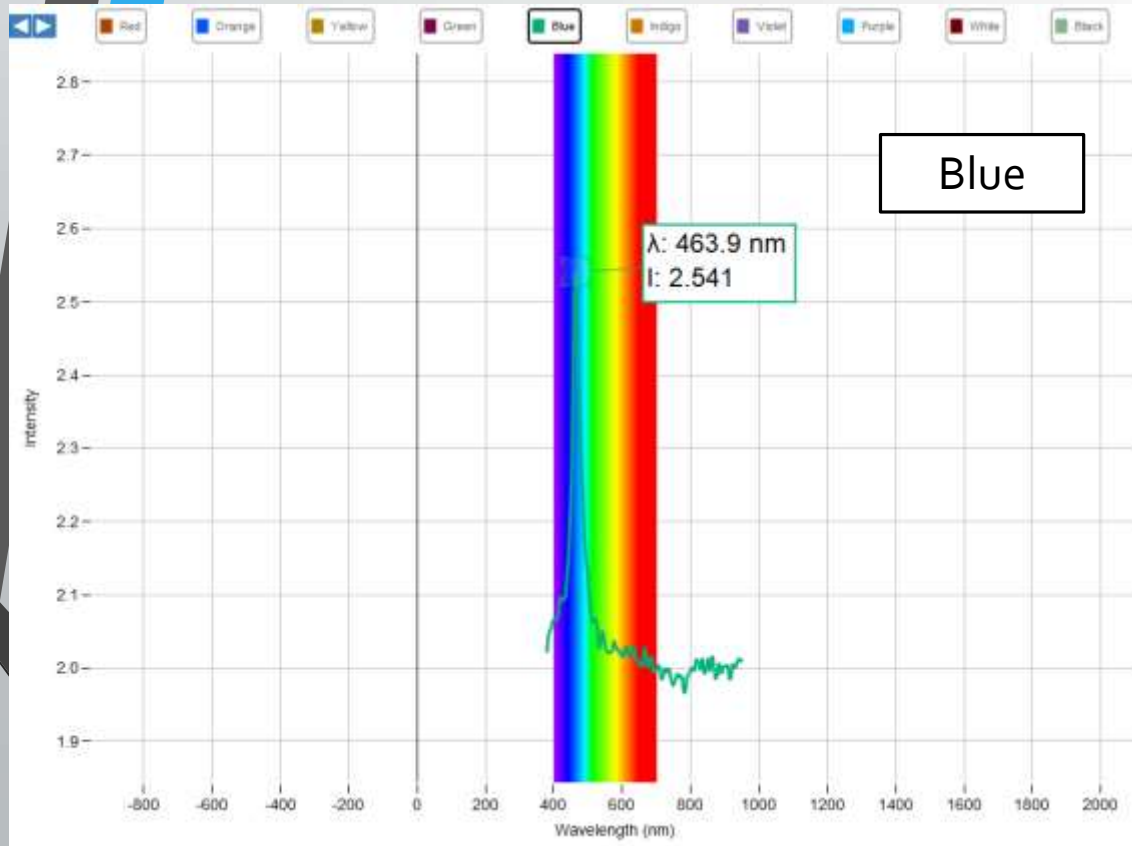


NEOPIXEL LED Strip

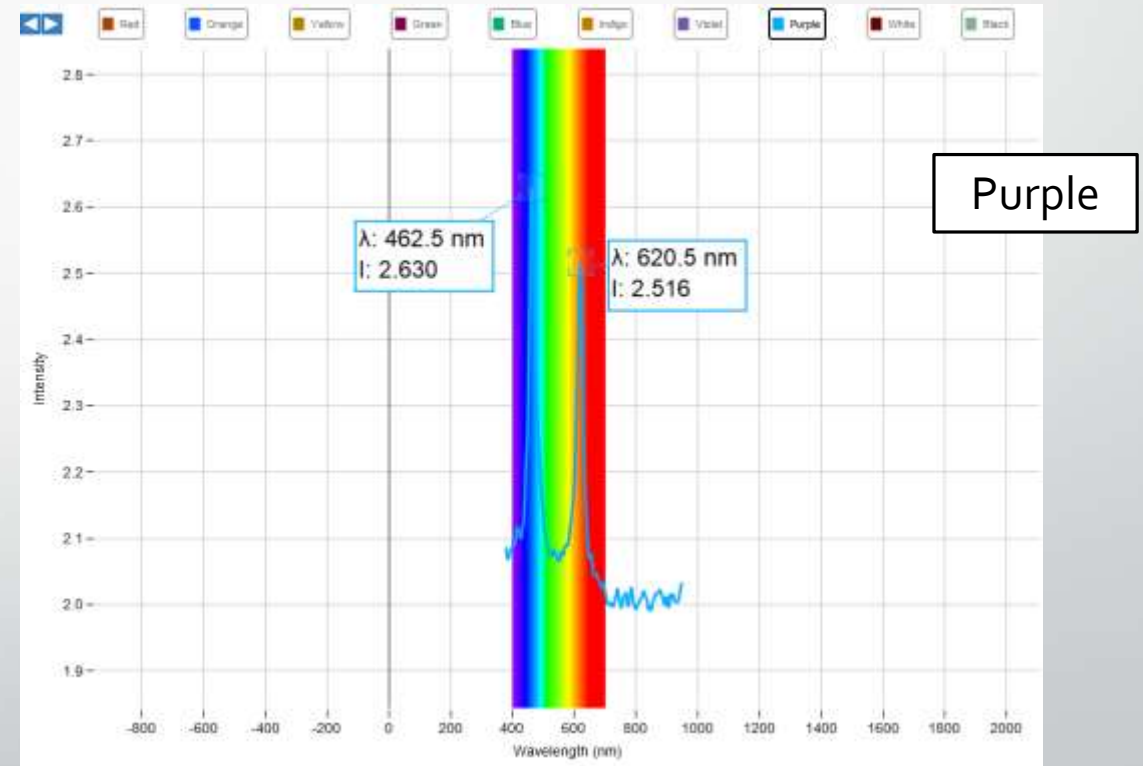
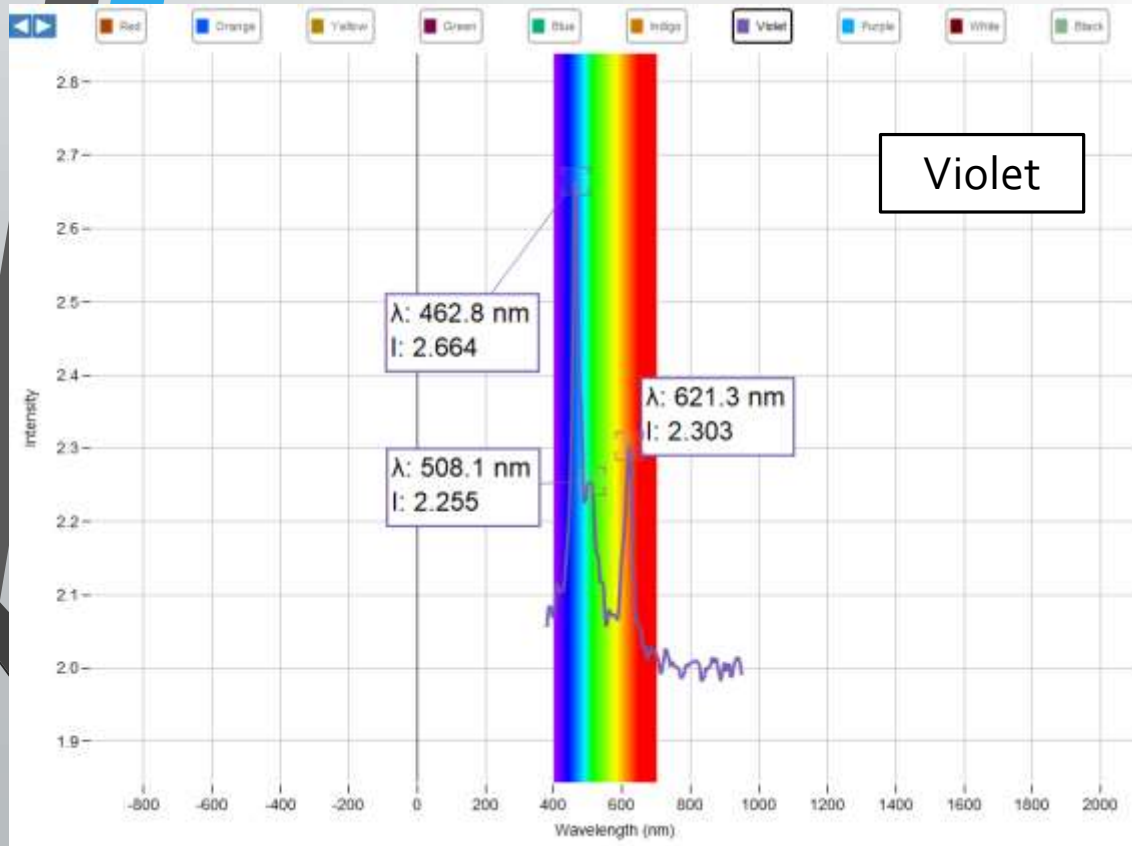
Intensity & Wavelength(nm) (2)



NEOPIXEL LED Strip Intensity & Wavelength(nm) (3)

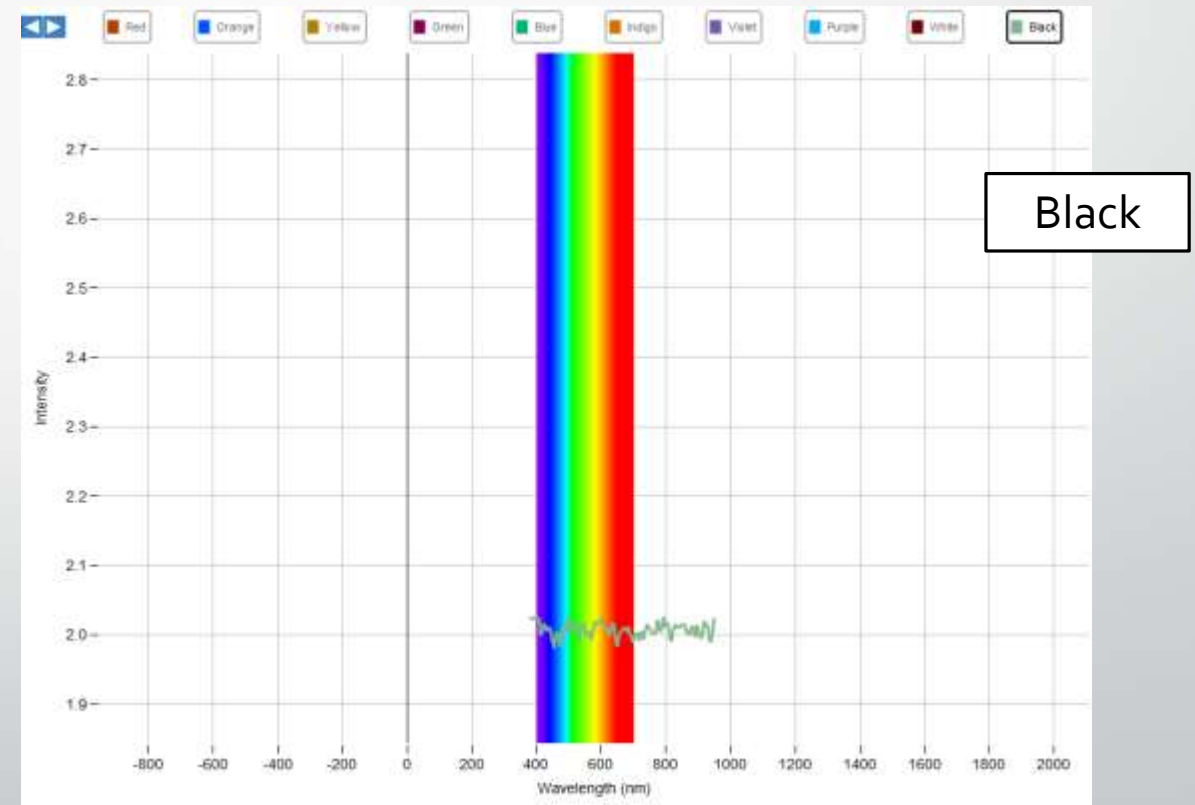
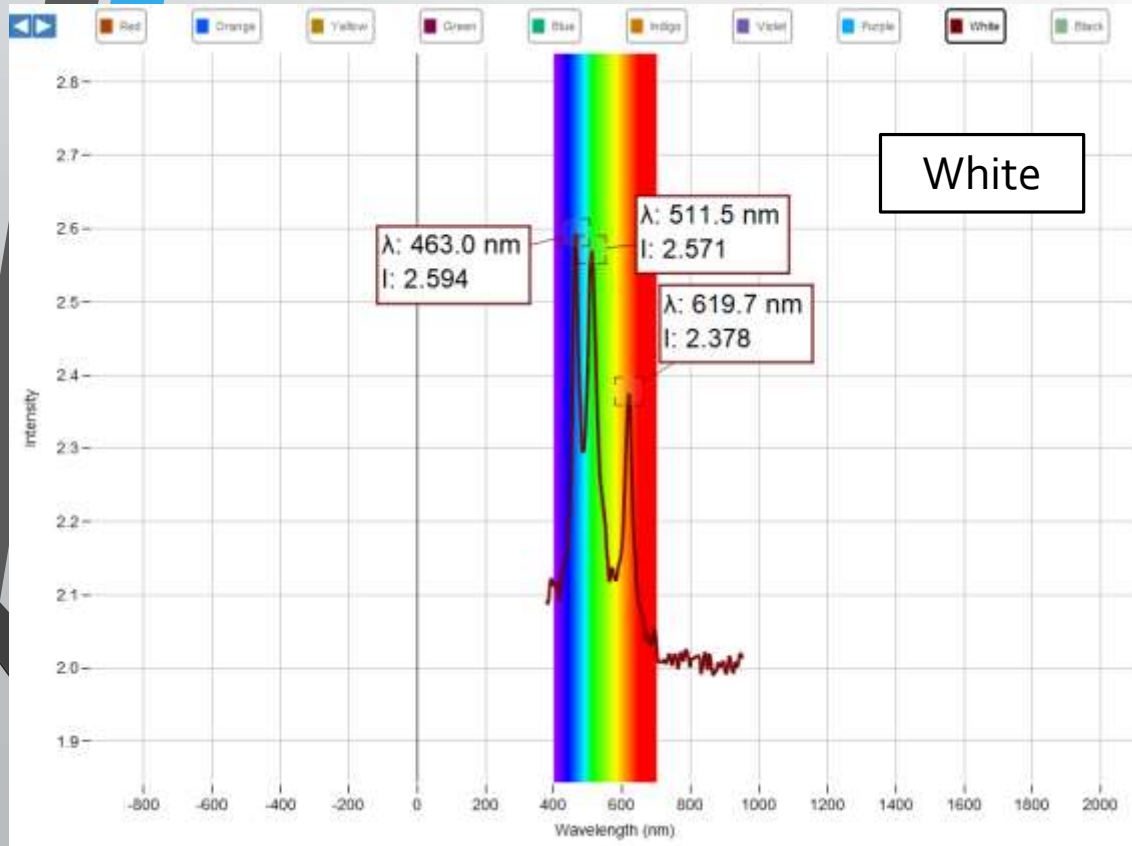


NEOPIXEL LED Strip Intensity & Wavelength(nm) (4)

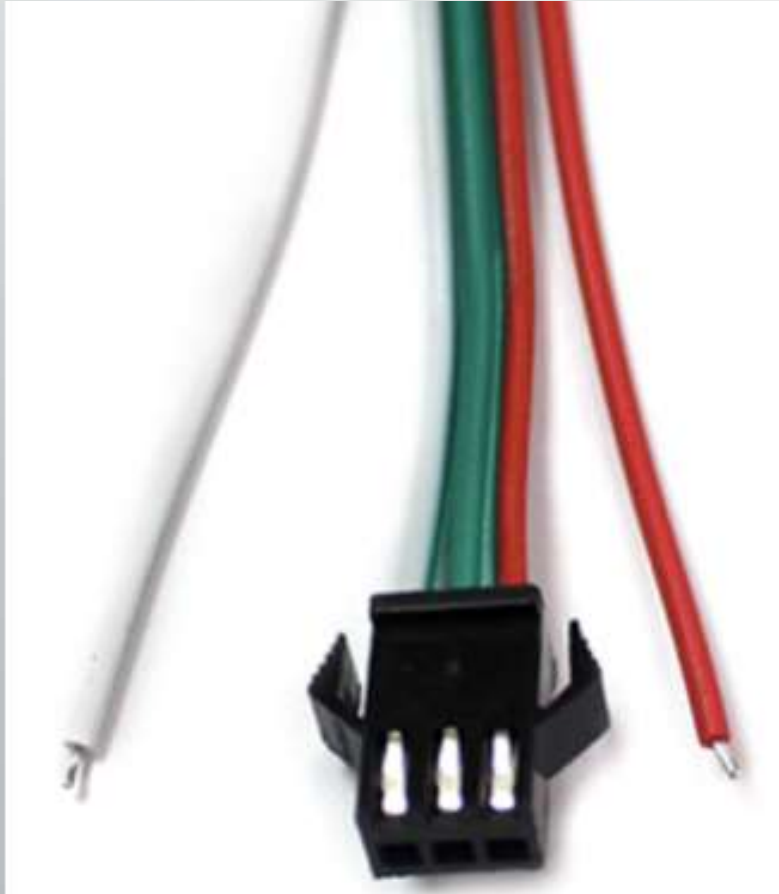


NEOPIXEL LED Strip

Intensity & Wavelength(nm) (5)

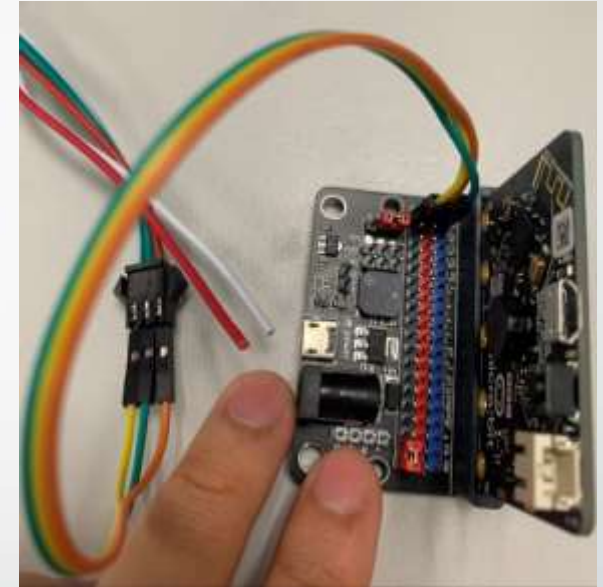


CONNECTIONS OF NEOPIXEL LED WITH MICRO:BIT

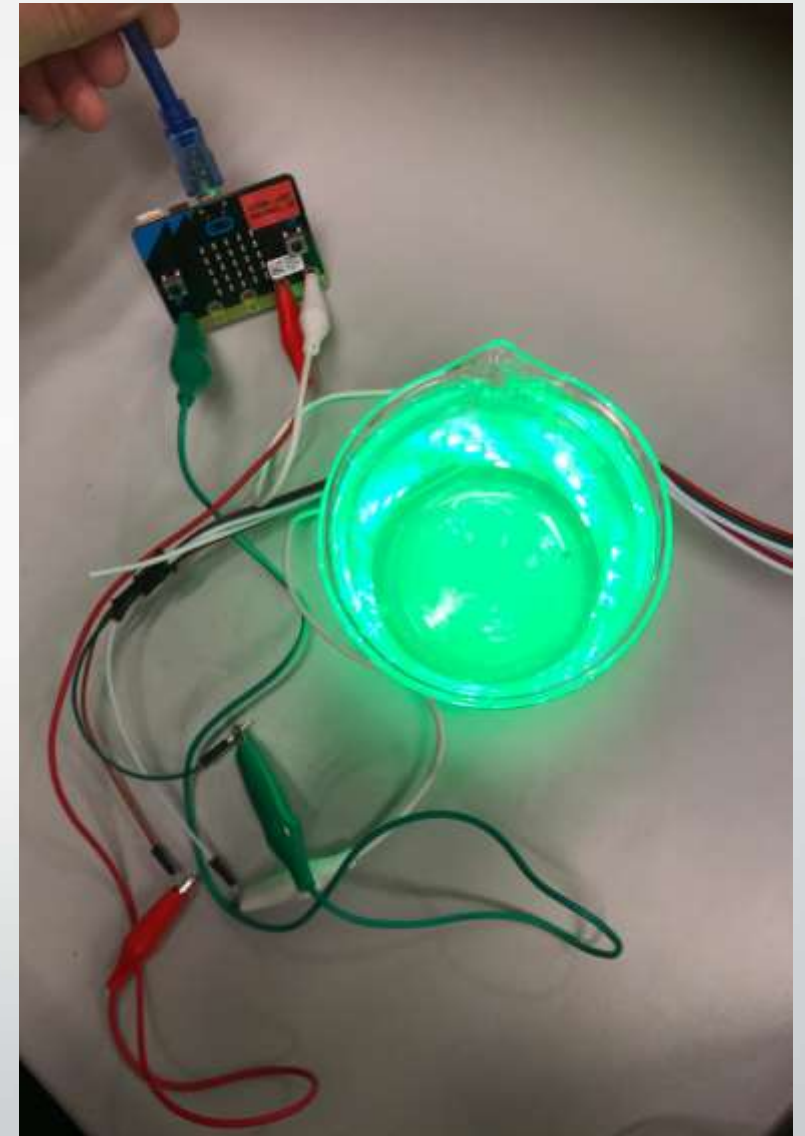


- red > 3V
- green > pin 0
- white > GND

NOTE: Please note that LED strip has to be connected to the plug as shown on the picture. LED strip will NOT work if connected on the other end of the strip



Handcraft



Data Reference

Volume of Oxygen Produced (mL) vs. Time (Hour)

