

BIOLOGY REPORT

EFFECT OF LIGHT INTENSITY ON OXIGEN PRODUCTION IN CANADIAN PONDWEED



OBJECTIVE

In this investigation , we investigated the effect of light intensity on the rate of photosynthesis and generate data to analyse.

We used our knowledge of the factors which affect the rate of the photosynthesis to explain the results of the investigation.



MATERIALS

1) Canadian pondweed

1



2) Lamp

2



3) Stopwatch.



4) Funnel

4



5) Buret.

5|8



6) Metre ruler

6

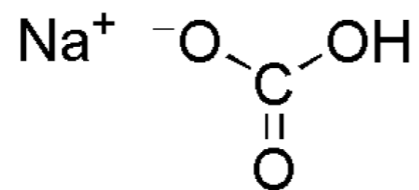


7) Water



8) Boss clamp and stand.

9) Sodium bicarbonate



9



7

METHOD

- 1) We put sodium bicarbonate in water
- 2) We put the funnel into the buret
- 3) We put Canadian pondweed in the funnel with the solution that we made
- 4) We reversed the funnel into the bowl
- 5) We put some water in the bowl
- 6) We put the lamp at different distances from the bowl
- 7) We counted bubbles per minute

SAFETY CONSIDERATIONS

Take care when handling the lamp as this will become very hot

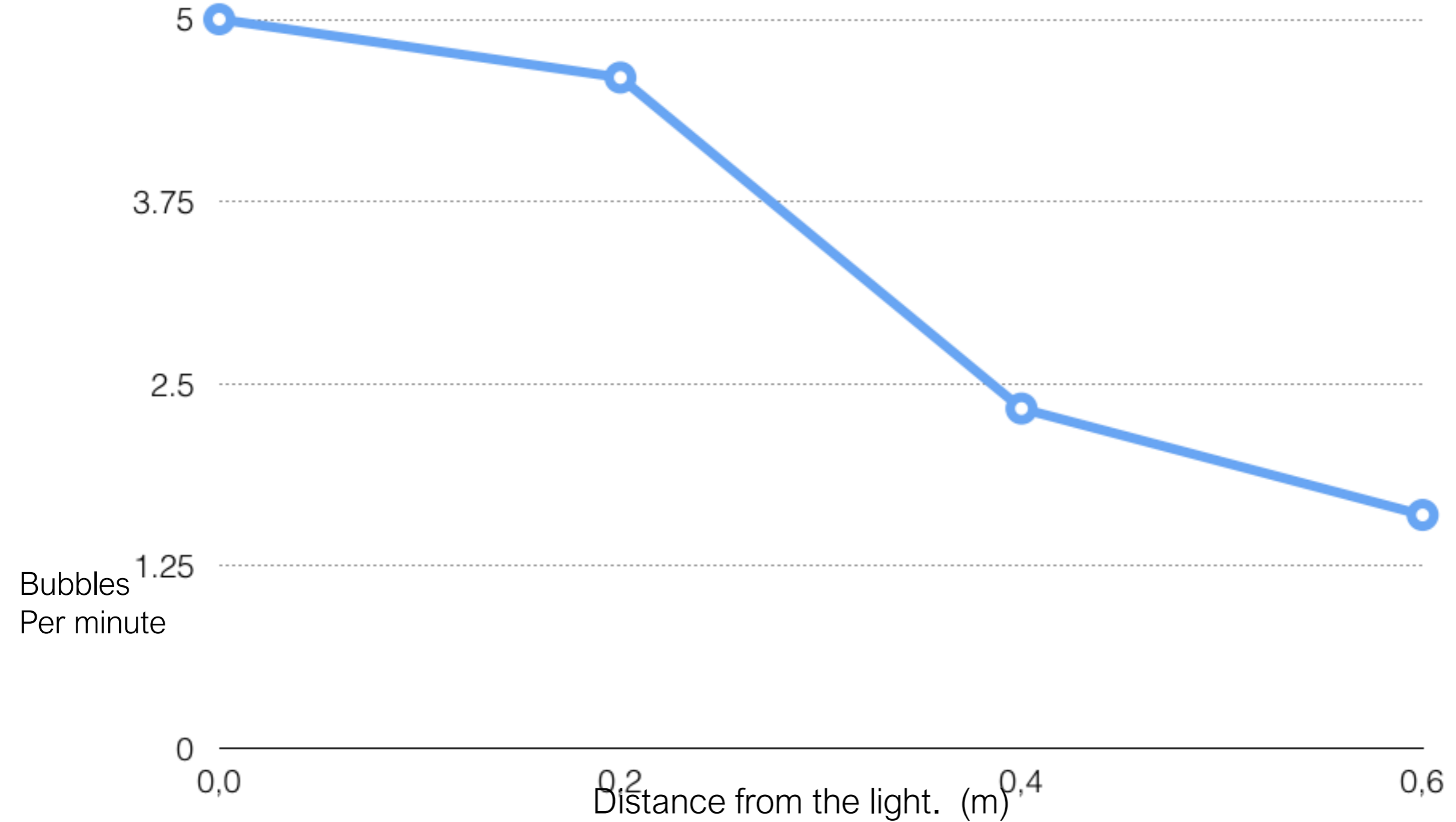


RECORDING DATA

Number of bubbles in 1 minute

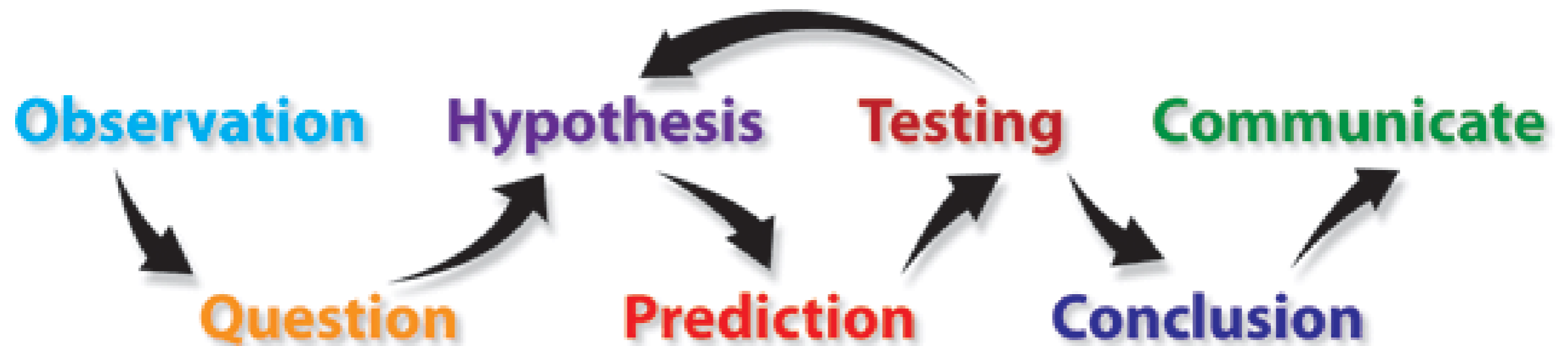
Distance between plant and light.	Record 1	Record 2	Record 3	Avarage per minute
0.6m = 60cm	3	1	1	1.6
0.4m = 40cm	2	2	3	2.33
0.2m = 20cm	8	2	4	4.6
0.0	4	5	6	5

RESULT GRAPH



Handling data

The mean number of bubbles per minute can be calculated adding all the records and dividing by their number



ANALYSIS

The curve shown in my graph is a line which in a little section, the distance is the limiting factor, while in the second section, the PLATEAU, the light intensity isn't the limiting factor, so we can have other limiting factor as temperature and carbon dioxide



THIS POWER POINT WAS ADAPTED BY :

Sabatino Ucciero , Pierfrancesco Palmieri , Sara Manco , Andreea Popa , Aldo Scalzone , Salvatore Gravante , Damiano Mincione , Federica Rima , Maria Isabel Soare , Sara Pedana , Dalila Gravante

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