

Subject: Biology

Topic: Photosynthesis

Subtopic: To study the effect of carbon dioxide on the rate of photosynthesis

Level: S.4

Learning objectives:

Content:

Students should be able to explain the effect of carbon dioxide concentration on the rate of photosynthesis.

Language:

Students should be able to write short paragraphs to explain the effect of carbon dioxide concentration on the rate of photosynthesis.

S.4 Biology
Photosynthesis
Worksheet 2

Name: _____ Class: _____ No: _____ Date: _____



To study the effect of carbon dioxide on the rate of photosynthesis

An experiment was carried out to investigate the effect of carbon dioxide concentration on the rate of photosynthesis of a flowering plant. The results were as follows.

CO ₂ concentration in air (% volume)	Rate of photosynthesis (arbitrary units)	
	low light intensity	
0	0	
0,02	20	
0,04	30	
0.06	36	
0.08	40	
0.12	46	
0.16	47	
0.20	47	

1. Present the results as a graph. (4 marks)
2. From the graph, find out the rates of photosynthesis at both light intensities when the carbon dioxide concentration in the air is at a normal level. (2 marks)
3. Describe and explain the results. (3 marks)
(Hint: Use the paragraph pattern in Worksheets 1A and 1B to answer this question.
N.B. The word 'light intensity' should be changed to 'carbon dioxide'.)
