

2.8 Photosynthesis

Question Paper

Course	DP IB Biology
Section	2. Molecular Biology
Topic	2.8 Photosynthesis
Difficulty	Easy

Time allowed: 10
Score: /5
Percentage: /100

Question 1

In plants, oxygen can be thought of as a waste product of photosynthesis.

Where does the oxygen come from?

- A. The photolysis of water.
- B. Molecular oxygen in the atmosphere.
- C. The splitting of carbon dioxide.
- D. The breakdown of glucose.

[1 mark]

Question 2

Which of the following statements best describes why the majority of plants appear green?

- A. Chlorophyll reflects the light most strongly in the green portion of the visible spectrum.
- B. Chlorophyll absorbs light most strongly in the green portion of the visible spectrum, followed by the red portion.
- C. When chlorophyll absorbs light, it releases electrons.
- D. The human eye is more sensitive to green light.

[1 mark]

Question 3

Which option correctly completes the sentence below?

Photosynthesis is an example of _____.

- A. An exothermic reaction.
- B. A catabolic reaction.
- C. An endothermic reaction.
- D. Net energy loss.

[1 mark]

Question 4

A plant is grown in increasing concentrations of carbon dioxide, whilst other factors are kept constant.

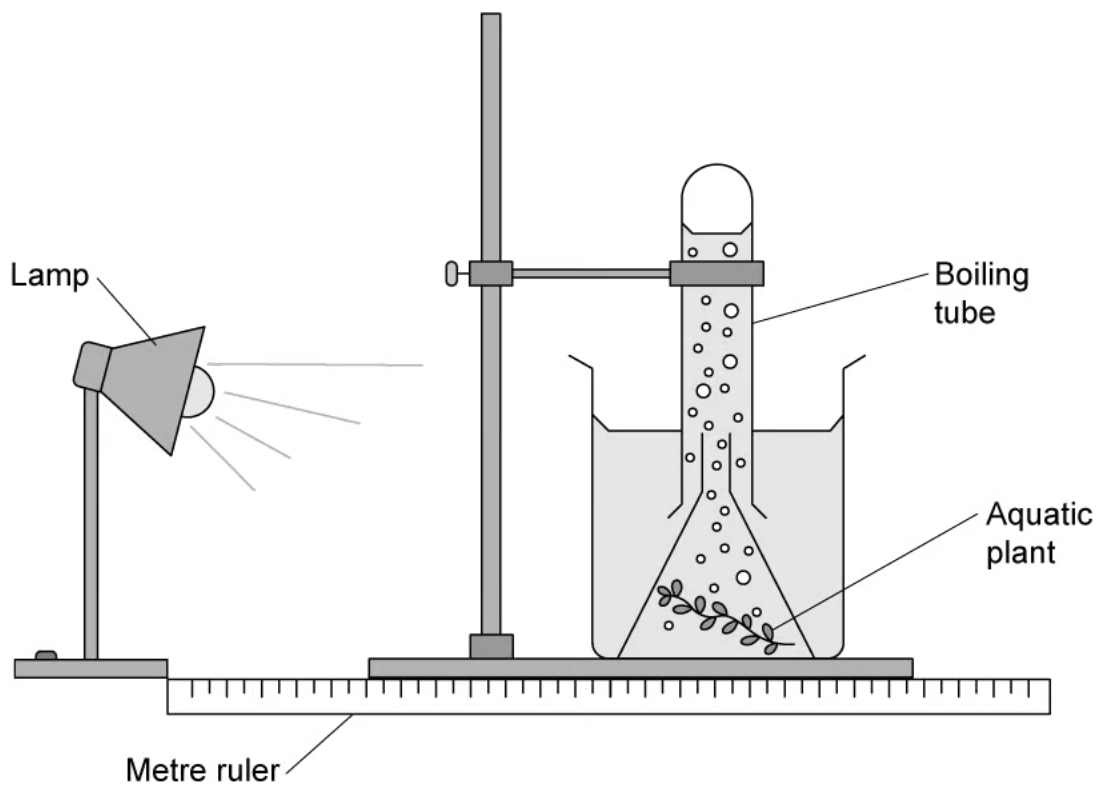
What will happen to the rate of photosynthesis?

- A. There will be no change.
- B. It will increase to a maximum level.
- C. It will keep increasing exponentially.
- D. It will increase to an optimal level and then decrease.

[1 mark]

Question 5

With reference to the experimental set-up shown, which option correctly describes how the rate of photosynthesis can be directly measured?



- A. Measuring the distance between the light and plant.
- B. Measuring the change in biomass of the plant.
- C. Measuring the carbon dioxide production by counting bubbles.
- D. Measuring the oxygen production by counting bubbles.

[1 mark]