

Formative Assessment: Exploring Photosynthesis

Student Name:	Class:
Student ID:	Date:

Assessment Details

Duration: 30 minutes	Total Marks: 20
Topics Covered:	 Definition and importance of photosynthesis Identification of reactants and products Explanation of the role of chlorophyll and light energy

Instructions to Students:

- 1. Read all questions carefully before attempting.
- 2. Show all working out marks are awarded for method.
- 3. Calculator use is permitted except where stated otherwise.
- 4. Write your answers in the spaces provided.
- 5. If you need more space, use the additional pages at the end.
- 6. Time management is crucial allocate approximately 1 minute per mark.

Foundation Level [10 marks]

Question 1	[1 mar
What is the main purpose of photosynthesis?	
A) To produce energy for plants	B) To produce oxygen for animals
C) To absorb water and minerals	D) To release carbon dioxide
Question 2	[2 mark
What is the role of chlorophyll in photosynthesis?	
Question 3	[2 mark
Label the reactants and products in the following	diagram of photosynthesis:
$6 \text{ CO}_2 + 6 \text{ H}_2\text{O} + \text{light energy} \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + 6 \text{ O}_2$	

Core Level [15 marks]

Question 4	[4 marks]
Explain the importance of light energy in photosynth	esis.
Question 5	[1 mark]
What are the two main products of photosynthesis?	
A) Glucose and oxygen	B) Starch and water
C) Cellulose and carbon dioxide	D) Protein and nitrogen
Question 6	[3 marks]
Label the structures involved in photosynthesis in th	
[Insert diagram of plant cell]	
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Extension Level [5 marks]

C) No effect on photosynthesis

Question 7	[6 marks]
Describe the relationship between photosynthesis and the water cycles	ele.
Question 8	[1 mark]
Question 8 What is the effect of increased carbon dioxide levels on photosynth	

D) Unknown effect on photosynthesis

Additional Space for Answers

