

Q1: What is the overall chemical equation for photosynthesis?

A1:  $6\text{H}_2\text{O} + 6\text{CO}_2 + \text{Light Energy} \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2$

Q2: What are the reactants (inputs) of photosynthesis?

A2: Sunlight, water ( $\text{H}_2\text{O}$ ), and carbon dioxide ( $\text{CO}_2$ )

Q3: What are the products (outputs) of photosynthesis?

A3: Glucose ( $\text{C}_6\text{H}_{12}\text{O}_6$ ) and oxygen ( $\text{O}_2$ )

Q4: In what plant organelle does photosynthesis occur?

A4: Chloroplasts

Q5: What is the role of chlorophyll in photosynthesis?

A5: Chlorophyll is a green pigment that absorbs light energy, initiating the process of photosynthesis.