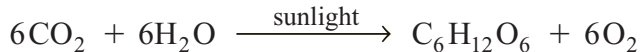


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Glucose ( $\text{C}_6\text{H}_{12}\text{O}_6$ ) is formed in plants by the process of photosynthesis. The net equation for photosynthesis is shown below.



- Calculate the molar mass of glucose. Show your calculations and include units in your answer.
- Explain how the amount of carbon dioxide consumed by a plant can be determined from measuring the amount of oxygen released by the plant. Assume excess water is available.
- Calculate the amount of glucose, in grams, formed when 100 mol of  $\text{O}_2$  is released. Show your calculations and include units in your answer.