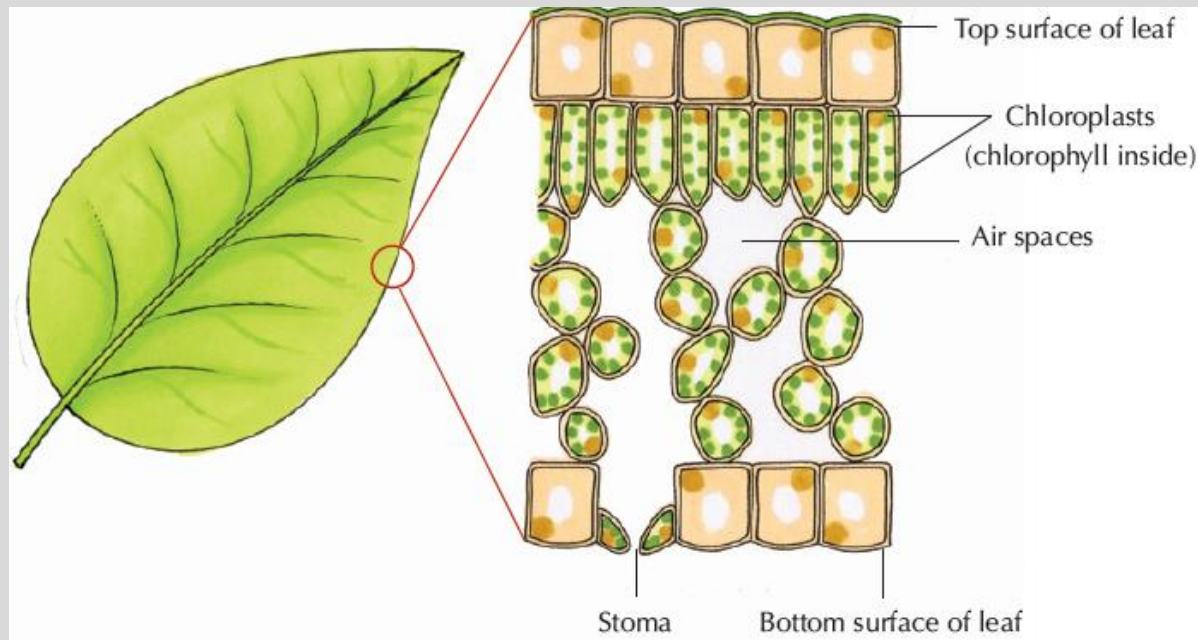


Chapter 13: Photosynthesis

Definition: Photosynthesis is the process by which plants make their own food using the green chemical, chlorophyll.

This takes place in the leaves. A leaf is flat and thin to absorb light. They contain Stomata – tiny pores which allow the gas exchange to take place.



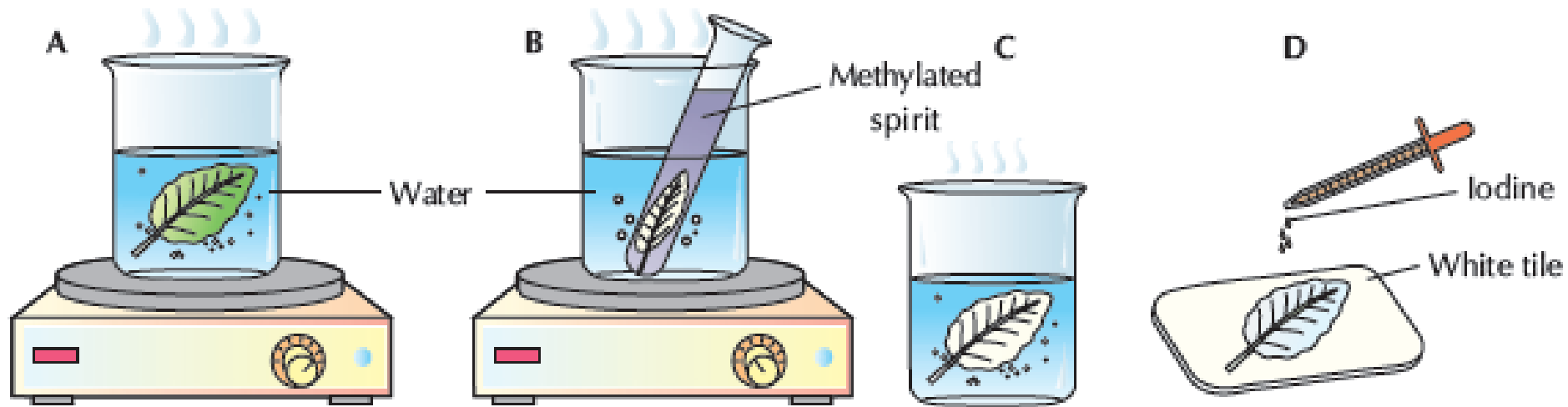
Photosynthesis Equation.



CO₂ and H₂O combine with the light and chlorophyll to form glucose and O₂

- Plants can only make food during the day.
- The glucose is turned into starch and protein.
- The protein is used to repair damaged cells and for growth of new ones.

Testing a leaf for starch



- The leaf is boiled for one minute to kill and soften it.
- The leaf is soaked in methylated spirits to remove the chlorophyll. This leaves the leaf white and brittle.
- It is rinsed again in water to soften it.
- A few drops of iodine are spread on the leaf. A blue/black colour shows the presence of starch.