Photosynthesis

Starter

* Light energy
* Chloroplasts
* Chlorophyll
* Carbon dioxide + water 🡪 oxygen + glucose

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6CO2 + 6H2O 🡪 C6H12O6 + 6O2

During photosynthesis light energy is absorbed by a green substance called chlorophyll which is found in chloroplasts in some plant cells and algae. This energy is used to convert carbon dioxide (from the air) and water (from the soil) into sugar (glucose). Oxygen is released as a by-product

1) Palisade cells in the leaf contain many chloroplasts. This is important because photosynthesis occurs in the chlorophyll, so the plant needs a lot of them to photosynthesise

2) Plants contain stomata on the underside of the leaf. This allows the plant to intake carbon dioxide and release oxygen.

3) Spongy mesophyll layer contains many air spaces. This allows the plant to store carbon dioxide for photosynthesis

3 main factors of photosynthesis:

* Light intensity
* Carbon dioxide concentration
* Temperature

**See graphs in book**

Inverse relationship – As distance increase, light intensity decrease

**See book for equation**