

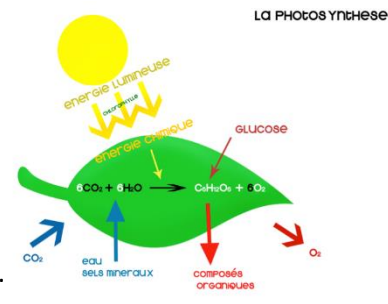
Unit Overview – B4 Bioenergetics

You will learn about:

- How plants photosynthesise and what limits this process.
- The process of respiration and what happens if there isn't enough oxygen.

You will be able to:

- Measure the effects of light on pond weed.



Key Words

Chlorophyll,
epidermal tissues,
palisade mesophyll,
spongy mesophyll,
vascular bundle,
light intensity,
limiting factor,
concentration gradient,
diffusion,
flaccid,
guard cell,
transpiration,
turgid,
xylem,
phloem,
aerobic respiration,
anaerobic respiration,
fermentation

Key learning points

Photosynthesis

Limiting factors

Uses of glucose

Aerobic respiration

Anaerobic respiration

Response to exercise

Metabolism

Links to other subjects:

SMSC

- Evaluate risk both in practical science and the wider context, including perception of risk in relation to data and consequences.
- Evaluate every day and technological applications of science.

Literacy

- Communicating the scientific rationale for investigations, methods used, findings and reasoned conclusions through paper-based and electronic reports and presentations using verbal, diagrammatic, graphical, numerical and symbolic forms.

Numeracy

- Translate information between graphical and numeric form.
- Recognise and use expressions in decimal form.
- Use an appropriate number of significant figures.