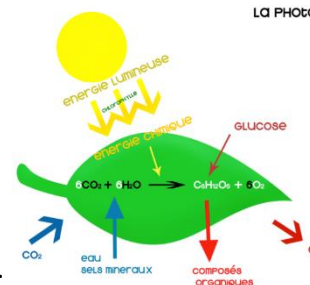


Unit Overview – Bioenergetics

Target grade for tests:

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.

<p>Key learning points</p> <table border="1"> <tr><td>Photosynthesis</td><td></td></tr> <tr><td>Limiting factors</td><td></td></tr> <tr><td>Uses of glucose</td><td></td></tr> <tr><td>Aerobic respiration</td><td></td></tr> <tr><td>Anaerobic respiration</td><td></td></tr> <tr><td>Response to exercise</td><td></td></tr> <tr><td>Metabolism</td><td></td></tr> </table> <p>Links to other subjects:</p> <p>SMSC</p> <ul style="list-style-type: none"> • 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. <p>Literacy</p> <ul style="list-style-type: none"> • 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. <p>Numeracy</p> <ul style="list-style-type: none"> • Translate information between graphical and numeric form. • Recognise and use expressions in decimal form. • Use an appropriate number of significant figures. 					Photosynthesis		Limiting factors		Uses of glucose		Aerobic respiration		Anaerobic respiration		Response to exercise		Metabolism		<p>Key Words</p> <p>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</p>	
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					Aerobic respiration															
					Anaerobic respiration															
					Response to exercise															
Metabolism																				
Research	Note-making	Group work & discussion	Memorisation	Precision & accuracy	Independence	Reflection														