

Subject	Year	Term
Biology	13	1
Topic		
Photosynthesis		
Content (Intent)		
Prior Learning (Topic) GCSE: B1 – Cell Biology; B4 – Bioenergetics. Year 12: Cell Structure; Transport Across Membranes. Year 13: Energy, Ecosystems & Nutrient Cycles.		
<p><i>Chloroplast structure – recap</i></p> <p><i>Photosynthesis overview</i></p> <p><i>Light-dependent reaction, to include the electron transport chain and synthesis of ATP</i></p> <p><i>Light-independent reaction – the Calvin cycle</i></p> <p><i>Factors affecting the rate of photosynthesis</i></p>		
Future Learning (Topic) Year 13: Respiration. Further University Study		
How will knowledge and skills be taught? (Implementation)	How will your understanding be assessed & recorded (Impact)	
<p><i>Demos</i></p> <p>None in this topic</p> <p><i>Practical work</i></p> <p>Required practical 7</p> <p>Required practical 8</p> <p><i>Written</i></p> <p>Class notes</p> <p>Past paper questions in class</p> <p>Past paper questions in homeworks</p> <p>Write-ups of required practicals 7 & 8</p>	<p>- 2 x assessed homeworks (Grade given. Written & verbal feedback. Response expected.)</p> <p>-1 x end of topic test (Grade given. Verbal feedback to class and individuals.)</p> <p>- Assessment of CPAC skills from the practical (both written and practical) as detailed on the practical sheets.</p>	
How can parents help at home?		
<p>Look at the topic specific resources on the VLE</p> <p>Use appropriate youtube channels: cognito, freesciencelessons, Crash Course Biology.</p> <p>Encourage students to use the textbook issued.</p> <p>Take an interest! Ask your children what they have learnt and be curious about their learning.</p>		
Helpful further reading/discussion		
<p>Reading</p> <p>New Scientist</p>	<p>Vocabulary Lists</p> <p><i>Chloroplast, grana, thylakoids, stroma,</i></p>	<p>Careers Links</p> <p>Biological Scientist</p> <p>Ecologist</p>

Biological Science Review Magazine The Biologist Magazine – Royal Society of Biology Royal Society of Biology blog	<i>chlorophyll, electron, electron carrier, ATP, NADP, NADPH, photolysis, RuBP, RuBisCO, GP, TP, glucose.</i>	Agricultural Scientist Plant biologist Environmental Scientist
--	---	--