



Subject	Year	Term																
Biology	10	2																
Subject	Year	Term																
Unit 4 - Bioenergetics																		
Content (Intent)																		
Prior Learning (Topic)	Unit 3 Infection and Response																	
Unit 4 Bioenergetics - Plant tissues, organs and systems, Transport of substances in plants, Leaf structure and photosynthetic reactions, Rate of photosynthesis required practical lesson, Glucose and photosynthesis, Aerobic respiration, Anaerobic respiration, Responses to exercise.																		
Future Learning (Topic) Unit 7 Ecology																		
What Knowledge and Skills will be taught (Implementation)	How will your understanding be assessed & recorded (Impact)																	
Knowledge Unit 4 Bioenergetics - Plant tissues, organs and systems, Transport of substances in plants, Leaf structure and photosynthetic reactions, Rate of photosynthesis required practical lesson, Glucose and photosynthesis, Aerobic respiration, Anaerobic respiration, Responses to exercise. Practical Skills - Required practical activity 6 Investigate the effect of light intensity on the rate of photosynthesis using an aquatic organism such as pondweed. Maths Skills – Data, mean calculations, graph drawing.	Key Piece of work (Homework) Pupils given a percentage and formative feedback provided for a targeted piece of homework so that they can respond to the teacher and make progress in the topic. End of topic test Pupils given a percentage, formative feedback and GCSE equivalent grade. Formative feedback provided. Year 10 end of term 1, 2 and year exams Pupils given a percentage, formative feedback and GCSE equivalent grade. Interleaving Topics Unit 1 Cells and Unit 2 Organisation – Key Terms and concepts will be reviewed prior to the start of the Unit 4 such as structure of cells, specialised cells, transport in cells and heart structure.																	
How can parents help at home?																		
Ensure all class booklets are complete and homework submitted on time. Assist in ensuring the active use of the EDUCAKE online learning platform where each pupil is given a personal log on from their teachers. Encourage pupils to revise for tests and exams and to create revision resources such as flash cards and posters. Ensure all pupils have all their resources required for science lessons, including booklets, pens and calculators																		
Helpful further reading/discussion (including Reading and Vocabulary Lists)																		
Reading AQA revision guides AQA revision cards Resources on Teams EDUCAKE online learning platform. GCSE POD	Vocabulary Lists <table><tr><td>Photosynthesis</td><td>Photosynthesis</td></tr><tr><td>Respiration</td><td>Mesophyll</td></tr><tr><td>Limiting Factor</td><td>Xylem</td></tr><tr><td>Aerobic Respiration</td><td>Phloem</td></tr><tr><td>Anaerobic Respiration</td><td>Guard Cells</td></tr><tr><td>Fermentation</td><td>Palisade Cells</td></tr><tr><td>Oxygen Debt</td><td>Limiting Factors</td></tr><tr><td>Metabolism</td><td></td></tr></table>		Photosynthesis	Photosynthesis	Respiration	Mesophyll	Limiting Factor	Xylem	Aerobic Respiration	Phloem	Anaerobic Respiration	Guard Cells	Fermentation	Palisade Cells	Oxygen Debt	Limiting Factors	Metabolism	
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