

Subject	Year	Term																
Biology	10	2																
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Unit 4 – Bioenergetics; Unit 7 Ecology																		
Content (Intent)																		
Prior Learning (Topic) Unit 3 Infection and Response																		
<p>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.</p>																		
Future Learning (Topic) Unit 7 Ecology																		
What Knowledge and Skills will be taught (Implementation)	How will your understanding be assessed & recorded (Impact)																	
<p>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. <u>Interleaving Topics</u> Y9 Cells, Structure and Transport; The Body, Health and Lifestyle – 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.</p>	<p>Key Piece of work (Homework) Pupils given a percentage and formative feedback provided. End of topic test Pupils given a percentage and GCSE equivalent grade. Formative feedback provided. Year 10 Assessment 2 and Year 11 Assessment 1 Pupils given a percentage and GCSE equivalent grade. Formative feedback provided.</p>																	
<p>Unit 7 Ecology – Communities, Abiotic and Biotic factors, Adaptations, Levels of organisation (feeding relationships), Predator prey cycles. Maths Skills – data collection, % cover, graph drawing. <u>Interleaving Topics</u> Y9 The Body, Health and Lifestyle and Unit 4 Bioenergetics – Key Terms and concepts will be reviewed prior to the start of this unit such as food molecules, the effect of temperature on enzymes, photosynthesis, aerobic/anaerobic respiration.</p>	<p>Key Piece of work (Homework) Pupils given a percentage and formative feedback provided. End of topic test Pupils given a percentage and GCSE equivalent grade. Formative feedback provided. Year 11 Assessment 2 Pupils given a percentage and GCSE equivalent grade. Formative feedback provided.</p>																	
How can parents help at home?																		
<p>Ensure all class notes 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</p>																		
Helpful further reading/discussion (including Reading and Vocabulary Lists)																		
<p>Reading AQA revision guides AQA revision cards Resources on Teams EDUCAKE online learning platform.</p>	<p>Vocabulary Lists</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Photosynthesis</td> <td style="width: 50%;">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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