

AQA TRILOGY Biology		Covered in Lesson	Diagnosis			Revised		
B1.4 Bioenergetics			R	A	G	1	2	3
B1.4.1 Photosynthesis	Describe what happens in photosynthesis, including using a word equation and recognise the chemical formulas for carbon dioxide, water, oxygen & glucose							
	Explain why photosynthesis is an endothermic reaction							
	Recall the limiting factors of photosynthesis							
	Explain how limiting factors affect the rate of photosynthesis, including graphical interpretation (limited to one factor)							
	HT ONLY: Explain how the limiting factors of photosynthesis interact, inc graphical interpretation (two/three factors)							
	HT ONLY: Explain how limiting factors are important to the economics of greenhouses, including data interpretation							
	HT ONLY: Explain and use inverse proportion in the context of photosynthesis							
	Required practical 6: investigate the effect of light intensity on the rate of photosynthesis using an aquatic organism such as pondweed							
	Describe how the glucose produced in photosynthesis is used by plants							
B1.2.3 Plant tissues, organs and system	Describe what happens in respiration including using a word equation and recognise the chemical formulas for carbon dioxide, water, oxygen & glucose							
	Describe aerobic and anaerobic respiration with regard to the need for oxygen, the differing products and the relative amounts of energy transferred							
	Recognise the equations for aerobic respiration, anaerobic respiration in muscles and anaerobic respiration in plants and yeast cells.							
	Recall what type of respiration fermentation is and its economic importance.							
	Describe what happens to heart rate, breathing rate and breath volume during exercise and why these changes occur							
	Explain what happens when muscles do not have enough oxygen and define the term oxygen debt							
	HT ONLY: Explain what happens to accumulated lactic acid in the body							
	Explain the importance of sugars, amino acids, fatty acids and glycerol in the synthesis and breakdown of carbohydrates, proteins and lipids							
	Explain what metabolism is, including examples							