

Review B4 Bioenergetics

		Covered in class	Strength/weakness?	Answered Exam Q	Kerboodle page
	4.1 Photosynthesis				
	State the word equation for photosynthesis				124
	Write a balanced symbol equation for photosynthesis (HT Only)				124
	Explain how leaves are adapted for photosynthesis				125
	State the factors that affect the rate of photosynthesis				126
	Explain limiting factors				126
	Explain graphs of photosynthesis rate involving two or three factors and decide which is the limiting factor (HT only)				126
	Explain how limiting factors are important in the economics of enhancing the conditions in greenhouses to gain the maximum rate of photosynthesis while still maintaining profit (HT only)				130
	Explain the relationship between light intensity and the inverse square law (HT only)				127
	State the uses of glucose by plants				128
	Know how plant use nitrate ions that are absorbed from the soil.				129
	4.4.2 Respiration				
	Compare the processes of aerobic and anaerobic respiration with regard to the need for oxygen, the differing products and the relative amounts of energy transferred.				134
	Define aerobic and anaerobic respiration				134
	State that reactions which transfer energy to the environment are exothermic reactions				134
	Name three things organisms need energy for				135
	State the word equation for aerobic respiration				134
	Write a balanced symbol equation for aerobic respiration (HT only)				134
	State the word equation for anaerobic respiration in muscles				138
	The energy transferred supplies all the energy needed for living processes.				134
	State that anaerobic respiration in yeast cells is called fermentation and has economic importance in the manufacture of bread and alcoholic drinks				139
	Explain why anaerobic respiration takes place in muscles during exercise				136
	Explain muscle fatigue and oxygen debt				138
	Define the role of the liver in the removal of lactic acid (HT only)				141
	Define metabolism				140
	State five metabolic processes				140