AQA Biology GCSE Student Checklist

B17 Biodiversity and ecosystems

Name	Class	Date
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Lesson	Aiming for 4	Aiming for 6	Aiming for 8	
B17.1 The human population explosion	I can state what biodiversity means.	I can describe why a good level of biodiversity is important to the future of the human species.	I can explain in detail why a high level of biodiversity is important to the stability of ecosystems.	
	I can list some resources that humans are using up.	I can describe some effects of human population growth.	I can explain why human population change differs from population change of other animals.	
	I can state some ways that air, water and land is polluted.	I can analyse and interpret data and information concerning human population growth.	I can suggest and evaluate solutions to the problems caused by human population growth.	
B17.2 Land and water pollution	I can state some substances that pollute the water and land.	I can describe how sewage, fertilisers, pesticides and herbicides pollute the land and water.	I can explain in detail how pollution affects biodiversity.	
	I can state some effects of rubbish, pesticides and sewage on land and water.	I can describe the process of eutrophication and bioaccumulation.	I can explain how pesticides in water can kill top predators in food chains.	
	I can display data appropriately with guidance.	I can draw conclusions from data.	I can consider a land or water-based pollution issue, stating opinions with reasoning.	
B17.3 Air pollution	I can state that acid rain is caused as a result of burning some fuels.	I can describe how acid rain is formed.	I can use word and symbol equations to show how burning some fuels produces acidic gases.	
	I can list some effects of acid rain on plants and animals.	I can plan an investigation to find out how acid rain affects the germination of seeds.	I can explain what causes global dimming and smog and describe their effects.	
	I can analyse observations and data with guidance.	I can choose a suitable method for analysing data.	I can analyse in detail data showing sulphur emissions over the last 3 years and suggest reasons for the trend.	

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Lesson	Aiming for 4		Aiming for 6		Aiming for 8	
B17.4 Deforestation and peat destruction	I can define deforestation.		I can explain the effects of deforestation and peat removal.		I can explain in detail how deforestation and peat removal increases the amount of carbon dioxide in the air.	
	I can state at least one reason for deforestation and one effect.		I can categorise reasons for and effects of deforestation as environmental, social, economic and/or political.		I can analyse data to describe a trend in deforestation rate and give an explanation.	
	I can give a use for peat.		I can describe why there is a conflict between using peat to increase food production and the need to conserve peat bogs.		I can explain the conflict between using peat to increase food production and the need to conserve peat bogs.	
	I can state that global warming is caused by increased levels of carbon dioxide and methane in the atmosphere.		I can use the terms greenhouse effect, global warming and climate change correctly.		I can produce scale diagrams showing some of the contributors to the greenhouse effect.	
B17.5 Global warming	I can give one biological consequence of global warming.		I can describe in detail the biological consequences of global warming.		I can explain in detail the causes and effects of rising carbon dioxide and methane levels in the atmosphere.	
B17.6 Maintaining biodiversity	I can list some ways in which people can help maintain biodiversity.		I can describe programmes to reduce negative effects on ecosystems and explain how they work.		I can evaluate the conflicting pressures on maintaining biodiversity in some habitats.	
	I can state reasons why some habits are at risk.		I can use information to explain the conflicting pressures on maintaining biodiversity.		I can link ideas to suggest why recycling can help protect habitats.	