

High Tunstall College of Science Curriculum Intent

Subject: Biology (Separate) Year: 11

Thread 6 Ecology



	Biology Thread 6	Progress		
Topic	Key ideas	R	A	G
Ecology	Describe what decomposition is and explain what conditions are needed			
	Identify and investigate factors that affect the rate of decay			
	Explain how air pollution is caused and describe its effects.			
	Identify sources of water pollution and explain how these affect organisms.			
	Describe what food security is, identifying the factors that impact on this			
	Evaluate methods used to make food production more efficient			
	Describe the importance of sustainable fishing			
	Explain how Biotechnology is used in food production			

Lesson	Learning Focus	Assessment	Key Words
1	What is Decomposition?	Differentiated Task	Decomposition, decomposer, micro-organism, enzyme
2	What factors affect the rate of decay?	Required practical	Decay, independent variable, dependent variable
3	What is the impact of Air Pollution?	Differentiated Exam Questions Case study	Sulphur Dioxide, Carbon Dioxide, acid rain, Catalytic converter
4	What happens when water is polluted?	Case study, Exam questions	Eutrophication, Bio Indicators, Bioaccumulation
5	What factors affect Food security?	Green pen assessment	Food security, malnutrition, sustainability
6	How can we make food production more efficient?	Intensive farming debate	Intensive, organic, sustainable
7	How can food production be made more sustainable?	Peer and self assessment, exam questions	Mycoprotein, sustainable, biotechnology, fermenter
8	Retrieval	Self assessment	