High Tunstall College of Science Curriculum Intent

Thread 6—Ecology

	Biology Thread 6	Progress		
Topic	**Key ideas**	**R**	**A**	**G**
Ecology	**Explain why communities are important**			
	Describe Biodiversity and why it is important			
	Explain how to estimate the number of organisms in a habitat			
	Explain the processes involved in the water cycle			
	Explain the processes involved in the carbon cycle			
	Describe causes of pollution and how this impacts on the Ecosystem			
	Identify the reasons for deforestation and peat bog destruction, describing the wider impact these have			
	Explain the effects of Global Warming on Biodiversity			
	Describe how Biomass changes in a food chain			

Lesson	Learning Focus	Assessment	Key Words
1	Why are Communities important?	Green pen self assessment of tasks	Communities, populations, abiotic Biotic, **ecosystem**
2	How can we maintain Biodiversity?	Peer assessment and feedback	**Biodiversity**, deforestation
3	How can we measure distribution in a habitat?	Required Practical	Mean, **distribution**, quadrat, transect
4	How are materials cycled?	Diagram of the water cycle	**Evaporation**, condensation
5	How is Carbon Cycled?	Exam Question, green pen self assessment	**Respiration**, Photosynthesis, Combustion
6	What is the impact of Air Pollution?		Smog, **Acidification**
7	What is the impact of Water Pollution?	Eutrophication task	**Eutrophication,** Anoxic
8	How does Deforestation and Peat Bog Destruction impact on the environment?	Exam Questions	Deforestation, peat bog
9	How does Global warming affect the ecosystem?	Exam questions	**Global warming**, smog, global dimming
10	Retrieval	Self Assessment	