

High Tunstall College of Science Curriculum Intent

Subject: Chemistry Year: 10

Thread 6—Earth and Atmosphere



	Chemistry Thread 6	Progress		
Topic	Key ideas	R	A	G
Earth and atmosphere	I can explain how the atmosphere has evolved over time			
	I can explain the greenhouse effect, and identify human activities that are contributing to this			
	I can evaluate global climate change, and consider how to reduce my carbon footprint			
	I can identify atmospheric pollutants and consider the effects these are having			
	I can explain what is meant by a life cycle assessment, and can consider how to carry these out			
	I understand what an alloy is and why these are useful			
	I can explain methods used to prevent corrosion			
	I can evaluate the use of ceramics, polymers and composites			

Lesson	Learning Focus	Assessment	Key Words
1	How has the atmosphere changed?	Extended writing looking at the atmosphere	Atmosphere, evolution
2	What is the greenhouse effect?	Completion of differentiated tasks	Greenhouse effect, global warming, carbon dioxide, methane
3	What is global climate change and how can we reduce it?	Data analysis tasks	Climate change, carbon footprint, trends
4	What are atmospheric pollutants and how can we reduce these?	Exam questions	Pollutant, carbon dioxide, carbon monoxide, sulphur dioxide, nitrogen oxides, particulates
5	What is a life cycle assessment?	Completion of LCA comparing the use of plastic and paper bags	Life cycle assessment
6	What are alloys?	Exam questions	Alloy, mixture
7	How can we prevent corrosion?	Application task	Corrosion, galvanising, sacrificial protection
8	What other materials are useful?	Extended writing task	Ceramic, polymer, composite