

Subject	Year	Term	
Environmental Science	13	2	

Topic

Sustainability

Content (Intent)

Prior Learning (Topic)

Biogeochemical Cycles

Atmosphere

Hydrosphere

Lithosphere

Mineral resources

Agriculture

Habitats

Forest resources

Aquatic food systems

Pollution

Energy resources

Future Learning (Topic)

Dynamic equilibria

Negative feedback mechanisms which resist change

Positive feedback mechanisms which increase change

Equilibrium tipping points which lead to new equilibria

Diverse systems are more likely to be resistant to change

Energy

Natural processes are driven by renewable energy, especially solar power

Natural processes use low energy-density resources

Most natural processes occur at low temperatures

Carbon footprints and sustainable development

Material cycles

Linear human systems lead to resource depletion and waste generation

Natural processes often link together in sequences that create cycles, with the waste products of one process being the raw materials for other processes

Natural waste products are either non-toxic or do not build up to cause toxicity

The circular economy

The application of the principles of the circular economy to the development of sustainable lifestyles Biocapacity and ecological footprints: a comparison of the factors controlling the impact of different ecological footprints on biocapacity

How will knowledge and skills be taught?	How will your understanding be assessed &
(Implementation)	recorded (Impact)
Note taking	- Homework Booklet marked and written
Calculating carbon footprint Analysing the effectiveness of different sustainable	feedback given
strategies	Test marked, graded and feedback given
analyse data on fossil fuel use and hydrocarbon	
reserves to assess future supply problems.	

identify the impacts of fossil fuel use and plan a monitoring programme to assess the impacts of changing to renewable energy resources. interpret graphs on population growth, resource consumption, biodiversity loss and pollution emissions within the context of sustainable lifestyles. Case studies

How can parents help at home?

Look at the topic specific resources on the VLE

Use appropriate YouTube channels

Encourage students to write revision cards

Look at the specification on the AQA website

Complete past papers (on the AQA website)

Take an interest! Ask your children what they have learnt and be curious about their learning.

Helpful further reading/discussion

Reading	Vocabulary Lists	Careers Links
Environmental Science	Dynamic equilibria	See VLE
Chapter 14	Tipping points	
	Circular economy	
	Optimum production	
	Biocapacity	
	Ecological footprints	
	Global hectare	
	Living planet index	
	Bomas	
	Biological corridors	
	Sequestration	