

Subject	Year	Term	
<b>Environmental Science</b>	13	1	
<b>+</b>			

#### Topic

## **Energy Resources**

## **Content (Intent)**

## **Prior Learning (Topic)**

Renewable and non-renewable energy

Types of energy

Fossil fuels

Finite resources

Radiation

Radioactive decay

#### **Future Learning (Topic)**

The importance of energy supplies in the development of society

The impact of the features of energy resources on their use

The sustainability of current energy resource exploitation

Strategies to secure future energy supplies

compare the energy density, production cost,

construct a Sankey diagram to represent energy resources, uses and efficiency for a country.

energy resources.

carbon intensity and mean load factor for a range of

How will knowledge and skills be taught:	How will your understanding be assessed &
(Implementation)	recorded (Impact)
Note taking convert between joules, watts, kWh and MWh when carrying out calculations. carry out calculations using numbers in standard and ordinary form, eg when comparing production of different energy resources. calculate surface area to volume ratios and relate this to heat loss. Practical: Surface area to volume ratio in relation to heat loss use V <sup>3</sup> in wind power calculations. find the mean of a range of data, eg mean power output of a wind farm. represent a range of data in a table with clear headings, units and consistent decimal places, eg to	- Homework Booklet marked and written feedback given Test marked, graded and feedback given

How will knowledge and skills be taught?

How will your understanding be assessed &

## 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	Affluence	See VLE
Chapter 9	Depletable	
	Abundance	
	Intermittency	
	Gasification	
	Liquefaction	
	Fracking	
	Fission	
	Embodied Energy	
	Fusion	
	Thorium reactor	
	Toroidal reactors	
	Photovoltaic	
	Kaplan turbines	
	Biofuel	