Geography Department — Foundation Stage Scheme of Work

Year 7 Topic 4 - Energy — 10 Lessons

Aims: This unit explores the growing demand for energy in the world, and the issues (and possibilities) that this creates. Students will understand the different types of energy available to us, as well as how much of each energy source we use. Students will examine the role of oil as a natural resource and its importance in the global economy. They will explore CO2 and the link between energy use and climate change. They will acknowledge the differences between renewable and non-renewable forms of energy, as well as the advantages and disadvantages of different sources. Students will be introduced to the concept of mitigation and consider future possibilities, as well as current trends in energy production, through the use of case studies.

Links To KS3 National Curriculum:
They should understand how geographical processes interact to create distinctive human and physical landscapes that change over time. This includes the link between the economy, population, natural resources and energy. In doing so, they should become aware of increasingly complex geographical systems in the world around them. Students will understand geographical similarities, differences and links between places, with regard to energy use. By studying energy, students will understand how human and physical processes interact to influence, and change landscapes, environments and the climate; and how human activity relies on effective functioning of natural systems.

Links to KS4:
Edexcel B, Paper 3 – Topic 9 – Consuming Energy Resources
Edexcel B, Paper 3 – Topic 8 – Forests Under Threat (threats to environments for mineral extraction and fuel use)
Edexcel B, Paper 3 – Topic 7 – People and the Biosphere (energy and fuel use)
Edexcel B, Paper 2 – Topic 5 - UK's Evolving Human Landscape (sustainability in London)
Edexcel B, Paper 1 – Topic 2 - Development Dynamics (role of globalisation on the environment)

<table>
<tr><th>Key Skills</th><th>Literacy Links:</th><th>Numeracy Links:</th></tr>
<tr><td>• Build on their knowledge of globes, maps and atlases
• Topographical and other thematic mapping, and aerial and satellite photographs
• Use Geographical Information Systems (GIS) to view, analyse and interpret places and data</td><td>Key words
• Renewable; Non-renewable; resource; emissions; mitigation; production; consumption; efficiency;</td><td>• Interpreting figures and graphs</td></tr>
<tr><th>Assessment</th><th colspan="2">Cross-Curricular Links</th></tr>
<tr><td rowspan="2">An exam-style paper, consisting of a mixture of questions ranging in marks from 1 to 8. These will include short answer, multiple choice, longer written answers and interpretation and use of given figures and data.</td><td colspan="2">• Science – energy
• Previous topic of water – Hydroelectricity</td></tr>
<tr><th colspan="2">SMSC opportunities and British values</th></tr>
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	• Developing imagination and creativity by thinking about where our energy could come from. • Moral – understand the consequences of our actions – particularly with regard to energy consumption. • Offer reasoned views – to examine the benefits and disadvantages of different energy sources.

Opportunities for further learning

- **Option 1:** Revise Core Facts for the unit from your knowledge organiser
- **Option 2:** GCSE Pod (consuming energy)
- **Option 3:** Seneca learning (consuming energy)
- **Option 4:** BBC Bitesize KS3 Geography – energy and resources (https://www.bbc.co.uk/bitesize/topics/zjsc87h) and sustainability (https://www.bbc.co.uk/bitesize/topics/z2vkjxs)
- **Option 5:** SMHW quizzes