

Year 8 Unit 2 Overview – Climate Change and Antarctica

What are our impacts on the environment and how should we protect it?



You will learn about:

- Causes and effects of pollution
- Fossil fuels and the consequences of burning them
- The Greenhouse effect and how we reduce this
- Antarctica: how it is threatened and how it could be managed in the future

You will be able to:

- Describe the causes and effects of pollution
- Discuss the impacts of fossil fuels
- Compare the social, economic and environmental threats to Antarctica and predict how it could be managed in the future
- Use literacy (PEEL, PEAL), numeracy, (graph and data skills) and map skills

Lesson Overview <div><div>1. What are the causes and effects of pollution?</div><div>2. Where should Britain’s energy come from?</div><div>3. How does the greenhouse effect work?</div><div>4. What are the effects of climate change?</div><div>5. How can we reduce our greenhouse gases?</div><div>6. Where is Antarctica and what is it like?</div><div>7. How are animals adapted to live in Antarctica?</div><div>8. Why does Antarctica need to be protected?</div><div>9. What should be allowed in Antarctica?</div><div>10. Consolidation and Revision</div><div>11. End of unit test</div><div>12. DIT</div></div>				Key Words: <div><div>Industrial Pollution- the damaging of the environment and people by industry</div><div>Environment- the natural surroundings where people, plants and animals live</div><div>Renewable resources – resources that can be used over and over again. They will never run out.</div><div>Fossil fuels – non- renewable energy source from remains of ancient plants (coal, oil, natural gas)</div><div>Sustainability - using the earth’s resources without harming the environment today so that they are still available for future generations</div><div>Global warming - the warming of the earth’s atmosphere</div><div>Greenhouse effect – the collection of greenhouse gases in the atmosphere which trap the sun’s heat</div><div>Protect – to look after</div><div>Exploit – to make use of something in an unfair way for profit</div><div>Non-renewable resources- resources that cannot be used over and over again so will run out eventually.</div></div>			
Suggested reading Fiction books: Can you Survive Antarctica? An interactive adventure by Rachel Hanel Floodland by Marcus Sedgwick The Last Wild trilogy by Piers Torday <i>Non-fiction articles available on showbie.</i>				Cross curricular SMSC: develop a critical understanding of the social impacts of pollution and moral responsibility for protecting fragile environments. Develop spiritual and cultural understanding of attitudes towards renewables. Literacy: use of PEEL to explain and connectives to compare and contrast information. Understanding of key geographical terms. Numeracy: Use of ratios and percentages in comparing effects of energy sources. Line graph construction and analysis. Working out mean averages.			
Research	Note-making	Group work & discussion	Memorisation	Precision & accuracy	Independence	Reflection	