ENERGY: HOW DO WE POWER THE WORLD?	
In this unit pupils will learn: • The importance of energy usage and how energy is produced • The impact energy has on climate change	• Renewable and non-renewable energy • How we can reduce energy usage

NATIONAL CURRICULUM

Locational knowledge

- name and locate United Kingdom, geographical regions and their identifying human and physical characteristics, land-use patterns; and understand how some of these aspects have changed over time

Place knowledge

- Understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom,

Human and physical geography

- describe and understand key aspects of:
- human geography, including: distribution of natural resources including energy

Lesson	Brief Overview	INK	Vocabulary
ENERGY PRODUCTION What is the importance of electricity on our lives?	In this lesson children will reflect on the importance of electricity in my life and I can record how I use electricity for everyday activities.	• Most electricity is produced in power stations and then cables distribute energy to our houses, schools and places of work. • Today, electricity provides most of the energy to power the modern world. • Electricity can be generated in a range of ways: by burning fossil fuels, by harnessing renewable sources such as wind, biomass and solar power, and by using nuclear power.	Generator, fossil fuel, nuclear power, renewables, turbine
ENERGY USE AND CLIMATE CHANGE What are the links between energy use,	In this lesson children will learn about the links between energy use, fossil fuels, carbon emissions and climate change.	• Manufacturing, farming, transport and domestic use are all major areas of energy consumption.	Manufacturing, energy consumption, fossil fuels, carbon emissions, climate change

fossil fuels, carbon emissions and climate change?		• There are big differences in the amount of energy most people use in different countries. • Burning fossil fuels to produce energy is increasing carbon **emissions** in the atmosphere and contributing to **climate change**.	
NON-RENEWABLE ENERGY SOURCES Why are non-renewable energy sources contributing to the energy problem?	In this lesson children will learn why non-renewable energy sources are contributing to the energy problem.	• **Non-renewable energy** sources (fossil fuels) are those that cannot be replaced and will eventually run out. • Burning fossil fuels releases **carbon emissions** into the atmosphere which is causing our planet to warm up, and is contributing to **climate change**. • A way of reducing **climate change** is for countries and people to stop using **non-renewable** fossil fuels, and to instead use more **renewable energy** sources.	Non-renewable energy, renewable energy, climate change, carbon emissions
RENEWABLE SOURCES OF ENERGY What are the advantages and disadvantages of renewable sources of energy?	In this lesson children will learn the advantages and disadvantages of renewable sources of energy, and form an opinion about their relative merits.	• **Renewable sources** of energy include solar, wind, **hydro-electric** power and **biomass**. • **Renewable energy** sources can contribute to reducing **carbon emissions**. • Different forms of **renewable energy** have a range of advantages and disadvantages.	Renewable energy, carbon emissions, hydro-electric, biomass
REDUCING ENERGY USE	In this lesson children will learn a range of actions that we can take to reduce energy use, and why this matters.	• **Appliances** that heat, light, cook and heat water use lots of energy	Appliances, meters, active travel

What action can we take to reduce energy use and why is this important?		and can be monitored by **meter** readings. • Different forms of transport use very different amounts of energy, but **active travel** uses the least amount of energy. • Reducing energy use can contribute to reducing the impacts of worldwide climate change.	
SOLVING THE ENERGY PROBLEM Who is responsible for the energy problem and who can help to solve it?	In this lesson children will learn who is responsible for the energy problem and who can help solve it.	• A range of **stakeholders** - **governments**, businesses and individuals - can all take action to help reduce energy use and **carbon footprints**. • Everyone, including children, can talk to other people and **campaign** for action to solve the world's energy problem.	Government, stakeholders, campaign, carbon footprint