



How has our use of energy changed over time?



What should I already know?

- What electricity is.
- Why electricity is important.
- Why is our environment important?



Energy

- Energy was vital throughout history, particularly to grind wheat to make bread. Before mills, this was a very hard, exhausting job!
- Mills allowed villages or towns to make more wheat/bread and so sell or store their extra food.
- The Industrial Revolution allowed for more goods to be made quickly. This was made possible by the use of coal and steam.
- Trains were powered by steam and allowed for goods to be moved further and faster.
- Coal and oil are called Fossil Fuels and create a lot of pollution when they are burned. They also will eventually run out!
- The creation of the first nuclear power plant was controversial in England. Is nuclear power safe and sustainable?

Technical vocabulary

energy	Power that can be stored and/or used to perform different tasks
mill	Noun: a wind or water powered wheel. Adjective: to grind something down
Industrial	The use of factories and railways to produce goods and move them around quickly
Revolution	big changes from one way of living to another
Steam power	The heating of water to produce steam that powers engines
nuclear	Using plutonium and uranium to heat water to power steam turbines
turbine	A wheel that turns when water or steam is pushed against it
windfarm	Wind turbines that generate electricity as the wind pushes them
solar	Panels that collect light and heat and turn them into electricity
hydroelectric	A series of turbines that are moved by steam or water
Sustainable	something that doesn't run out
Renewable	A form of energy that can keep being used
Fossil fuels	Materials like coal or oil that are used to generate electricity but will run out
mining	Digging up fossil fuels
Electricity	The movement of electrons through a circuit that use energy
Chronology	The order of time/events
Pollution	Something harmful or unwanted when you use or create energy
environment	The conditions of the world around us

Timeline

200BC	1185AD	1760AD.	1830AD	1956AD	1980AD
First records of watermills in ancient Greece.	First records of windmills used for the grinding of bread.	Start of industrial revolution in England and use of coal as power.	Huge railway building in the UK and first use of steam engines.	First nuclear power plant built in England.	First windfarm systems built.

What will I know by the end of the unit?

- How people used energy before the industrial revolution.
- How the industrial revolution changed how we made and used electricity.
- How and why alternative energy sources became popular.
- Why is nuclear power controversial?