

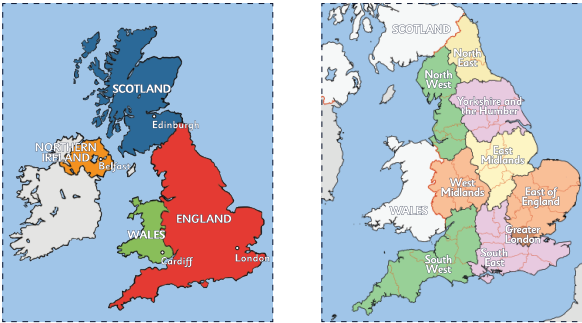
Economic Activity of the UK

Year 6

Knowledge Organiser

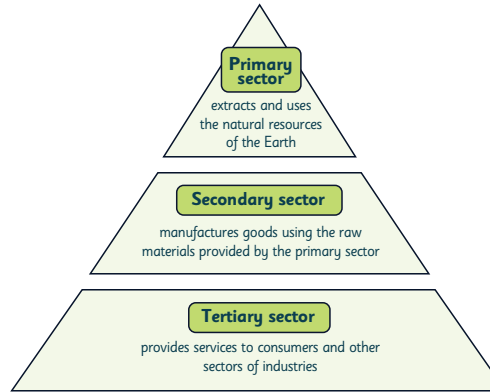
Geography of the UK

The UK comprises **four countries**: England, Northern Ireland, Scotland and Wales. The **capital cities** of these countries are London, Belfast, Edinburgh and Cardiff. England is made up of nine regions shown in the map below:



Sectors of the UK economy

In the UK, economic activity can be split into **three different sectors**: primary, secondary and tertiary:



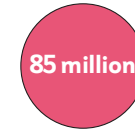
Agriculture

In the UK, agriculture can be carried out '**intensively**' or '**extensively**.' Intensive farming involves small areas of land used for large crop and animal production. Usually, animals are kept in smaller spaces for this to be possible.

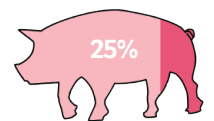
Intensive farming statistics



Over **85%** of the UK's farmed land animals live in factory farms.



More than **80 million** animals are living in intensive farms at any given time.



The number of **mega-farms** in the UK **rose** by more than **25%** in the six years leading up to **2017** and continues to climb.

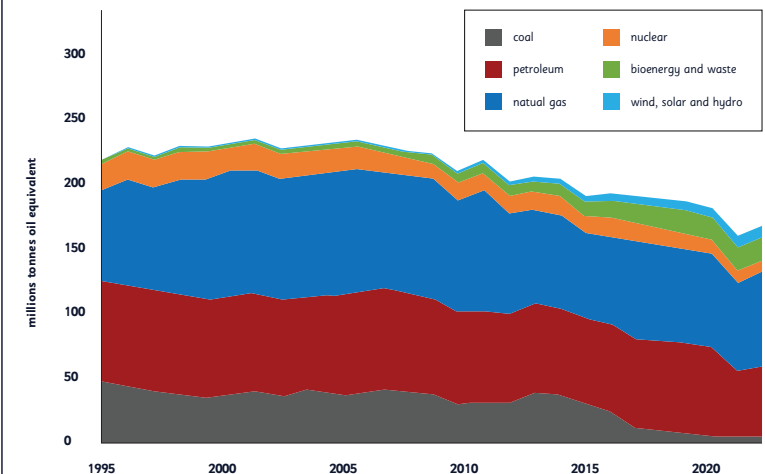
Energy generation

Energy can be generated and captured from **multiple different sources**. These sources can be sorted into two categories: **renewable and non-renewable**. Renewable energy sources are **naturally occurring and replenished** in the environment. These could be used indefinitely without running out. Non-renewable energy sources are found on Earth in a **finite supply**, meaning a specific amount that will eventually run out.

Renewable and non-renewable energy sources



Demand for energy in the UK, 1995-2021



Water use

Water is one of the most important resources on Earth; we all need it to survive. Unfortunately, water is a **finite resource**, so there is only a certain amount that remains on Earth which is going through the **water cycle**. '**Virtual water**' is water used to **produce different products**; when the UK uses these products, they 'use' the water used in their production.

Products with a high 'virtual' water footprint



Automation

Automation is the technology of **completing a task using machinery** with as **little human assistance as possible**. **AI (artificial intelligence)** is a form of automation which uses **computers** that are programmed with the ability to '**think**' and learn.

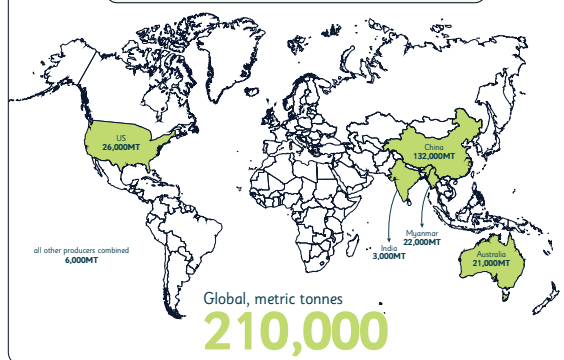
Machines are less likely to make **manual errors** than humans. They also **work faster** than humans and **don't need breaks**, making more products.

Machines can **complete repetitive, tedious tasks**, making human workers more happy. Once the machines have been **purchased**, they are **cheaper to run** than paying humans long-term. Computers can also be used for security and to recruit new staff by **automatically** choosing the best job applications.

Rare earth elements

'Rare earth elements' are **seventeen elements** used in many **high-tech devices**, e.g. smartphones and game consoles. A few countries, including **China** and the **USA**, produce most of these REEs. Creating **mines** to extract REEs is difficult as they are found thinly and evenly across the Earth's surface rather than in large amounts.

Top five producers of rare earths in 2019



We learnt in our **energy generation lesson** that moving to **renewable energy sources** is very important for the future of our planet.

Rare earth elements are needed to **develop green energy technology** like in these images.

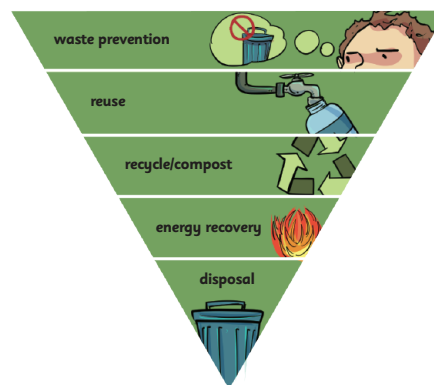
Rare earth element shortages could affect the development of this 'green' tech.



Waste management

The UK has developed a **waste management hierarchy** for dealing with waste produced in the country. **Waste prevention** is the key element of the hierarchy; **refusing** single-use plastics and using **reusable products** is the first step to **reducing our environmental impact**. Limiting our **reliance on landfills** is very important.

Waste hierarchy negatives of landfill



Lance

Landfill sites are **overflowing**, and eventually, we will run out of **landfill space**.

The **hazardous waste** is often improperly disposed of and ends up in a **landfill**. Hazardous waste can **contaminate the soil** and endanger animals, plants and humans.



Jamie

