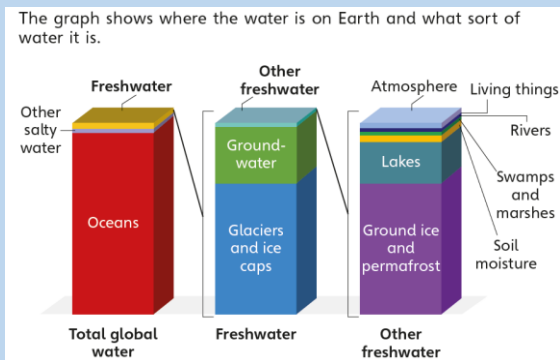


YEAR3 Autumn Term Topic: Water and Weather

Key Vocabulary

Air masses	Huge areas of air that have the same temperature and the same amount of water vapour.
Condensation	When a gas turns into a liquid
Evaporation	When a liquid turns into a gas
Forecast	A prediction about what will happen in the future, based on evidence
Gravity	An invisible force that pulls things towards the centre of the Earth
Hemisphere	Half of the Earth: the top half is the northern hemisphere, the bottom half the southern hemisphere
Rain Shadow	The side of a mountain that does not get much rain
Solar System	The Sun and everything that travels round it
Water Cycle	How water moves around the Earth, evaporating and condensing
Water vapour	Water that is in the form of a gas

Key concepts and processes



Earth's Water

Ocean: The ocean is a massive body of saltwater. It's the largest part of Earth's water, making up about 97% of all the water on our planet.

Saline: This word means "salty." The ocean is saline because it contains lots of salt.

Permafrost: Permafrost is ground that's always frozen, even in summer. It's like nature's deep freezer!

Glaciers: Glaciers are huge masses of ice. They're like frozen rivers of ice that can be found in some very cold places.

Lakes: Lakes are big bodies of water surrounded by land. They can be small like a pond or massive like the Great Lakes in North America.

Groundwater: Groundwater is water that's hidden underground, beneath the Earth's surface. It's often found in rocks and soil.



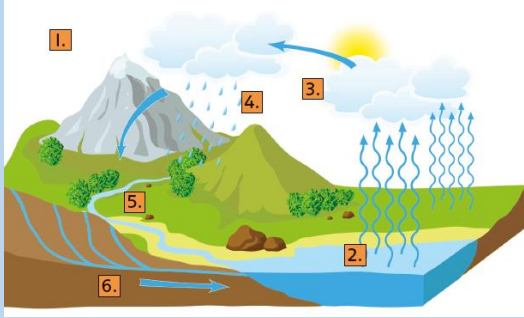
Water can exist as a solid, liquid, or gas, depending on its temperature.

- Below 0°C, water freezes into ice (solid).
- When heated, water evaporates into water vapour (gas).
- When water vapour cools, it condenses back into liquid water.

Water Cycle

Water changes form and moves through a cycle in nature.

- The Sun heats water, causing **evaporation** into the **atmosphere**.



1. Atmosphere,
2. Evaporation
3. Condensation
4. Precipitation
5. Run off
6. Ground water

- In the cold air, water vapour cools and turns back into liquid through **condensation**, forming clouds.
- When clouds become heavy, water falls as **precipitation** (rain or snow).
- Some water flows into rivers as **surface runoff**, and some seeps into the ground as **groundwater**, both eventually returning to the sea.

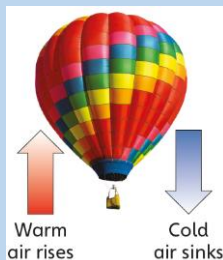
Water Cycle

Water Cycle: The water cycle is how water moves around our planet. It has a few main parts:

Evaporation: When the sun makes water from rivers, lakes, and even the ocean turn into water vapour. It's like water disappearing into the air.

Condensation: When water vapour in the air turns back into tiny water droplets and forms clouds.

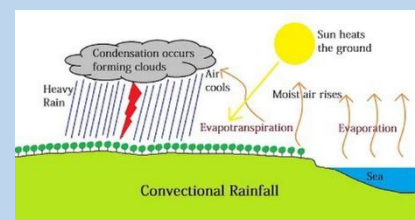
Precipitation: When those cloud droplets get heavy and fall to the ground as rain, snow, or hail.



A hot air balloon rises when a burner heats the air inside, making it lighter. When the burner is turned off and the air cools, the balloon begins to fall.

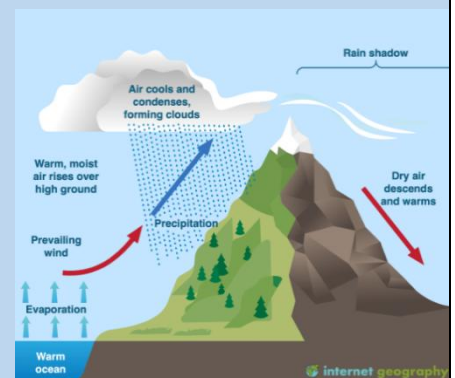
Types of Rainfall

Convictional Rainfall: This is like when the sun heats the ground, and the warm air rises, forming clouds that bring rain.



Orographic

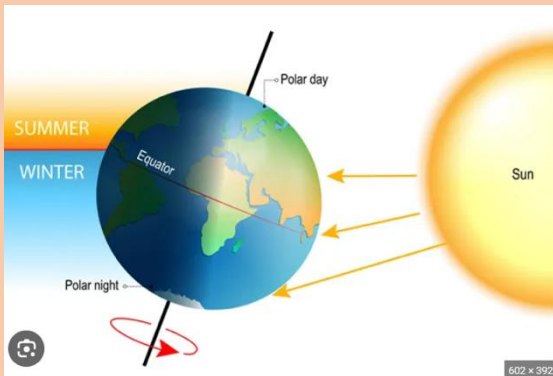
Rainfall: When air is forced to rise over a hill or mountain, it cools down and forms clouds that release rain.



Rain Shadow: The side of the hill or mountain where the air descends and gets drier because it already lost its moisture.

Frontal Rainfall: Happens when two different air masses meet. One warm and one cold. They battle, and the warm air is forced to rise, creating rain.

Case Studies & Examples



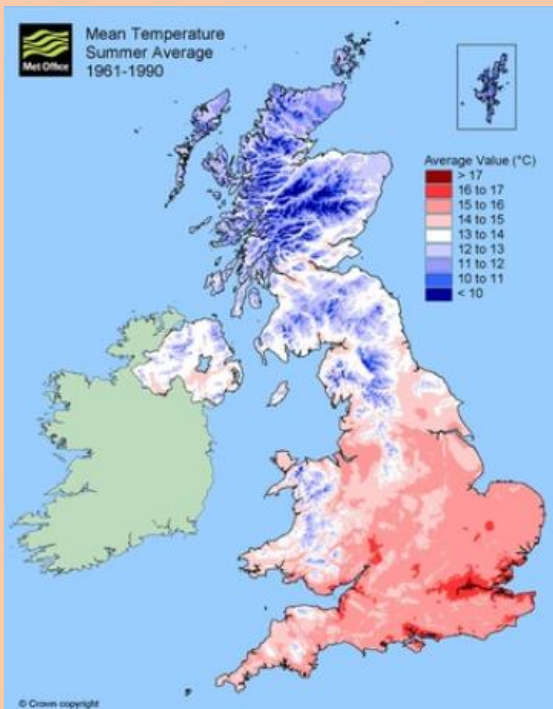
Seasons in the UK

Why We Have Seasons: The UK has different seasons because Earth is tilted on its axis. It's like the planet has a slight lean. This tilt makes some parts of the Earth get more direct sunlight at different times of the year.

Northern Hemisphere: The UK is in the northern part of the Earth, and the northern hemisphere gets warmer when it gets more direct sunlight.

In the summer, the Earth's northern hemisphere is tilted towards the sun.

In the winter, the Earth's northern hemisphere is tilted away from the sun.



Temperate and Mild: The UK has a temperate climate, which means it doesn't get too hot or too cold. It's just right, like Goldilocks' porridge!

Spring Term Topic: The United Kingdom

Key Vocabulary

The United Kingdom (UK)	Comprises of 4 countries: England, Scotland, Wales, Northern Ireland
Population	The number of people that live in a place.
Currency	The money used in a country
Pound/ sterling	The currency used in the UK.
Borough	A borough is a small area or part of a city or town that helps run things for the people who live there.
Brent	The borough where Wembley and ELPS is in.
Gorge	A narrow valley with steep, rocky walls and usually has a stream running through it.
Loch	Scottish word for lake.
Ben Nevis	Tallest mountain in the United kingdom. Located in Scotland.
North Sea	Located to the north-east of the United kingdom .
Moorland	A moorland is an area of open and usually high land with poor soil that is covered mainly with grass.

Famous attractions in the United kingdom

Wembley Stadium  Location: London	Tower Bridge  Location: London	The Angel of the North  Location: Gateshead	Edinburgh Castle  Location: Edinburgh
London Eye  Location: London	Houses of Parliament  Location: London	Roman Baths  Location: Bath	Kings College  Location: Cambridge

Map of LONDON



Key concepts

- The United Kingdom consists of 4 countries- **England, Scotland, Wales and Northern Ireland**.
- The population of the UK is approximately 67 million.
- The currency used here in the Pound (British Sterling £)



Scotland is in the north of the UK. The capital city of Scotland is Edinburgh. The population is approximately 5 million. The most popular foods are haggis. A famous landmark is Edinburgh Castle. The tallest mountain in Scotland is **Ben Nevis**.

Scotland is known for its beautiful **lochs**, which are often surrounded by villages. The rugged **mountains** of Scotland, like the Cairngorms, are great for hiking and climbing. Scotland has many scenic **rivers** that play a role in hydroelectric power generation. The country's **coastline** is found along the west and east, offering views of the North Sea. The Isle of Skye and Orkney Islands are examples of Scottish **islands**. Scotland's rolling **hills** provide opportunities for outdoor activities.

Wales has a population of about 3 million people. The capital city of Wales is Cardiff. A famous landmark is the Principality stadium and the Menai bridge. Mount Snowden is the tallest mountain in Wales. The currency used here is the **pound. £**. Roald Dahl is a famous author who was born in Wales. Cawl and Welsh cakes are popular dishes. The daffodil is the national emblem of Wales. Rugby is the national sport in Wales and is often played in the Principality Stadium. The longest place name in the UK can be found in Wales.

England is in the south of the UK. London is divided in 32 **boroughs**. Wembley is in the borough of **Brent**. The River Thames flows through London.



Summer term Topic: Population

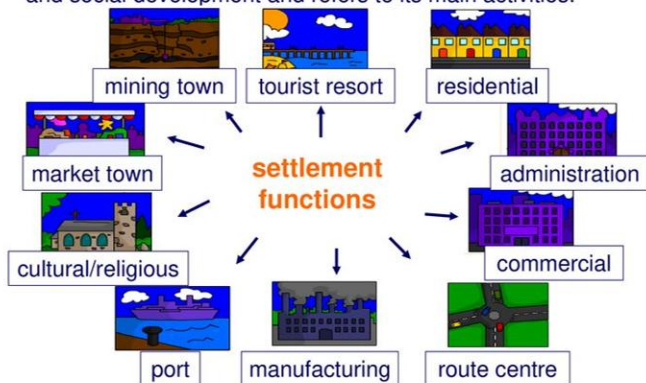
Key Vocabulary	
Birth Rate	The number of births per 1,000 people per year.
City	A large settlement that usually has more than 100,000 people.
Densely populated	Many people live in the area. For example: cities such as Manila in the Philippines and Milan in Italy.
Employment	A job- that pays money in return for work.
Land use	The purpose or use of an area of land.
Leisure	Activities that people do in their spare time when they are not working.
Megacity	A city with at least 10 million people.
Population	The number of people in a particular place.
Population density	The number of people per square kilometre.
Settlement	A place where humans live.
Town	A medium-sized settlement that can have between 1,000 and 100,000 people.
Village	A small settlement that can have between 100 and approximately 3,000 people.

Key concepts									
- Approximately 8 billion people live on Earth. - In 1800, there were approx 1 billion people on Earth. - In 20250, it is predicted that the population will reach 10 billion.	<table border="1"> <thead> <tr> <th colspan="2">The differences between villages, towns and cities</th></tr> </thead> <tbody> <tr> <td>Village</td><td> - In the countryside - Some services such as a post office, a small shop and sometimes a small place of worship - There may be a doctors' practice and a primary school - Many people are leaving villages to move to towns and cities </td></tr> <tr> <td>Town</td><td> - Services such as primary and secondary schools, a train station, hospitals and shopping centres - Large supermarkets and at least one place of worship </td></tr> <tr> <td>City</td><td> - Many different types of services, including universities, sports stadiums and a large variety of shops - Many restaurants, transport links and different places of worship - Many people move to cities because there are more opportunities for employment and leisure </td></tr> </tbody> </table>  This land is good for farming because it has rich, fertile soil. There is flat land for animals to graze.	The differences between villages, towns and cities		Village	- In the countryside - Some services such as a post office, a small shop and sometimes a small place of worship - There may be a doctors' practice and a primary school - Many people are leaving villages to move to towns and cities	Town	- Services such as primary and secondary schools, a train station, hospitals and shopping centres - Large supermarkets and at least one place of worship	City	- Many different types of services, including universities, sports stadiums and a large variety of shops - Many restaurants, transport links and different places of worship - Many people move to cities because there are more opportunities for employment and leisure
The differences between villages, towns and cities									
Village	- In the countryside - Some services such as a post office, a small shop and sometimes a small place of worship - There may be a doctors' practice and a primary school - Many people are leaving villages to move to towns and cities								
Town	- Services such as primary and secondary schools, a train station, hospitals and shopping centres - Large supermarkets and at least one place of worship								
City	- Many different types of services, including universities, sports stadiums and a large variety of shops - Many restaurants, transport links and different places of worship - Many people move to cities because there are more opportunities for employment and leisure								
 Sparse- spread out 									

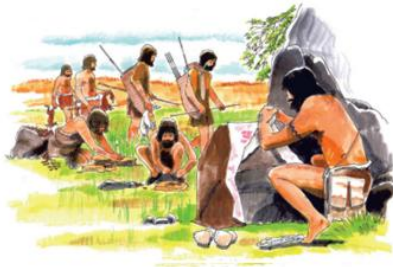
Dense- packed together

What is the function of a settlement?

The **function** of a settlement relates to its economic and social development and refers to its main activities.



This mountain is not good for farming because there is no soil, just rock, and it is steep.



Hunter-gatherers

Many thousands of years ago, humans were 'hunter-gatherers'. They hunted wild animals for meat, and used the skins and bones to make things such as clothes and tools. Humans also gathered (collected) fruit, plants and nuts to eat.

Hunter-gatherers were nomadic, which means they moved from place to place looking for food. They did not have permanent **settlements** (places where there are always people living).

Permanent settlements

Around 5,000 years ago, people learnt how to take good care of the soil. This meant that they could live in the same place all the time.

Permanent settlements and new ways of farming meant people could grow more food than before. So **villages** got bigger, and developed into **towns**. Some towns got even bigger and became **cities**.

Residential Area



Industrial Area



Commercial Area



Transport

Land use in cities	
Residential	Housing of all types
Commercial	Businesses, offices and shops
Industrial	Factories, warehouses (large buildings for storage), rubbish and recycling facilities
Transportation	Roads, bus lanes, railway lines, cycle paths
Green areas	Big parks and open spaces

