

YEAR 7 UNIT 2: Cold Environments

KEY TERMS

Adaptation – a change plants or animals make to survive in an environment

Climate - Average and typical weather conditions of an area

Economic - Related to money and resources

Environment - The natural or built world in which plants, animals or humans live

Ecosystem - living community of plants and animals sharing an environment with non-living elements such as climate and soil

Exploitation - The use of resources, often unfairly in order to benefit from them

Extreme environment – somewhere which is difficult for plants, animals and humans to survive in

Finite - Limited in size or amount - will one day run out

Global warming – the increase in global temperatures caused by increasing amounts of greenhouse gases in the atmosphere

Greenhouse effect – a natural process which keeps the planet warm

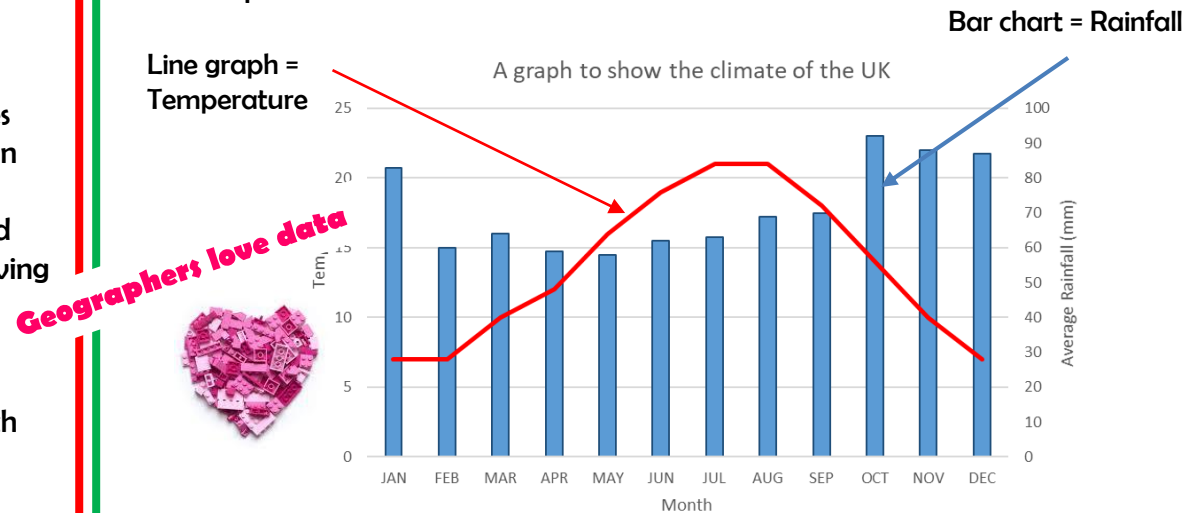
Indigenous – the original inhabitants of an area, or a group who have lived in a place for many generations.

Interdependence - When one feature is affected by another or changes when another changes this is called

Settlement - A place where people establish a community

Weather – the day to day conditions that can be observed out the window.

A climate graph is TWO graphs together showing the rainfall and the temperature of the same place.

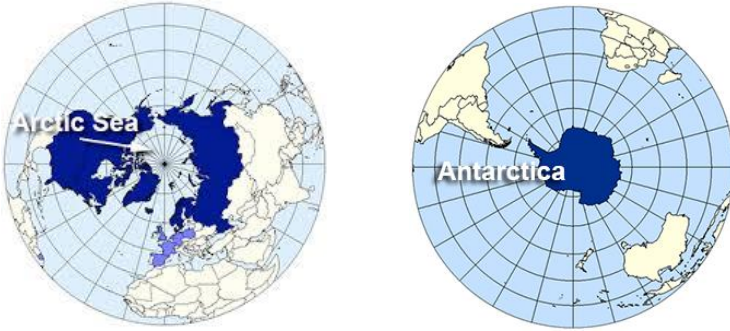


Good graphs are drawn with a ruler and include a title, axis labels and units.

Animals and people have to adapt to the extreme environment, animals have done this over many generations. Humans have to use technology.



The Arctic surrounds the North Pole, it is in the far north of our planet and is described as a frozen ocean surrounded by water.



Antarctica surrounds the South Pole, it is in the far south of our planet and is described as frozen land surrounded by water.

Geographers ask good questions

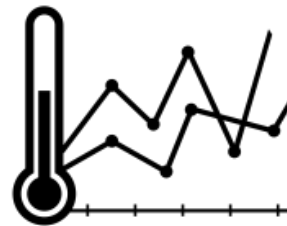
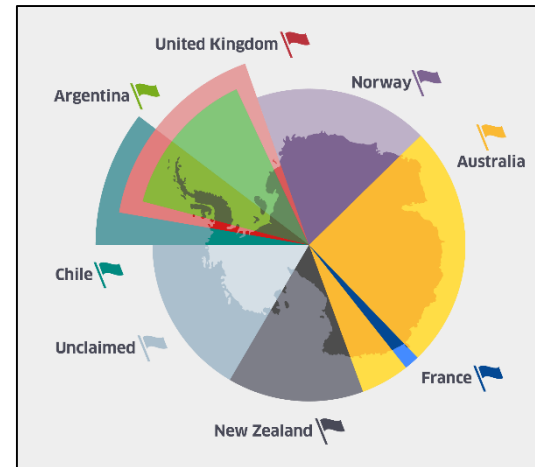
How are humans using these landscapes and is it sustainable?
The polar landscapes are at risk from over use (exploitation). In the past humans were responsible for over fishing and the destruction of whale populations. Indigenous populations rely on these resources, and have used them sustainably for generations.

How can we use enjoy the resources these environments offer while making sure there are homes and a future for the people who call the Arctic home?

The biggest challenge facing the polar regions is climate change. The burning of fossil fuels has increased global temperatures. This is leading to a rise in sea temperature and melting ice. Animals like polar bears are not able to adapt quickly enough and their numbers are falling. The people who live in the Arctic are not able to hunt in the same ways as they rely on these animals.

The Antarctic treaty

- 1.To make Antarctica a natural reserve that is devoted to peace and science
- 2.To allow scientists freedom to work
- 3.To share scientific knowledge
- 4.To set aside any territorial claims
- 5.To ban nuclear explosions and the disposal of radioactive waste
- 6.To make sure all visits to Antarctica comply with the treaty
- 7.To ban all commercial mining until at least 2048.
- 8.To ensure all waste is disposed of without damaging the environment
- 9.To protect all Antarctic animals and plants.



YEAR 7 UNIT 3: Physical Landscapes in the UK

KEY TERMS

Channel – the course of a single river or stream

Condensation – when water vapour is turned into a liquid

Confluence – the point at which a tributary joins another river

Deposition – the dropping of rock particles when the water has less energy

Erosion – the wearing away of rock

Evaporation – when liquid water changes to a vapour

Floodplain – flat land at the side of a river which floods when a river bursts its banks

Geology – the study of rocks beneath or feet

Meander – a bend in a river

Mouth – where a river joins the sea

Precipitation – any liquid water falling to the earth (e.g. rain)

Rock Type – different rocks are eroded at different rates.

Sediment – small pieces of material such as rock or sand moved to a new location

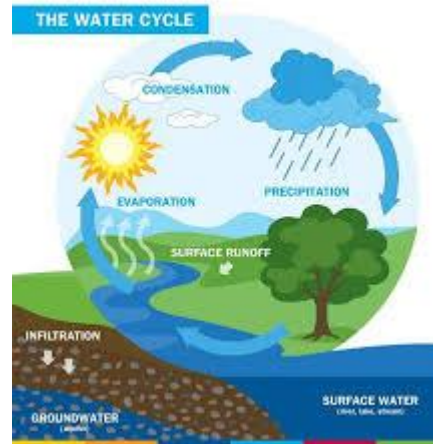
Source – the start of a river

Transportation – the movement of sediment from an area of erosion to an area of deposition

Tributary – a smaller channel that joins a larger river

Water Cycle – the cycle of water from the atmosphere, to land and ocean

The water cycle describes the never ending cycle of water through our atmosphere, land and oceans



Water shapes our natural landscape through **erosion**, **transportation** and **deposition**. Wearing away rock from one place and taking it to another. It is through this process we have the Valleys of Wales, the uplands of the Peak District, and the amazing coastal features of the Jurassic Coast.

River landforms – different parts of a river have different levels of energy so they erode, transport and deposit different amounts of sediment – creating different features.

Upper Course

- Source
- V – Shaped valley
- Interlocking spurs
- Waterfalls
- Gorges
- Narrow
- Shallow
- Large bed load

Middle course

- Meanders
- River Cliffs
- Slip off Slope
- Open gentle valley
- Wider and deeper
- More suspended sediment

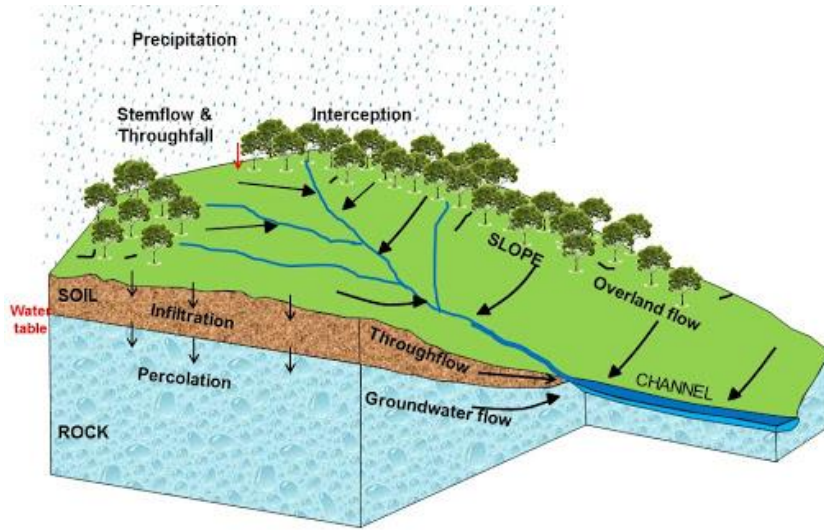
Lower Course

- Ox bow lakes
- Flood plains
- Levees
- Open valley
- Wide floodplain
- Very wide
- Very deep
- Mouth
- Estuary



Drainage Basin

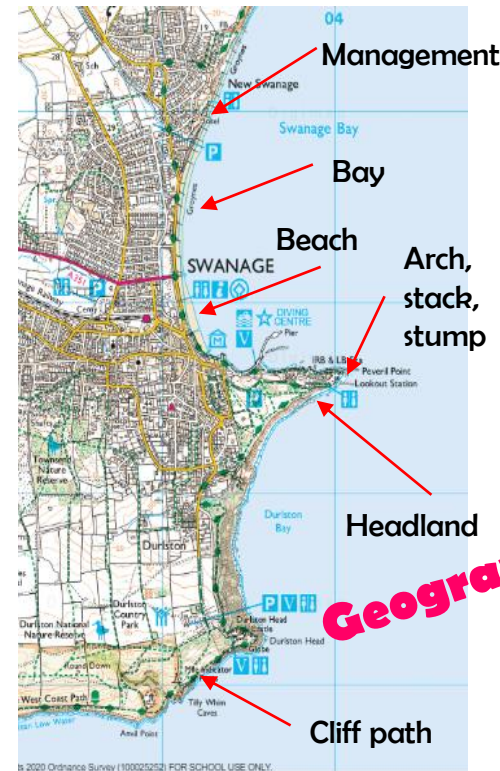
Geographers try to understand the interaction between the water cycle and the individual character of the drainage basin. By studying this geographers are able to predict changes to river landscapes and also where and when a river may flood.



VS



The interactions between the sea and the geology create spectacular coastal landforms. These areas are popular with tourists. However, the sea is always changing the coast which can cause problems for people living in coastal communities. These problems include erosion and sea flooding.



Geographers love maps



Geographers ask good questions As our population continues to rise there is a demand for housing.

Often more houses are built in areas at risk from flooding. How can we safely protect homes and businesses from these dangers and who should pay for them. Are big questions for our future, especially if predictions about sea level rises are accurate!

