

| | Autumn 1 | Autumn 2 | Spring 1 & 2 | Summer 1 & 2 |
|--------------------------------|--|--|---|--|
| | What is our place in the world? | What fantastic places exist in our world? | Why do people experience differences in weather and climate around the world? | What makes Asia so diverse? |
| Overview of Scheme of Learning | The students will study a range of map skills as well as the human and physical geography of the UK. They will revisit foundational knowledge on continents and oceans (from KS2). | The students will study the human and physical Geography of a range of “Fantastic Places”. They will learn about the skill of preparing and reading climate graphs, which will be used in later schemes of work. Students research a fantastic place of their own choice for homework and explain why it is a fantastic place. | The students will study a range of climate zones and learn about the reasons for differences between them, including latitude and differential heating. Students will practise their use of climate graphs and use their locational knowledge | The students will study the diverse continent of Asia. They will use their prior knowledge on climate zones to look at the different biomes found in Asia. They will also learn about Asia’s physical geography and some of the different industries and cultures. |
| Cultural capital | <p>Borrow a local map from your local library and explore your surroundings!</p> <p>Download the free app “All trails” to go for a walk and explore!</p> <p>In lessons and for homework, students are completing a fieldwork booklet to accompany this unit.</p> <p>Read: “Prisoners of Geography – Our World explained in 12 simple maps” and “Prisoners of Geography – Ten maps that tell you everything you need to know about global politics” by Tim Marshall.</p> | <p>Browse a travel guide to learn about a range of Fantastic Places!</p> <p>Watch a travel or nature documentary.</p> <p>Read “The explorer” by Katherine Rundell.</p> | <p>Watch a weather forecast.</p> <p>Write a weather diary.</p> <p>Read “Very British Weather: Over 365 Hidden Wonders from the World’s Greatest Forecasters” by The Met Office.</p> <p>Watch “The Aeronauts”.</p> <p>Watch A Perfect Planet Series 1:3. Weather</p> <p>Watch Panorama – Britain’s Wild Weather.</p> | <p>Watch David Attenborough – Series 1: Episode 2: Asia.</p> <p>Read “The Kite Runner” by Khaled Hosseini</p> <p>Read “A Thousand Splendid Suns” by Khaleh Hosseini</p> <p>Read “Kick” by Mitch Johnston</p> <p>Read “The unexpected inheritance of Inspector Chopra” by Vaseem Khan.</p> |

Year 7 Curriculum Overview Geography 2023-24

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| <p>Prior learning</p> | <p>From KS2, students will be able to describe the characteristics of their town and may have done some map skills. They should have learned about the seven continents and five oceans.</p> | <p>Students will use their knowledge from Autumn 1 and develop their cartographic and geographical skills.</p> | <p>From Fantastic Places, students will have an understanding that not all places have the same climate. Their prior locational knowledge will support learning on climate zones.</p> <p>Cross curricular link with Science.</p> | <p>Students will know that Asia is a continent and is made up of many countries.</p> <p>Students will be able to identify human and physical features and will have an understanding that not all places are the same.</p> <p>Students will use their atlas skills and climate knowledge.</p> <p>Cross curricular link with RE.</p> |
| <p>Number of lessons</p> | <p>7 lessons</p> | <p>7 lessons</p> | <p>12 lessons</p> | <p>10 lessons</p> |
| <p>Assessment Overview</p> | <p>Pre-assessment – exploring the difference between physical and human geography, plus locational knowledge. Assessment – follows the pre-assessment, and includes locational knowledge and physical and human geography. Requires a combination of short and long answers with some skills questions. This is a format used consistently in secondary Geography at MCA.</p> <p>This will be completed in Autumn 1.</p> | <p>Pre-assessment – Students complete a piece of evaluative writing on Svalbard (one of our fantastic places). Assessment – Includes skills and shorter questions. The longer question is an evaluative piece requiring students to compare two fantastic places – this question can use their homework research and is an opportunity for students to benefit from their hard work at home.</p> <p>This will be completed in Spring 1.</p> | <p>Pre-assessment – Students complete two climate graphs and complete a piece of writing to describe them. Assessment – Includes skills, including interpreting climate graphs, shorter questions and a piece of evaluative writing completed using a written resource.</p> | <p>End of Year assessment – a range of short and longer answers with some skills questions.</p> <p>This will be completed in the Summer term.</p> |
| <p>Link to detailed content (Knowledge Organiser/Unit Overview/Scheme of Learning)</p> | <p><i>Knowledge organiser 01. Our Place in the World</i></p> | <p><i>Knowledge organiser 02. Fantastic Places</i></p> | <p><i>Knowledge organiser 03. Weather and climate</i></p> | <p><i>Knowledge organiser 04. Asia</i></p> |

| Lessons | | Objectives | Outcomes | Purpose | Key concepts | Core ideas | Skills | Homework |
|---------|------------------------------------|---|--|--|--------------|---|-----------------|--|
| 1. | What is Geography? | <ul style="list-style-type: none"> To describe what human and physical geography is. To assess geographical images. | <ol style="list-style-type: none"> A completed definition of human and physical geography. A description of the geography seen in several images. | To ensure students have an understanding of what geography is and the fundamental differences between human and physical geography. It is necessary that students understand this distinction before they move onto more complex geography at KS3. | Place | Definition of human and physical geography. | Image analysis. | 1. Students find examples of human and physical geography in the news. |
| 2 | What are continents and countries? | <p>To explain what an atlas is and what it is used for.</p> <p>To define 3 key words for this lesson.</p> <p>To understand the continents in the world.</p> | <ol style="list-style-type: none"> A completed world map with continents labelled on. A definition of continent, country and atlas. To write down facts about countries and capitals found in each continent. | Students will develop their knowledge of what the continents are, as well as the difference between countries and continents. This knowledge is key in their geographical development as they require a good spatial understanding of the continents and where they are in relation to them. | Scale, place | continents | Map skills. | |

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| 3 | Pre-assessment | <ul style="list-style-type: none"> To recap understanding of the continents and the fundamental differences between human and physical geography. | <ol style="list-style-type: none"> Completed definitions of key words. An example of human and physical geography. A labelled map of the 7 continents. | <p>Students will be assessed on key definitions, their understanding of the difference between physical and human geography, and their knowledge of the continents.</p> <p>This is key core geographical knowledge that students need to understand before progressing further.</p> | Place, scale | Continents, key definitions. | Map skills | |
| 4 | What are OS maps? | <ul style="list-style-type: none"> To understand what a compass is and the points, North, South, East and West. To be able to describe what an OS Map is and why we use them. To be able to use a map and directions to find landmarks. . | <ol style="list-style-type: none"> To draw a completed labelled compass. To write down 3 strengths and weaknesses of OS maps. To write directions from one place to another on an OS map. | <p>Students may have some prior experience of using maps but no universal. Before moving onto later lessons where they will learn how to read an OS map and understand it in more depth, they need to understand what an OS map is and become familiar with it. The purpose of this lesson is to ensure students have a minimum base level understanding of an OS map and how to use it.</p> | Scale, place | Using an OS map. | Map skills | Write a poem about the differences between continents and countries. |
| 5 | What are map symbols? | <ul style="list-style-type: none"> To understand some map symbols and know why they are used. I can create a story using as many map symbols as possible . | <ol style="list-style-type: none"> A list of important map symbols An extended story that incorporates map symbols. A written summary of the importance of map symbols. | <p>Students will build on prior knowledge of OS maps. They will be introduced to the concept of using a universal symbol on a map to represent information and meaning. They will develop their knowledge of key map symbols. They will then practise using this knowledge to plan a route, using the map symbols and previous learnt compass points to direct themselves. This lesson is focused on building core geographical knowledge to help them navigate OS maps and understand them.</p> | Scale, place | Key OS map symbols | Map skills, extended writing. | |

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| 6 | How do I read a 4 figure grid reference? | <ul style="list-style-type: none"> Explain how to find a 4 figure grid reference Write a 4 figure grid reference for a location of my choice | <ol style="list-style-type: none"> A list of important map symbols An extended story that incorporates map symbols. A written summary of the importance of map symbols. | Students learn the importance of a 4-figure grid reference as well as how to read them. They will practise writing them and finding different places. This is important because it secures this skill. They need to understand how to find a 4-figure as the next lesson will build on this. | Scale | 4-figure grid references. | Map skills. | Create your own guide on how to use an OS map. |
| 7 | How do I read a 6 figure grid reference? | <ul style="list-style-type: none"> To understand what a six-figure grid reference is. To explain why six-figure grid references are used. | <ol style="list-style-type: none"> A completed worksheet on 4 and 6 figure grid references. Extended writing on the geography of the Great Barrier Reef. A completed series of questions on 6-figure grid references. | Students will build on previous knowledge of 4 figure grid references. Activities will develop and build on their existing understanding. They will explore this new skill of 6 figure grid references through activities that focus on the Great Barrier Reef. This also develops their locational knowledge. This is important for the next topic where students will explore the concept of place. | Scale, place | 6 figure grid references. | Extended writing, map skills. | . |
| 8 | How is height shown on a map? | <ul style="list-style-type: none"> To be able to <u>interpret</u> contours lines height and relief. To be able to <u>create</u> an accurate cross section from contours on a map. | <ol style="list-style-type: none"> A definition of the term relief. A completed contour match up sheet. A completed series of questions using the "Harry Potter" contour map. | This lesson moves onto new skill of reading the height of a map. Students will now have secure knowledge of the purpose of a map, how to read grid reference and map symbols. Students in this lesson will develop their ability to understand the map in more complexity by being able to describe relief. This is important for later lessons in this unit where they will explore the relationship between relief and rainfall in the UK. The concept of relief is revisited throughout the weather and climate unit also. Therefore students need to secure this new skill before moving onto these lessons. | Scale | Contour lines, relief. | Map skills, image analysis. | For a city of your choice in the UK. Describe the human geography i.e. population size, demographics, attractions, history. |

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|----|--|---|---|---|---------------------------|------------------------------|-------------|----------|
| 9 | How do I measure distance on a map? | <ul style="list-style-type: none"> To understand the concept of scale. To know how to measure distance. To be able to explain what a scale bar is and how to use it. | <ol style="list-style-type: none"> A list of important map symbols An extended story that incorporates map symbols. A written summary of the importance of map symbols. | Students will be introduced to new geographical concept of scale. They will explicitly learn the purpose of scale and how it applies to map reading. They will know how to use a scale bar to measure distance. This is important for them to be able to confidently and full navigate a map. | Scale | Measuring distance | Map skills | |
| 10 | What is the physical geography of the UK | <ul style="list-style-type: none"> To understand the countries making up the British Isles. To plot on a map the main rivers, mountains and weather patterns of the UK To explain the physical features of the UK in the form of a poem. | <ol style="list-style-type: none"> A completed definition of the countries that make up the UK, Great Britain and British Isles. A completed map with the UK's main rivers, mountains and weather patterns plotted on it. | Students develop their understanding of the distinction between Great Britain, UK and British Isles. This develops their sense of place and is important for them when they explore different aspects of the UK's geography in KS3 and KS4. They will develop their knowledge of the UK's physical geographical features. This is important for the following lesson where they will look at the human geography of the UK and explore how population distribution is linked with the physical geography of the UK. | Physical processes, place | Physical geography of the UK | Map skills. | Revision |

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|----|--|--|--|--|-----------------------------------|--------------------------|--|-----|
| 11 | What is the human geography of the UK? | <ul style="list-style-type: none"> To define population density. To describe the population density of the UK. To create a map of the UK displaying population density. | <ol style="list-style-type: none"> A completed definition of population density. A completed map of the UK's population density. A extended piece of writing describing the UK's population distribution. | Students develop an understanding of population distribution in the UK. This lesson will ensure that students have a clear understanding of what population density is, and how it can link to other physical factors. This is important for when they explore human geography in KS3 and 4. | Place, | Population distribution. | Map skills, extended writing. | |
| 12 | Assessment | <ul style="list-style-type: none"> To assess to what extent students can understand key map skills and core geographical concepts. It also will assess their ability of apply learnt geographical skills. | | Students must recap prior knowledge on map skills and fundamental geographical concepts. | Physical processes, place, scale. | n/a | Exam technique Extended writing. Map skills | n/a |

Knowledge organiser: Where is our place in the world?

What is Geography?

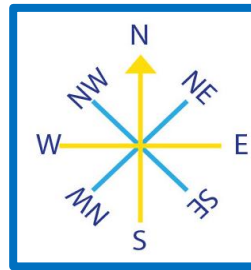
Geography is the study of how the world works and why it appears how it does. We want to understand how humans and nature work independently and together.

What are the two type of Geography?

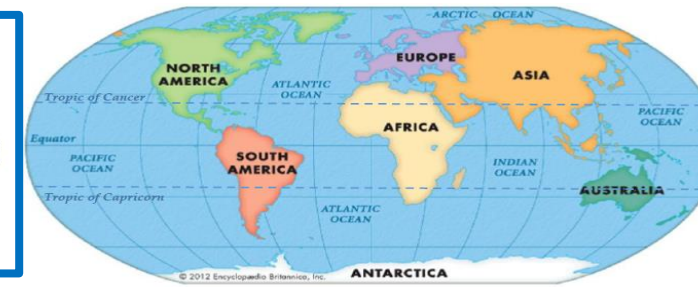
Physical Geography – everything in the world that is natural, e.g. rivers, trees

Human Geography – everything in the world that is created by humans, e.g. language, culture, trade.

8 point compass



Continents, oceans and key lines of latitude



Key terms:

Physical geography
Human geography
Continent
Country
Atlas
City
Equator
Compass direction
North, East, South, West
OS maps
Landmark
Map symbols
Key
Sketch map
Great Britain
The United Kingdom
British Isles
Grid references
4 figure grid references
6 figure grid references
Scale
Ratio
Distance
Kilometres
Centimetres
Scale bar
Relief
Height
Layered Colour
Spot Height
Sea level
Contour
Population density
Population distribution
Sparsely populated
Densely populated

OS maps

An OS map is a 2D representation of what a place looks like. It does not tell us direction or traffic. Paper editions can become out of date. However, they are renowned for their clarity and detail.

Sketch maps

A sketch map is a simple map which shows what a place is like.
All maps must include a key, a title, symbols, a north arrow

Grid references

Maps have grid lines on them—we use them to pinpoint locations by using grid reference. A four-figure grid reference is a handy way of identifying any square on a map, six-figure grid references are best for giving exact locations. Grid references are easy, as long as you remember that you always go along the corridor before you go up the stairs.

4 figure grid references

Step 1: Go along the bottom of the map until you reach the easting which forms the start of the box, e.g. 47

Step 2: Then, go up the side of the map until you reach the northing that forms the bottom side of the square you are trying to locate e.g. 33

Step 3: Now put your two answers together e.g. 4733

6 figure grid references

Step 1: Find the four-figure reference.

Step 2: Imagine this square is divided up into 100 tiny squares, 10 along the bottom and 10 up the side.

Step 3: Still remembering to go along the corridor and then up the stairs, estimate how far across and then up the square the feature is e.g. 476334

Scale and distance

The scale of a map helps us calculate the size, height and dimensions of the features shown on the map AND the distances between different points. Scale is the ratio between real life distances and how many times it has been shrunk to fit it on the map. We can measure distances on a map in two ways - straight line distances or distance along roads/tracks.

Relief

There are three ways to show height on a map:

Layer colouring – the darker the colour the higher the land.

Spot height – shows the exact height above sea level.

Contours – at regular intervals. If the lines are far apart, the land is flat, if they are close together the land is steep.

Great Britain is made up of England, Scotland and Wales.

The United Kingdom is made up on England, Scotland, Wales and Northern Ireland.

The British Isles is made up of the UK plus the Republic of Ireland.

Physical Geography of the UK

There are a range of mountains and rivers in the UK and seas that surround it.

Human Geography of the UK

The population of the UK is not evenly distributed. Urban areas are more densely populated than rural areas and the South is more densely populated than the North. The most densely populated city in the UK is London. The least densely populated area in the UK is the Scottish Highlands.

TOURIST INFORMATION

- Camp site
- Caravan site
- Garden
- Golf course or links
- Information centre, all year / seasonal
- Nature reserve
- Parking, Park and ride, all year / seasonal
- Picnic site
- Selected places of tourist interest
- Telephone, public / motoring organisation
- Viewpoint
- Visitor centre
- Walks / Trails
- Youth hostel

Knowledge organiser: What Fantastic Places exist around the World?

Svalbard

Svalbard is an archipelago and is part of Norway. Polar bears live in Svalbard. The capital city is Longyearbyen and they use the Norwegian krone as their currency. Their population is small at roughly 2,667. The average summer temperature is around 5 °C and the average winter temperature is around -12 °C. The average precipitation ranges from 6mm to 23mm. This precipitation falls as snow. The animals that live in Svalbard must be well adapted to the conditions.



Dubai

Dubai is located in the United Arab Emirates. It is within the hot desert. Iran and Saudi Arabia are close to Dubai. It is a hot place. It is north of the equator. There are lots of manmade landmarks in Dubai, which have had an impact on the natural world. Dubai takes some of its water from the ocean and has several desalination plants.



Racetrack Playa

Death Valley is located in North America and it is very hot. The Racetrack Playa is located in North America, on the East Coast, in Death Valley. The area is extremely cold at night and can freeze over which causes large rocks to slide across the ice. Once the ice has melted the tracks are left behind, giving the impression the rocks moved by themselves!



Totem Pole

The Totem Pole is on the edge of the Tasmanian coast in Australia. It is 65m high. A sea stack can be formed by erosion, although Totem Pole was formed by the escape of hot magma, which cooled into rare hexagonal pillars. The Totem Pole can be very dangerous to climb – Paul Pritchard fell when he attempted to climb. He survived thanks to the heroics of his climbing partner, but has had to adapt to permanent head injuries. He has returned to climbing!



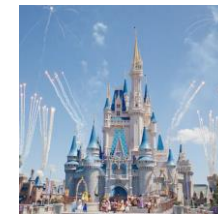
Stonehenge

What we know about the construction of Stonehenge we have had to work out from physical evidence, as it was first created around 5,000 years ago and the unique stone circle was constructed around 2,500 BC! The stones were moved from Wales, and they were put together with a tongue and groove construction ...which is how Ikea constructs a lot of its furniture today! Stonehenge was not voted as a modern Wonder of the World, leading it to be called a disgrace in the British press. Since then, a lot of work has been put into making Stonehenge into a valuable educational facility and protecting this unique monument. We will evaluate the work done.



Disney World

Disney World is located in Florida, on the east coast of North America. Disney World is of local importance as it supports the local economy and provides people with jobs. One in 50 local people have a job connected to Disney World. It is of national importance as it contributes a lot in taxes. It is of international importance as it attracts tourists from all over the world.



Key terms used in this unit:

Archipelago
Currency
Longyearbyen
Climate graph
Precipitation
Temperature
Adaptations
Racetrack Playa
Stonehenge
Totem Pole
Tasmania
Erosion
Stack
Cave
Arch
Stump
Dubai
United Arab Emirates
Saudi Arabia
Iran
Palm Jumeirah
Economy
National
International

Knowledge organiser: What Fantastic Places exist around the World?

Madagascar

Madagascar is an island located off the east coast of Africa. It has the Indian ocean to the east and the Mozambique channel to the west.

Madagascar is unique in terms of its plants and animals. The physical landscape is very varied and there are lots of things for people to do, including diving and snorkelling, fantastic food, wildlife, rainforests.

The animals that live there are very well adapted and, due to its remoteness, some species are only found on the island of Madagascar.



Maccu Pichu

Machu Picchu is located in Peru in South America. In 2007 it was voted as a New Seventh Wonder of the World. It was built in the mid-15th century. In 1983 it became a world heritage site. As it is a large site at high altitude, it has different climatic zones. Tourists can come and complete the Inca trail which is 32km long. The local area has been improved due to the increased tourism; however, there are some negatives, such as tour guides carrying too much which can lead to health problems. The site is also eroded by high footfall, and landslides therefore occur. The site is being protected in various ways – fewer roads are being built and the number of tourists are being cut.



Key terms used in this unit:

Adaptation

Native

Endemic

Maccu Pichu

Tourism

Erosion

Landslides

Favela

Slum

Agriculture

Biodiversity

Deforestation

Lava

Evaporation

Giant's Causeway

North Sentinel Island

Bay of Bengal

Tribe

Vulnerable

Brazil

Brazil is located in South America and is bordered by many other South American countries. It is on the East coast of the Atlantic Ocean.

It is of physical importance due to its biodiversity, its varied landscapes, soils and climate and the Amazon river.

It is of human importance due to its agricultural opportunities, tourism, economic power, exports and large population.

There are many issues in Brazil including traffic, deforestation and the slums.



Giant's Causeway

It is located on the North coast of Ireland. It was formed about 60 million years ago when the area was covered in lava. When the lava met the sea, it cooled and formed a mist as the water became steam. This then rained down onto the rock and this cycle continued until the lava solidified. The lava has split into columns. The tallest are about 12m high.

There are many different rock formations with different names.

According to legend the causeway is the remains of a pathway.



North Sentinel Island

The North Sentinel Island is located in the Bay of Bengal, off the coast of India.

It is banned for people to visit. This is due to the inhabitants. They have lived in isolation for the last 60,000 years. They are very vulnerable to modern day diseases and no one else speaks their language.



Knowledge organiser: Why do people experience differences in weather and climate across the world?

Climate is the overall pattern of weather.

Weather is the day to day variation in temperature, precipitation, wind speed, wind direction, cloud cover, humidity and air pressure.

Elements of weather

Temperature - This is the measure of how hot or cold it is. Measured using a thermometer.

Visibility - This is the distance that can be seen. Measured in metres.

General weather - This describes the weather in words; fog, showers, mist, thunder, sunny

Precipitation - Water in the air falls to the ground in many forms; rain, snow, sleet, hail etc. Measured in mm using a rain gauge.

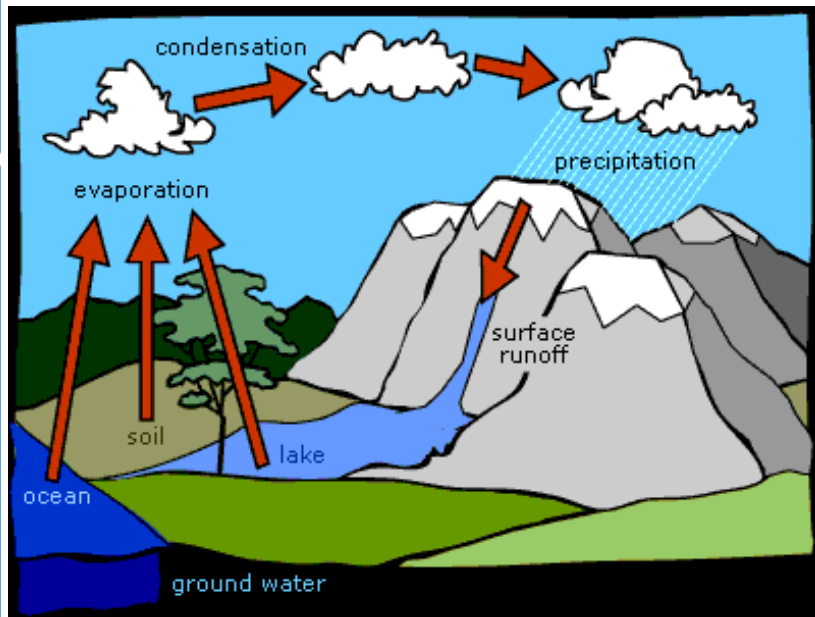
Cloud cover - This is the amount of the sky covered by cloud. Measured in oktas using the eye.

Wind speed - This tells us how strong the wind is. This is measured using an anemometer.

Wind direction - This is the direction the wind is blowing from. This is measured using a wind vane.

Cloud type - Clouds come in many shapes, sizes and heights. Cumulonimbus, cumulus, stratus and cirrus are the most common types.

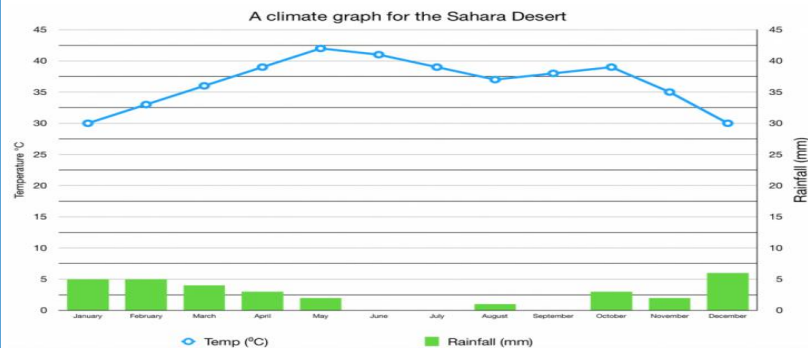
The Water Cycle



Climate graphs

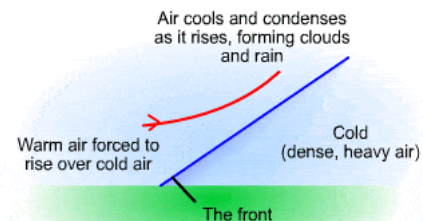
Climate graphs have 3 axis – month, temperature and precipitation.

The bar graph is always the precipitation, and the temperature is always the line graph.

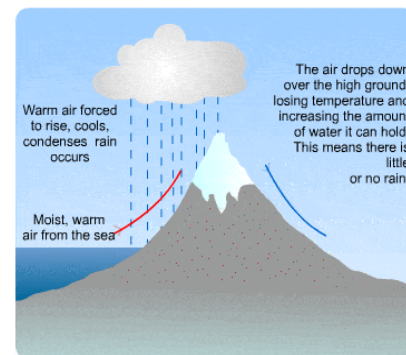


How does it rain?

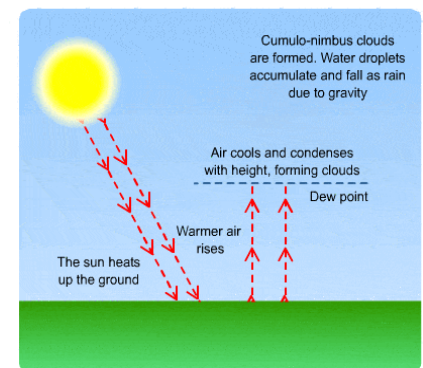
Frontal rain



Relief rain



Convictional rain



UK's weather

Temperatures are higher in the south. Rainfall is higher in the north and west. This is due to ocean currents, wind directions, altitude and latitude.

Flooding

Physical causes – rainfall, rock type, snow melt, steep slopes. Human causes – deforestation, urbanisation. Flooding affects countries socially, economically and environmentally.

UK floods - Calder Valley

Caused by heavy rainfall, prolonged rainfall during storms and steep slopes. It has made worse by urbanisation and deforestation, heavy rainfall. Impact – psychological stress of being flooded so many times, 6 times between 2015- 2020. financial, can't operate businesses, insurance cost. Responses – clearing drains, flood proof doors, planting trees.

Some places are extremely hot or extremely cold and the people have to adapt. For example, Dubai is very hot, and Russia is cold. The countries are very different and people live differently.

Key terms:

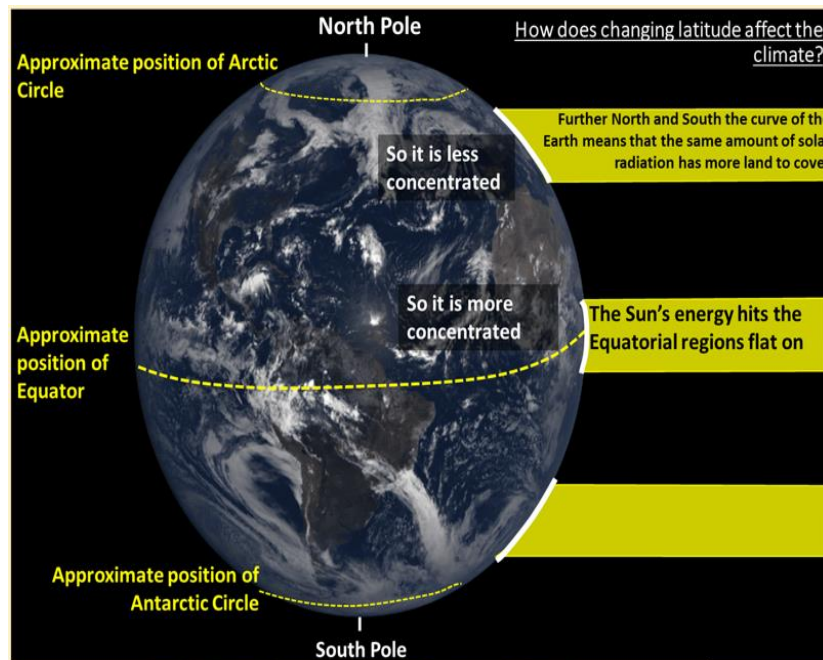
- Weather
- Climate
- Evaporation
- Condensation
- Precipitation
- Transpiration
- Interception
- Infiltration
- Surface run-off
- Ground water flow
- Temperature
- Visibility
- General weather
- Precipitation
- Cloud cover
- Wind speed
- Wind direction
- Cloud type
- Climate graph
- Altitude
- Latitude
- Ocean currents
- Frontal rain
- Relief rainfall
- Convictional rainfall
- Flooding
- Impermeable
- Deforestation
- Urbanisation

Global climate zones

1. **Tropical** – humid, temperature 25 - 35°C, i.e. Amazon.
2. **Dry** – Cold ocean currents mean very dry. Cloud free. Large temperature range - 45°C in day in summer, below 0°C at night in winter i.e. Sahara.
3. **Mediterranean** – hot dry summers, cooler wetter winters i.e. Spain, Greece.
4. **Continental** – Large range of temperature, cold winter, warm summer. Low rainfall as very far from the coast i.e. Moscow, Russia.
5. **Polar** – Temperature ranges from just above 0°C to -40+°C. Arctic can be a bit warmer. Tundra gets some snow. Antarctica has no rain as too cold for evaporation
6. **Temperate** – less extreme, cool winter, warm summer. 4 distinct seasons, autumn, spring, summer, winter. Weather varies a lot from day to day i.e. UK.

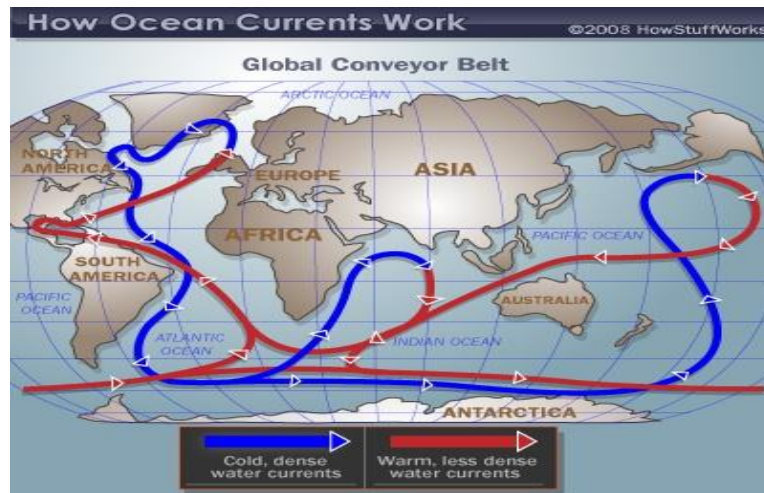
Ocean currents

Ocean currents travel around the world affecting weather. Warm currents bring higher temperatures and lots of rainfall to the areas they pass. Cold currents bring much colder temperatures and dry weather.



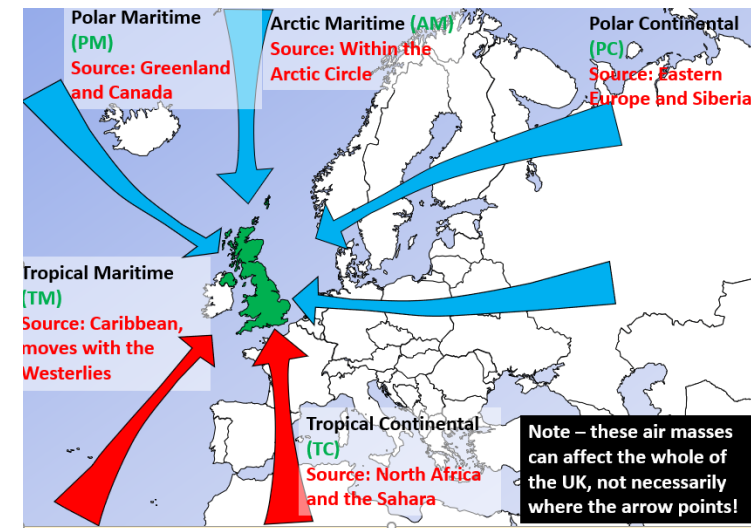
Differential heating

It gets **colder** as we move from the **equator**. This is because the energy from the sun, known as **heat**, is more concentrated at the equator. This is because the Earth is much flatter at **lower** latitudes so it covers a smaller area.



UK 5 air masses.

The UK experiences a temperate climate. It varies day to day depending on the air mass. It experiences 5 different air masses. Maritime are high in moisture, bring lots of rainfall/snow. Continental are dry and either bring very warm or very cold temperatures. Polar masses are typically cooler, tropical (formed closer to the equator) bring warm temperatures.



Pakistan Floods, 2022

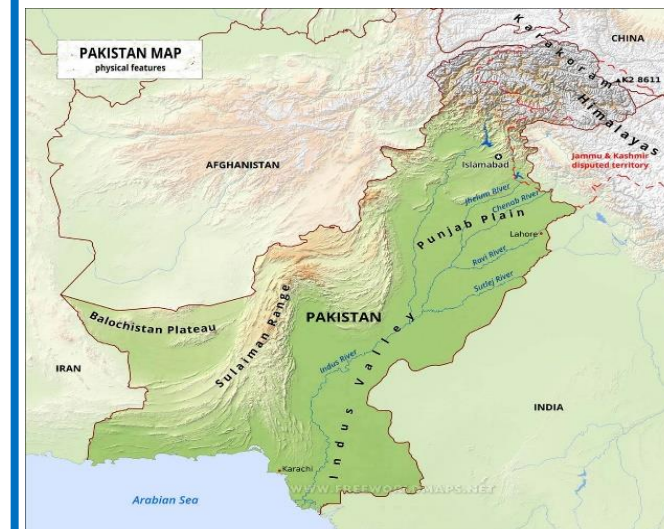
Causes- Caused by very intense monsoon, 508% more rain in Sindh province in July – August. 3x usual amount of glacial melting from Himalayas and Karakoram mountain ranges. Caused River Indus to flood. Climate change has meant it has been a lot warmer. Pakistan has more glaciers than anywhere other than the polar regions (7000).

Impacts – 1,265 killed, 1 million homes destroyed, 33 million people affected, over £8.7 billion damage, 6.4 million need humanitarian aid.

Responses – UN appeal for £139 million to help, aid agencies asked Pakistan government to allow food imports from India (border normally closed). UK gave £15 million in humanitarian aid. French government has sent aid carrying relief goods.

Key terms:

Biomes, Differential heating, Biomes, Urbanisation, Deforestation, Economic, social, environmental, Glacial melting, Monsoon, Climate zone, Latitude, Aid, Climate change, Relief



| Lessons | | Objectives | Outcomes | Purpose | Key concepts | Core ideas | Skills | Homework |
|---------|----------------------------|--|--|---|--------------------------------|---|----------------------------------|---|
| 1. | How can weather affect us | <ul style="list-style-type: none"> To be able to define what weather is. To think about how weather can vary from place to place and time to time. To explain the different impacts weather can have on people. | <ol style="list-style-type: none"> A completed definition of weather written down Written explanations of how the weather affects sporting events Annotations of the school building explaining how weather varies around it plus verbal answers in the lesson review | To ensure students have an understanding of what weather is, as this is core knowledge needed to understand more developed concepts and ideas around weather and climate. It is necessary that students begin to consider how weather varies across scale and time in order for later more detailed evaluation of case studies on the impacts of weather and climate. | Place, scale, physical process | Definition of weather Overview of the different impacts of weather | Reading, evaluation, map skills. | Record what weather was like for the week in a weather diary. |
| 2 | How do we measure weather? | <ul style="list-style-type: none"> To understand the different variables of weather. To be able to describe the weather instruments and units of measure for different weather variables. To identify where to install a weather station at MCA | <ol style="list-style-type: none"> A completed table of the weather instruments and units of measurement for various weather variables (e.g. temperature, wind speed). An appropriate choice and written reasons for a weather station at the University of Reading. A completed labelled diagram of a weather station. | Students will develop an understanding of the different components of the weather - building upon and securing previous learnt knowledge of what weather is. They will continue to develop their understanding of how weather varies over space by identifying where to install a weather station. | Scale, physical processes | Variables of weather and how they are measured. | Map skills, image analysis. | |

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| 3 | How do I read a climate graph? | <ul style="list-style-type: none"> To be able to explain the difference between weather and climate. To understand and be able to PLOT a climate graph To be able to INTERPRET climate graphs for different places and make COMPARISONS | <ol style="list-style-type: none"> Sentences contrasting weather and climate. A completed climate graph for Mildenhall, Suffolk, accurately drawn with temperature and precipitation plotted on the correct axis. Sentences contrasting the climate in Vostok and Mildenhall. | <p>Students will understand the difference between weather and climate. This is fundamental when learning about different climate regions later on in unit and also needed for interpreting climate graphs.</p> <p>Students will build on previous work around measuring weather by learning to plot and interpret climate graphs. This is a key geographical skill.</p> <p>Students will make comparisons between different climate graphs to encourage think about how climate varies across time and space. This introduces them to the key idea that the world is made up of different climate zones. This is important prior knowledge for later lessons.</p> | Time, physical processes, scale, space. | Definition of weather and climate. How to plot and interpret a climate graph. | Climate graphs | Central England temperature record sheet task. |
| 4 | The water cycle | <ul style="list-style-type: none"> To be able to identify the different parts of the water cycle. To be able to distinguish between the different parts of the water cycle. | <ol style="list-style-type: none"> Produce a labelled diagram of the water cycle. Answer a series of questions on the different parts of the water cycle. Write a story of a water droplet through the water cycle. | <p>Students will have from prior learning understanding of the fundamental differences between weather and climate, as well as an understanding of how we measure climate.</p> <p>To ensure students have a secure understanding of the water cycle in order to access later lessons on climate zones and more complex ideas on cloud formation.</p> | Physical processes. | Define and draw a water cycle. Describe evaporation, precipitation, accumulation, condensation and run-off. | Diagram drawing. Extended writing | |
| 5 | Why does it rain? | <ul style="list-style-type: none"> To understand why clouds form in the atmosphere. To be able to distinguish between different types of rainfall. | <ol style="list-style-type: none"> An explanation of how clouds form, with a labelled diagram. A completed set of questions about the patterns of rainfall over the UK. | <p>Students will build on prior knowledge of the water cycle. They will develop an understanding of the relationship between temperature and air pressure, and how this in turn influences rainfall. They will develop their knowledge and understanding of the role of relief in precipitation patterns in the UK.</p> <p>An understanding of this is fundamental for the later lessons where students explore climate variation around the UK.</p> | Physical processes. | Different types of rainfall Cloud formation. | Diagram drawing, map skills. | Climate zones worksheet. |

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| 6 | Pre-assessment Climate graphs | <ul style="list-style-type: none"> To recap previous learning on climate graphs. | 1. Completed climate graph pre-assessment | Students are provided with an incomplete climate graph and must complete the precipitation and temperature graph for each month. This tests their geographical skill of drawing a climate graph. They then are required to complete a series of interpretation questions that require them to accurately read and compare the two completed climate graphs. This test their ability to interpret data. They then are required to explain why the climate in Delwhinnie, Scotland and Reading, England is different. This tests their understanding of relief rainfall. | | Climate graphs | Climate graphs | |
| 7 | Why are some places just so hot? | <ul style="list-style-type: none"> To understand why different parts of the World receive different amounts of energy from the Sun. To be able to explain what latitude is. To be able to explain how differential heating can affect the climate of a region. | <ol style="list-style-type: none"> A simple explained sketch diagram of differential heating. To discuss what latitude is in pairs. A paragraph of writing on where the Earth is warmest and coldest using a thermal image of the Earth. | Students will continue to develop their knowledge of fundamental climate and weather processes. This lesson focuses on the role of differential heating and ocean currents. This lesson is focused on developing student understanding of why climate and weather are different at different parts of the Earth. This will be important prior knowledge for when they learn about biome distribution around the world. It encourages students to think of weather and climate at a range of scales and develops student understanding around the idea of latitudes. | Physical processes, scale, space Interdependence. | Climate zones Differential heating | Extended writing, diagram drawing. | Beast from the East homework. |
| 8 | Why does the UK have no rainforests? | <ul style="list-style-type: none"> To be able to DESCRIBE the major world climate types To know WHERE the world's major climate types are found To understand what happens to precipitation and temperature with increasing distance from the sea | <ol style="list-style-type: none"> A completed table of world climate types. A coloured map of the world climate types together with a paragraph on where tropical rainforests are found . Completed calculations for a maritime and a continental climate. | This lesson develops on prior learning around differential heating and ocean circulation, resulting in varying climate across the world. Students will build on this by developing their knowledge of what the main global climate zones are and where they are distributed. They will then be introduced to the geographical idea of maritime and continental climates. They will explore the relationship between distance from sea, and temperature and precipitation. This is important for the following lesson which will focus on types of air mass. | Physical processes, scale. | Climate zones Relief rainfall. | Map skills, mathematical skills. | |

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| 9 | What is an air mass? | <ul style="list-style-type: none"> To be able to describe the 5 major air masses that affect the UK To be able to explain what weather the major air masses bring to the UK To consider how air masses affect day to day life in the UK | <ol style="list-style-type: none"> A completed table on the 5 air masses affecting the UK Explained decisions on air mass “most likely to” statements. | Students will describe the characteristics of the 5 major air masses that affect the UK i.e. temperature, weather they bring, maritime or continental. They will use that knowledge to think about each air mass would affect their daily life i.e. which one would I need an umbrella for? This lesson builds on prior learning around the elements of weather and precipitation processes. | Physical processes, scale. | Air masses | Map skills. | Students have to research the causes and impacts of Pakistan 2022 floods. |
| 10 | Why does the Arctic get so little snow? | <ul style="list-style-type: none"> To understand why it is cold in our polar regions To understand why our polar areas are classified as deserts To have the ability to calculate means, totals and interpret climate graphs | <ol style="list-style-type: none"> A labelled sketch diagram on how latitude affects temperature A list of reasons in a table on why snow fall rates are very low in the Arctic and Antarctic regions Calculated and interpreted means and totals | Students will recap previous learning on differential heating. They will use this to complete a diagram on this. They then use this information to explain why the poles are colder. Students develop understanding of the different conditions that are required to produce snow i.e. evaporation, moisture and temperature. They also develop mathematical knowledge and revisit climate graphs. | Physical processes, scale, place. | Differential heating Climate and weather processes. | Data analysis, climate graphs, mathematical skills. | |
| 11 | Why do floods happen? | <ul style="list-style-type: none"> To be able to describe the main factors that causes flooding. | <ol style="list-style-type: none"> A completed storyboard of the main causes of flooding. A completed series of questions about flooding in the Calder Valley. | Students develop knowledge of the main causes of flooding, building on prior learning about the water cycle. They then apply this knowledge through a geographical enquiry into flooding in the Calder Valley, 2015 – 2020. This require students to use the content they’ve just learnt about causes of flooding. It also requires students to consider impacts and responses. This understanding of flooding impacts and responses will be developed further in the following lesson. | Physical processes | Flooding causes. | Extended writing, reading. | Revision |

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| 12 | Are floods a global issue? | <ul style="list-style-type: none"> To describe the main causes, impacts and responses to the Pakistan 2022 floods. | <ol style="list-style-type: none"> Create an A3 case study file on the Pakistan 2022 floods. Evaluative paragraph on the future of flooding globally. | Students continue to develop knowledge of causes of flooding and will develop knowledge of effects. They will start to think of effects as environmental, social and economic. They will focus on developing this through investigating the Pakistan, 2022 floods. | Place, physical processes | Flooding causes, impacts and responses. | Extended writing. | |
| 13 | Assessment | <ul style="list-style-type: none"> To assess to what extent students are able to understand key geographical processes that determine weather and climate. It also will assess their ability of apply learnt geographical skills regarding climate graphs and weather maps. | | Students must recap prior knowledge on climate and weather unit. They will be assessed on climate graph skills, knowledge and understanding of fundamental weather processes and flooding processes. | Physical processes, place. | n/a | Exam technique Extended writing. | n/a |



Regions and Countries of Asia

| Top 5 largest Asian countries | Top 5 most populous |
|---|----------------------------|
| 1. Russia - 17 million km ² | 1. China - 1.44 billion |
| 2. China - 9.6 million km ² | 2. India - 1.38 billion |
| 3. India - 3.3 million km ² | 3. Indonesia - 274 million |
| 4. Kazakhstan - 2.7 m km ² | 4. Pakistan - 221 million |
| 5. Saudi Arabia - 2.1 m km ² | 5. Bangladesh - 165 m |

Asia is the largest continent in the world. It covers approximately 44.5 million km². This is about 30% of the Earth's land surface. Asia has the world's longest coastline at 62,800km. It contains the world's top ten peaks, including Mount Everest. Asia is surrounded by the Arctic Ocean to the north, Pacific Ocean to the east and Indian Ocean to the south.



Key words

- Gross Domestic Product (GDP)
- Newly Emerging Economy (NEE)
- Population
- Population density
- Resource (e.g. oil, gas)
- Trade
- Development



Human Geography of Asia

Human geography – home to 60% of the World's population.

Hundreds of **languages** are spoken across Asia. Mandarin Chinese is the most spoken language in the world, by 1.1 billion people.

There is a huge variety of **food** across Asia. Most is made from local resources, e.g. seafood forms a major part of the Japanese diet, and is thought to be a cause of their high life expectancy.

There are thousands of **ethnic groups** across Asia. Vietnam has over 52 ethnic groups including the Kinh, also known as the Viet.

All major **religions** are practised in Asia, and Asia is the birthplace of many including Christianity and Islam. The top three religions in Asia are Hinduism (25% of Asia's population), Islam (1.1 billion followers in Asia) and Buddhism (11.9% of Asia's people).

Wars and conflicts in Asia have included WWII – when the USA dropped the first atomic bomb on Nagasaki and Hiroshima. The Korean and Vietnam wars were major conflicts – the Korean war has technically never ended!

The **history** of Asia includes the Silk Road, an ancient trading route that brought papers, gunpowder and spices to the West. The Great Wall of China famously can be seen from space!

There are 48 countries in Asia, 3 of which (Russia, Turkey and Kazakhstan) also are partly in Europe.

Southeast Asia – countries rely mainly on agriculture. They export rice and other foodstuffs, and also have rubber industries.

Central Asia – overall, these countries are not rich, and Central Asia has several large, sparsely populated countries like Kazakhstan and Turkmenistan. These countries do have oil, gold and minerals they are starting to exploit.

Western Asia, including the **Middle East** – this area includes many of the world's Arabic speaking nations. Has a large share of the world's oil and gas reserves, which has made some nations (e.g. Qatar) extremely rich. Dubai has the Burj Khalifa – world's tallest skyscraper.

Eastern Asia – main industrial area. China is the most populous country in the world; and is known for its exports, particularly electronics for the home. Japan is technologically advanced and has the world's highest life expectancy. North and South Korea are here.

South Asia – overall, the poorest region. India is the world's second most populous country and is a Newly Emerging Economy with a significant service industry. Exports from South Asia include textiles and foodstuffs, e.g. Bangladesh is known for its textiles industry.

Northern Asia - dominated by Russia, largest country in the world by area. Russia sells oil and gas to other countries by pipeline, and is mostly sparsely populated. Some parts of Russia, e.g. Siberia, are very cold. Russia also has a coastline to the Arctic Ocean.

Physical geography

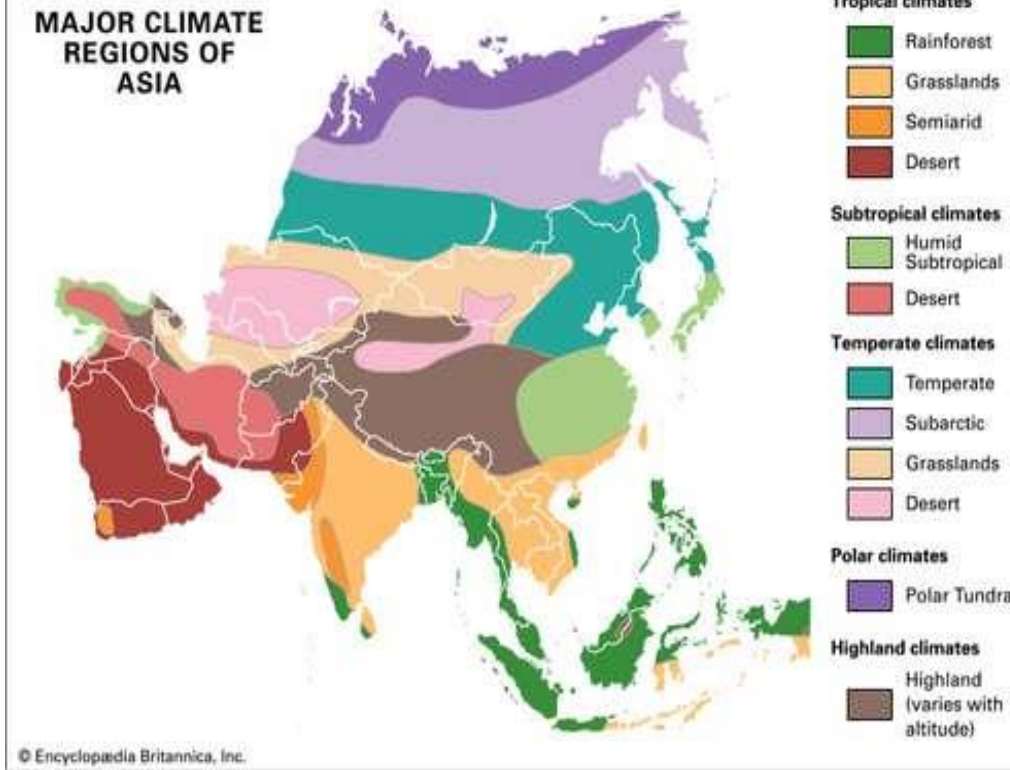
Asia contains some of the most extreme temperatures on the planet. The temperature has reached 53.9°C in Israel, and has been as low as -67.8 °c in Siberia, Russia.

Asia has a mix of climate regions. Polar, subarctic, and temperate climates occur along the continent's northern and north-eastern areas. Arid (dry) and highland (high areas – varied because temperature drops with altitude) zones are found in the continent's middle and south-eastern areas. A mix of grassland and tropical rainforest climates are found in the southern areas of Asia.

Keywords

| | |
|-----------|---------------|
| Polar | Climate |
| Subarctic | Biome |
| Temperate | Precipitation |
| Arid | Altitude |

MAJOR CLIMATE REGIONS OF ASIA



Steppes – large flat area of treeless grassland, characterised by low precipitation. Found in the middle of the continent. Hot summers and cold winters.

Temperate forest – region of deciduous trees. Found between Steppes and the coast. Hot summers and cold winters.

Cold desert – found north of the Steppes. Very dry. Summers are hot; but cloudless skies mean cold nights. Winters very cold (-40°C). Little vegetation.

Hot desert – found south of the cold deserts. Usually very hot during the day and cold at night. Little vegetation.

Mountainous – temperature falls with altitude, so the higher you go the colder it gets. At high altitudes trees no longer grow and there are glaciers.

Warm moist forest – furthest south, in and near the tropics. Includes tropical rainforests and mangrove swamps.



China. China In the west and north it is very dry. In the south-east the climate is mild and wetter. Two thirds of China is mountainous, and it has the World's third largest river in the Yangtze.

China is the world's 2nd largest economy and has a very powerful military. It is increasingly investing in Africa to ensure it has a secure supply of oil to keep its economy and military running! It has invested over \$20 billion in Nigeria to help fund infrastructure projects. However, there has been issues with human rights abuses towards African people in China and racism from Chinese workers towards Nigerian workers!

Vietnam. Vietnam is located in South-East Asia. Its capital is Ho-Chi Minh City. It has over 52 ethnic groups that make up its population. The Kinh make up 86%. Other groups include the Cham(originating from India) and the Hmong (originating from the Mekong delta).

This ethnic diversity is the result of migration over thousands of years to the area. People were drawn to the area for its trade links and fertile farming land. Today Vietnam exports the 2nd largest amount of rice, with India being the largest!



The **Middle East** is located in the western part of Asia. It is made up of 16 countries and the State of Palestine. It includes desert and mountains, and there are earthquakes and volcanoes. The major biomes are desert, grasslands and forests. Most of the Middle East was once dominated by the **Ottoman Empire**. By 1914 the



Ottoman Empire was already in decline, and it entered WWI. When the Allies (including Britain, France and Russia) won, the Middle East was divided between the Allies. This resulted in more conflict. Now these countries are independent. Some have oil, and, as a result there are very rich areas, although there is also poverty, e.g. Yemen.

Our case studies

Asia's biomes

Tundra – A cold region in the north where the ground is deeply frozen. Only the top layer thaws in the summer. Only small plants found here.

Taiga – coniferous forest, found between Tundra and Steppes. Long cold winters; short, hot and damp summers.