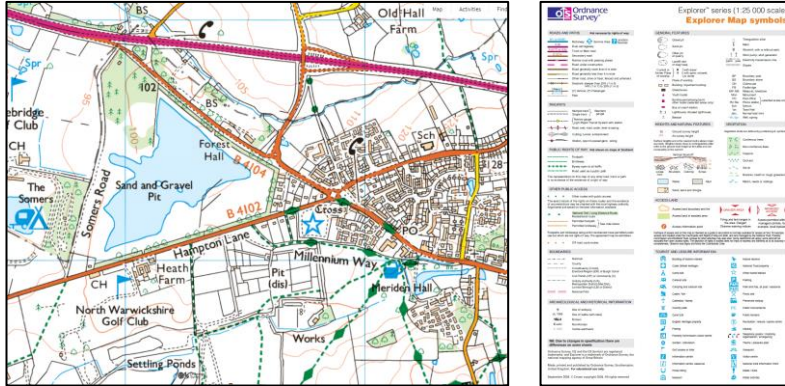


# Introduction to geographical skills

## Maps and symbols

OS maps use symbols to show human and physical features. Maps have a **title**, **labels**, a **compass rose**, a **scale** and a **key**.



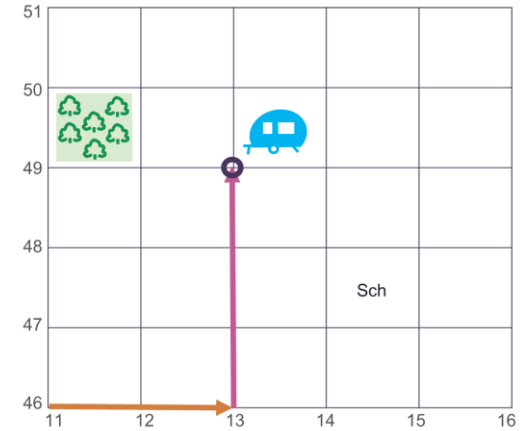
## Key vocabulary

- **Continent** – One of the seven large land masses on Earth
- **Longitude** – The lines down the earth showing east or west
- **Latitude** – The lines across the earth showing north and south
- **Eastings** – The grid reference along the bottom
- **Northings** – The grid reference up the side
- **Contour lines** – Brown lines on a map that show height
- **Relief** – The height of the land
- **Topography** - The shape and physical features of an area
- **Altitude** - Height above sea level (measured in metres).
- **OS map** – Ordnance Survey is a map of areas of the UK

## Four-figure grid references

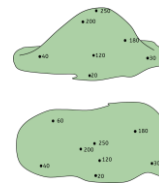
Four-figure grid references are used to describe locations on an OS map.

1. Look at the bottom-left corner of the square.
2. Find the **eastings**.
3. Find the **northings**.
4. Write down the four-figure grid reference.

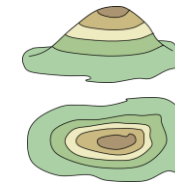


## Relief

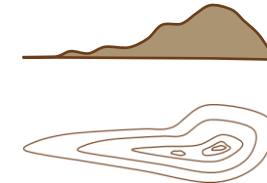
Height on a 2D map can be shown using three methods:



Spot heights – a dot giving the exact height of a specific point.



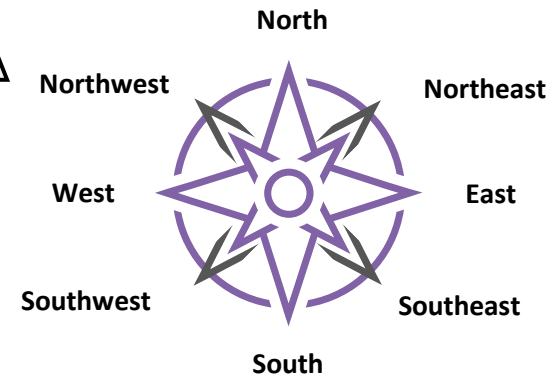
Colour layering - different heights are shown by bands of different colours.



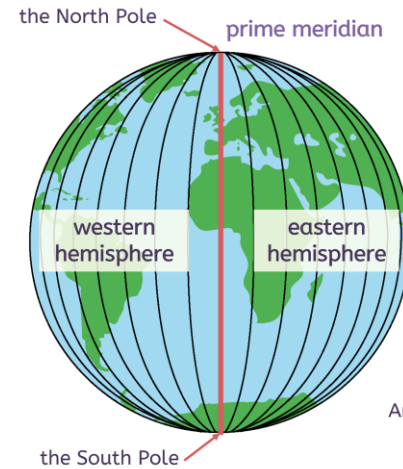
Contour lines – brown lines connecting areas of the same height.

# Introduction to geographical skills

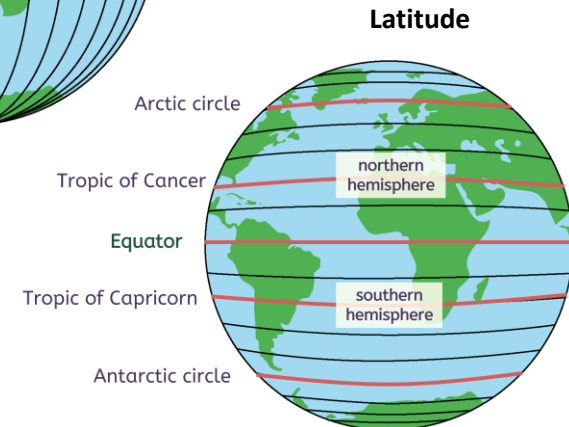
## Continents, oceans and countries in the UK



## Longitude and latitude



Longitude

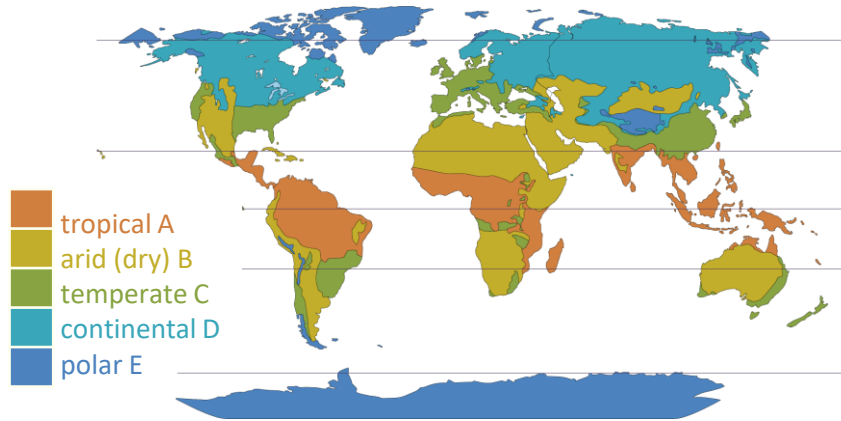


Latitude



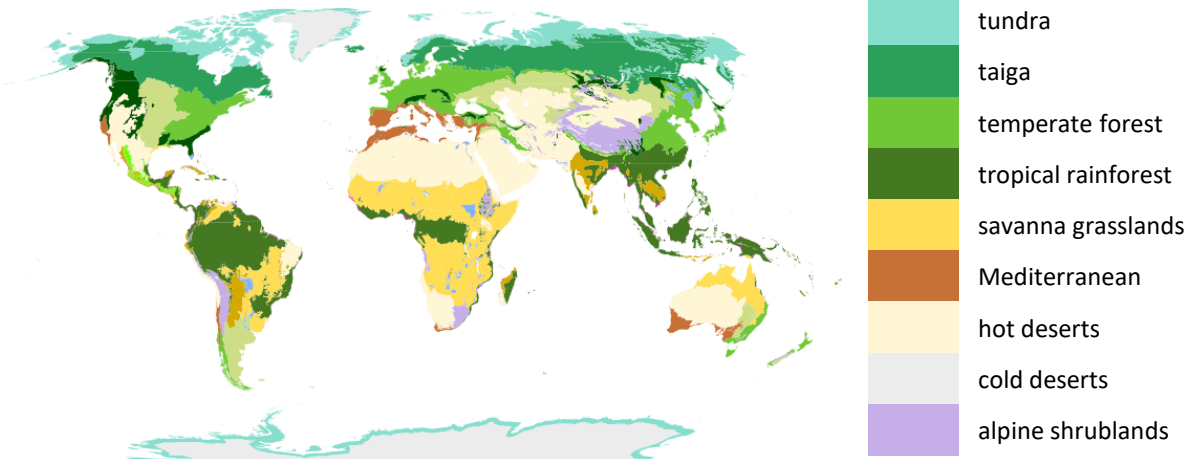
# Introduction to global climate

## Climate zones



Climate zones are areas in the world that have a similar climate. There are several major climate zones in the world, and the main six are shown on this map. The climate zones generally group together horizontally, following lines of latitude.

## Biomes



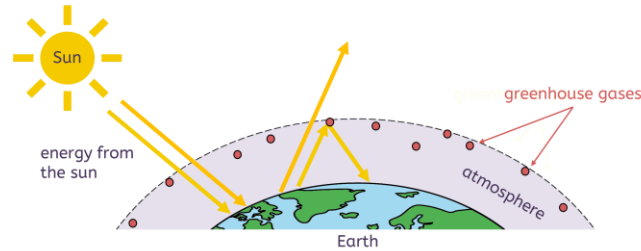
Biomes are areas of the world that, because of similar climates, have similar landscapes and wildlife. Biomes are shown on the map.

## Key Vocabulary

- **greenhouse gases** – gases such as carbon dioxide that trap heat within the atmosphere
- **the greenhouse effect** – the natural warming of the planet to its habitable temperature, caused by trapping heat in the Earth's atmosphere
- **the enhanced greenhouse effect** – the unnatural warming of the Earth due to increased greenhouse gases in the atmosphere
- **global warming** – the increase of average temperatures on Earth; this happens naturally but happens faster due to the enhanced greenhouse effect
- **climate change** – the change in the Earth's long-term weather patterns, including precipitation, wind and temperature
- **fossil fuel** – a (chemical) store of energy formed over millions of years from dead plants and animals

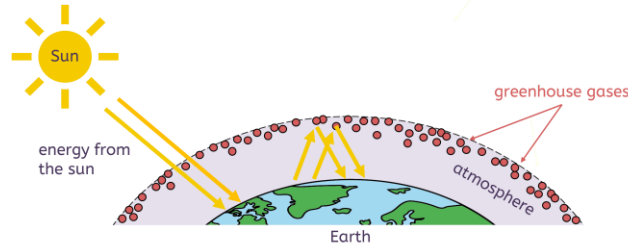
# Introduction to global climate

## Global warming

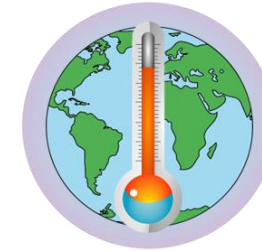


The **greenhouse effect** is the **natural process**, which has always taken place, that keeps the Earth warm. Without it, the Earth would be too cold to live on.

The light and heat energy are trapped in the atmosphere by greenhouse gases, such as carbon dioxide. This warms the Earth.



The **enhanced greenhouse effect** causes an **unnatural increase in temperature**. Human activities (such as burning fossil fuels, transport, waste, agriculture, deforestation) increase the amount of greenhouse gases in the atmosphere. The Earth warms more quickly, and global warming increases.



Accelerated global warming can also lead to other changes in the Earth's long-term weather patterns, such as precipitation, wind and storms. The changes to the Earth's wider climate – not just temperature – are called **climate change**.

## The causes of climate change

Climate change is caused by:

- burning fossil fuels for transport and electricity generation, which releases greenhouse gases
- deforestation, which reduces the absorption of greenhouse gases
- agriculture and waste disposal, which release greenhouse gases



deforestation



electricity generation



transport



agriculture

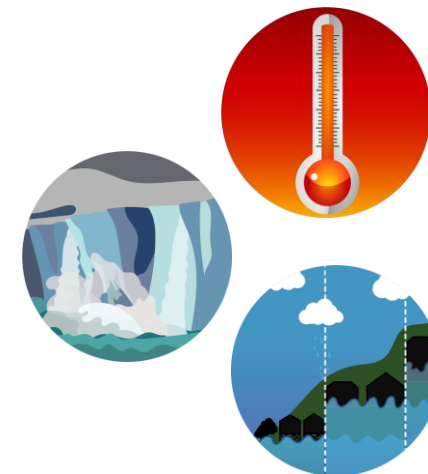


waste

## The effects of climate change

Climate change can cause:

- more extreme weather events, such as heatwaves
- melting sea ice and ice caps
- rising sea levels and flooding of coastal areas



# 7.03: Development



## Background

Across the world, the standard of living and quality of life can be very different.

**A** Countries therefore have different classifications based on the quality of life within them.

**B** How developed a country is can be measured in different ways.

**C** Development levels can vary within and between countries. There are many reasons why some countries are more developed than others.

**D,E** Countries can become more developed in many ways, including through economic growth from tourism, top-down development projects and bottom-up development projects.

## A) Country classification

1 <b>developed</b>	(n) countries with high standards of living, advanced infrastructure and strong economies.
2 <b>emerging</b>	(n) countries transitioning between developing and developed, showing rapid improvements in infrastructure.
3 <b>developing</b>	(n) countries with lower standards of living, less advanced infrastructure and economies that are growing but not yet strong.

## B) Measuring development

1 <b>GNI per capita</b>	(n) the average income of a country's citizens.
2 <b>infant mortality rate</b>	(n) the number of babies that do not survive to one year old per 1,000 births.
3 <b>life expectancy</b>	(n) the average number of years a person is expected to live.
4 <b>literacy rate</b>	(n) the percentage of people in a specific age group, typically aged 15 and above, who can read and write.
5 <b>average years of schooling</b>	(n) the average number of years of education that individuals aged 25 and older have completed.
6 <b>Human Development Index (HDI)</b>	(n) a composite measure of development that is used to categorise the development of countries using GNI per capita, life expectancy and average years of schooling.

## C) Factors that hinder development

Human	Physical
uneven distribution of income	challenging relief
corruption	extreme climate
conflict	lack of natural resources
low-value goods and services for trade	landlocked
high levels of debt	tectonic hazards
poor education systems	extreme weather
poor healthcare systems	lack of water resources

## D and E) Development Projects

### D) Top-down project: The Grand Inga Dam DRC

Advantages	Disadvantages
It provides a reliable source of renewable energy for the DRC.	It would flood 22,000 hectares of land in the Bundi Valley.
It provides electricity for Kinshasa at a lost cost.	Natural habitats will be destroyed by the reservoir.
It produces electricity that the DRC can sell the other countries.	35,000 people would be displaced from their homes by the dam reservoir.
It produces electricity to power more coltan and copper mines.	Electricity will be sold to other countries, and many people in rural DRC will still be without electricity.

### E) Bottom-up project: WECAN DRC

Advantages	Disadvantages
It protects the habitats of 100,000 species of animals and plants.	It is small scale, so it has limited reach.
It empowers indigenous women.	It does not stop illegal logging.
Women earn money from selling fruit and herbs from the trees planted.	The project currently supports only 700 women.
It reduces the impact of climate change through reforestation.	It takes a long time for the full benefits to be achieved.

