

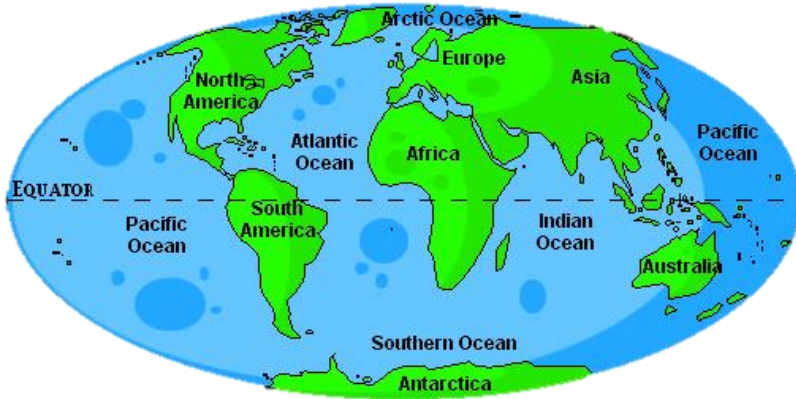
Year 7 exam (2023):

You need to know:

- Core knowledge – Rainforests, Hot & Cold environments & Maps skills
- Continents & oceans
- Map skills (grid references, scale [distance] and shape of land [height and relief], human vs. physical features)
- Hot deserts
- Tropical rainforests

Keywords:

ecosystem	ocean
adaptation	desert
tropical rainforest	contour line
continent	climate
four figure grid reference	tundra
six figure grid reference	climate graphs



Continents and oceans:

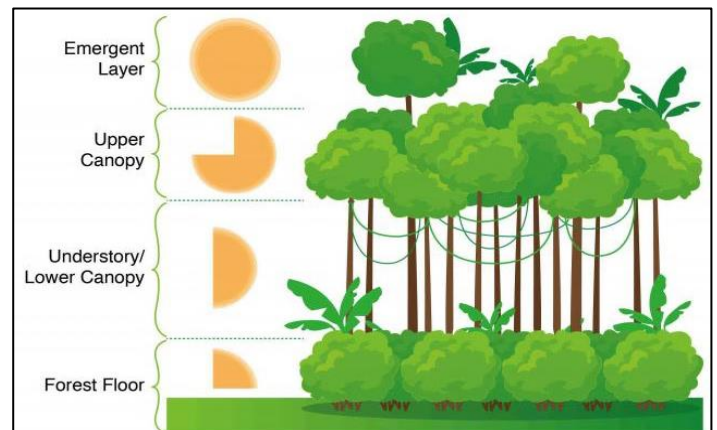
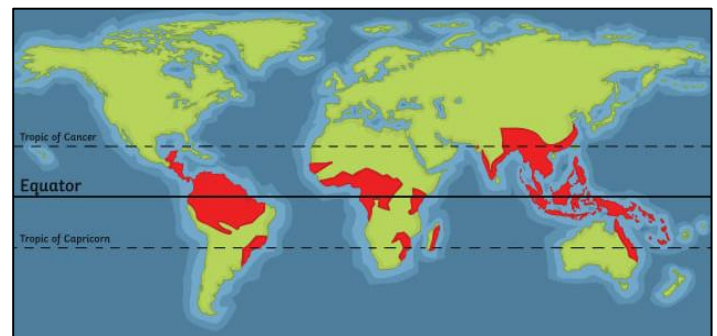
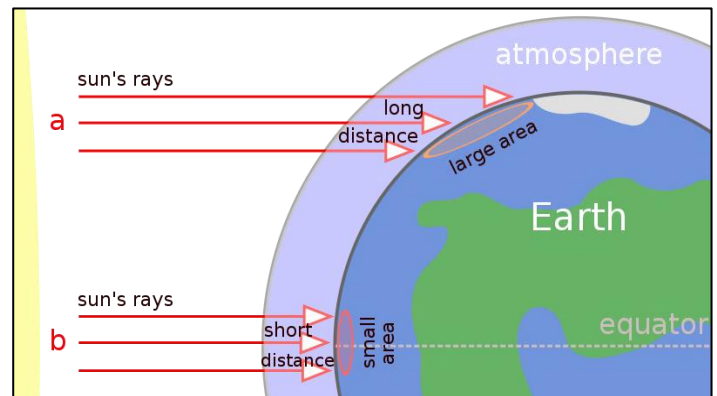
It is important you know there are 7 continents and 5 oceans.

You may be asked in the exam to identify where these are located in the world.

On a world map, you will often see the equator drawn on. North of the equator is called the northern hemisphere, south of the equator is called the southern hemisphere. You will notice that there is more land in the northern hemisphere, and more ocean in the southern.

Tropical rainforests:

- Located along the equator.
- Examples include The Amazon in South America and The Congo in Africa. The Amazon is the largest tropical rainforest in the world.
- The climate is hot, wet and humid (an equatorial climate). The temperature is pretty stable all year round.
- The climate is hot because the sun's rays are concentrated over a smaller area on the equator (see diagram). The climate is wet due to the rising hot and humid air, which cools as it gets higher leading to condensation forming lots of clouds.
- The vegetation grows in layers which have different amounts of light, humidity and wind. This leads to different species being found in different layers.
- Vegetation and animals have to adapt to the conditions to survive. Adaptations are physical features or behaviours that make them better suited to their environment.
- It would be useful to be able to explain examples of rainforest adaptations, e.g.:
 - Buttress roots – help provide support to keep the tallest trees stable when they experience more wind in the emergent layer
 - Sloth's sharp claws – helps it to hang in the branches all day and helps it climb trees
- Indigenous tribes (like the Yanomami) live deep in the rainforest and have very different lives to ours – they are nomadic and rely on their surroundings for survival
- Tropical rainforests are threatened by deforestation – the large-scale removal of trees, destroying forest areas
- Causes of deforestation include farming (especially commercial farming on a large scale to make profits), logging, mining, hydroelectric power, and road building.



How have camels adapted to life in deserts?

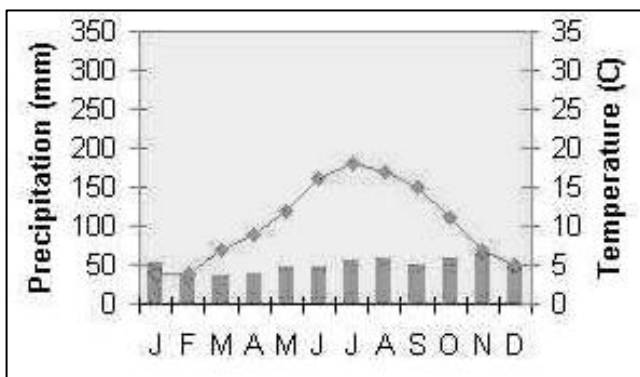


Cold deserts:

- The tundra tends to be found just north of the Arctic Circle, in continents of Asia, Europe & North America.
- Tundra is known for being a relatively treeless landscape – the permafrost makes it hard for trees to be able to root, along with the short growing season
- In winter it is very cold and very dark. In summer, it is very light and a bit warmer, allowing the top of the permafrost to melt and small shrubs, grasses and moss to grow.
- The tundra is a fragile environment, at risk because of climate change and other human activities.

Climate graphs:

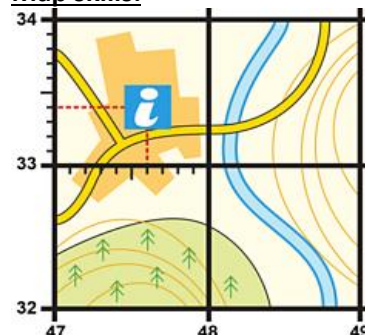
- It is important you know what the 3 axes represent and how precipitation and temperature are shown.
- In the exam you may be asked to complete a climate graph and describe one.
- Always use figures from a graph to write strong descriptions.



Hot deserts:

- They tend to be found near to the Tropic of Cancer and Tropic of Capricorn. E.g., Sahara in northern Africa, Kalahari in southern Africa and Thar in India
- They are defined as a place receiving less than 250mm of rainfall each year
- Temperatures in hot deserts can reach 50°C during the day, but at night can drop below freezing due to a lack of cloud cover, so the heat energy can escape
- Vegetation and animals have to adapt to the heat and lack of rainfall in order to survive. You would need to be able to explain adaptations e.g.:
 - Large ears on a fennec fox – helps them to radiate heat away from their bodies due to lots of blood vessels close to the skin
 - Saguaro cactus flowers at night – this attracts bats to pollinate the flower, but opening at night also limits water loss as there will be less evaporation when it is cooler
- Indigenous tribes (e.g. San Tribe of the Kalahari) have clever ideas to help them survive, such as clicking sounds used to communicate whilst out hunting so they don't frighten away their prey.
- Despite deserts being harsh places to live, there are lots of development opportunities once these are overcome. These include tourism, commercial farming, mineral extraction and renewable energy production. The Arabian desert has been used for these opportunities and now has lots of wealthy desert cities. However, this is causing challenges.

Map skills:



It is important you know how to locate places on a map using 4 figure and 6 figure grid references – 6 figure help to pinpoint smaller locations within the 4 figure box.

Make sure you know how to measure distances on a map and use the scale to convert these.

You need to be able to describe what the land on a map is like by looking at the relief and height. Relief is shown by contour lines, height is shown by spot heights and numbers on the contour lines. When quoting heights from a map, remember to include the unit of measurement – metres (m).

Possible exam questions:

- Describe the climate of a hot desert
- Name the 7 continents and 5 oceans of the world
- Explain two ways a cactus has adapted to survive in a hot desert
- Define the term desert
- Explain one rainforest animal adaptation
- Contrast four and six figure grid references
- Describe where tropical rainforests are located
- Explain what makes each ecosystem you have studied a challenging place to live
- Explain what contour lines show
- Explain why the tundra is a fragile landscape
- Define what a physical feature is and state an example

How should I revise?

- Learn core knowledge for tropical rainforests, hot & cold environments and map skills
- Notes in your exercise book
- Practice answering exam questions (see box)
- BBC bitesize – use the links to global biomes and OS map skills (SEE QR CODES)
<https://www.bbc.co.uk/bitesize/subjects/zrw76s>



SCAN ME



SCAN ME

- You could make revision mind maps
- If you want OS maps then Bing Maps has them, or Google 'north norfolk os map edexcel' – click the top link (the PDF) and scroll down to the bottom to find the map we used in class