

Weather or Climate?

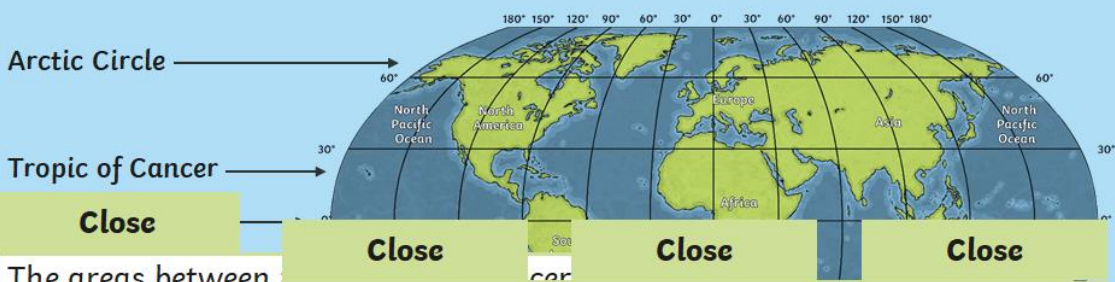


What is the difference between weather and climate?

Climate Zones



Think back to the previous lesson: How and why do the physical features of different regions across the Americas differ depending on latitude?



Close
The areas between the Arctic Circle and the Antarctic Circle correspond to the temperate zones. Climate differences between summer and winter (near the poles) can make the summer and winter temperatures very different.

Close
Areas within the Arctic and Antarctic Circles have at least one day of 24 hour sunlight in summer and one of 24 hour darkness in winter. Nearer the poles, there can be very long days or nights, depending on the season. Since the sun is very low in the sky, the energy from the sun tends to be weak.

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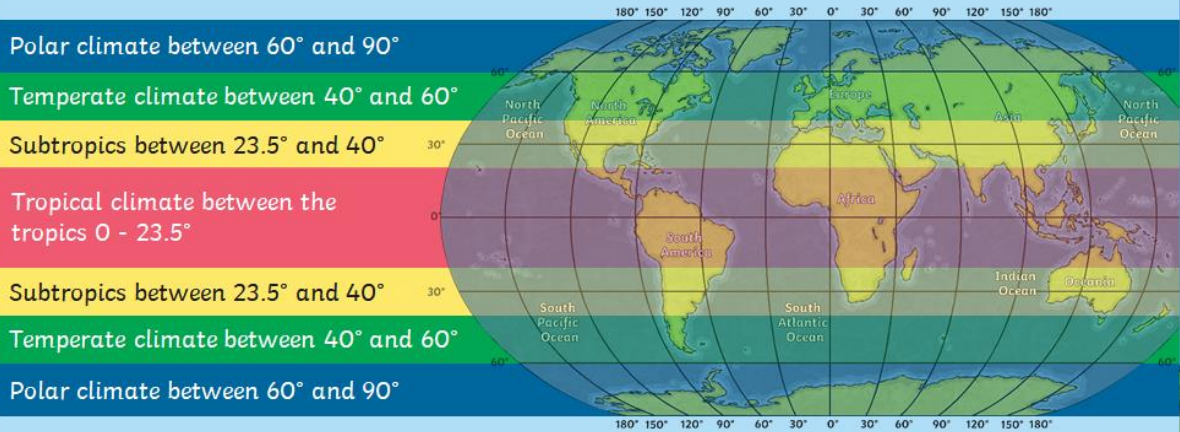
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Climate Zones



Here are four of the main climate zones in the world.
These zones are determined by **latitude**.



How many climate zones can you see across the Americas?

Climate Groups and Types and Biomes



What type of climate do you think it is where you live?

Look at the [Koppen System Information Sheet](#) to learn more.

The system describes five main **climate groups** and each of these groups consist of a range of **climate types**.

(Note that climate *zones* relate to latitude but there are other factors such as ocean currents, winds and land masses that also influence climate *groups* and *types*.)

Koppen System				
The Koppen system is the most commonly used system for classifying climate.				
Climate Group	(A) Tropical	(B) Dry	(C) Temperate	(D) Continental
	(1) wet (or rainforest)	(2) arid (or desert)	(3) hot	(4) dry summer (5) hot summer (6) dry winter (7) hot winter
Climate Type	(8) monsoon	(9) semi-arid (or steppe)	(10) cold (11) dry winter (12) warm summer	(13) dry winter (14) warm summer
	(15) wet & dry (or monsoon)	(16) cold (17) without dry season (18) cold monsoon	(19) without dry season (20) cold monsoon	(21) without dry season (22) very cold winter (23) very cold summer
Climate Codes	(A) Tropical monsoon climate (Af) Tropical rainforest climate (Am) Tropical monsoon climate (Aw) Tropical wet and dry climate (As) Tropical savanna climate with dry season (At) Tropical steppe climate	(B) Dry climate (BWh) Hot arid climate (BSh) Hot semi-arid climate (BSk) Cold semi-arid climate (BWk) Cold arid climate (BWn) Cold semi-arid climate	(C) Temperate climate (Cwa) Subtropical wet and dry climate (Cwb) Subtropical oceanic climate (Cfa) Humid subtropical climate (Cfb) Oceanic climate (Cwa) Subtropical wet and dry climate (Cwb) Subtropical oceanic climate (Cfa) Humid subtropical climate (Cfb) Oceanic climate	(D) Continental climate (Dfa) Humid continental climate with hot summer (Dfb) Humid continental climate with warm summer (Dwa) Subarctic climate with hot summer (Dwb) Subarctic climate with warm summer (Dsa) Subarctic climate with hot summer (Dsb) Subarctic climate with warm summer (Dsa) Subarctic climate with hot summer (Dsb) Subarctic climate with warm summer

Climate Groups and Types and Biomes

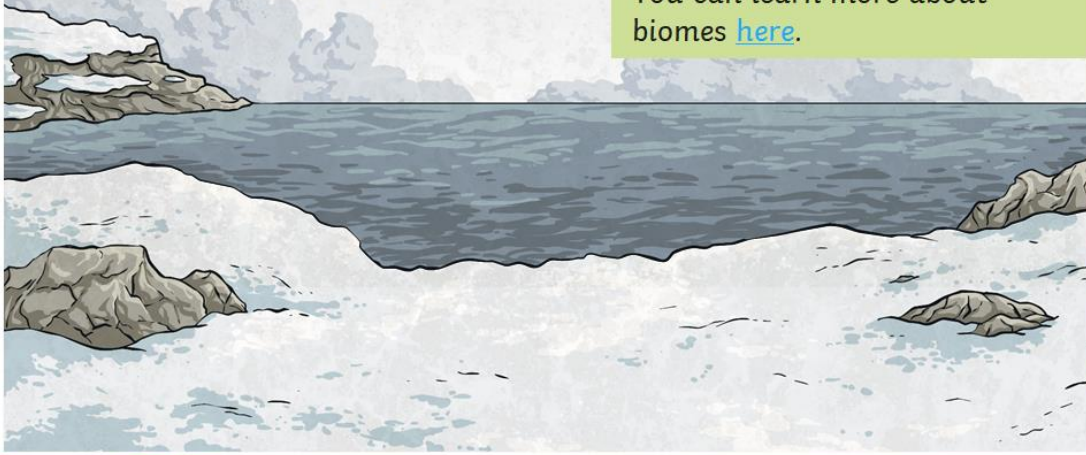


Biomes

The climate and geography of an area also determines its type of **biome**.

The world can be divided up into different major biome sites.

You can learn more about biomes [here](#).



Climates of the Americas



Climates of the Americas

I can describe the climates and biomes of different regions across the Americas.

Use the Köppen guides, an atlas and information books and/or the Internet to help you fill in the table. Try to include a range of climate zones.

Place	Latitude	Type of Climate	Type of Biome
Sheffield South Yorkshire, UK (for comparison)	53°22'58"	4 seasons. No major extremes in temperature. Rainfall all year round.	Deciduous forest
Las Vegas			
Havana			
Charchill			
Buenos Aires			
Burrow			

Complete the **Climates of the Americas Activity Sheet** with a partner.

Preparing for the Weather

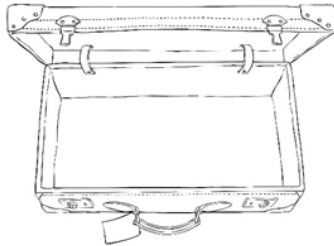


Complete the **Preparing for the Weather Activity Sheet**.

Preparing for the Weather

I can describe the climates and biomes of different regions across the Americas.

Draw or write what you are likely to need to pack in your suitcase for a week's visit in the summer to your home town.



Size of your home town in the UK?



planet

Geography Year 2 (The Learning Journey) (Weather and Climate) - 2020

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Preparing for the Weather

I can describe the climates and biomes of different regions across the Americas.

Your challenge is to prepare a weather forecast for one of the following places of the Americas or choose your own. The Koppen guides and range of websites will help you in your research for this task. These might include: Climatempo, Met Office or Weatherbase.

Las Vegas, Nevada, USA

Barrow, Alaska, USA

Moscow, Cuba, South America

Buenos Aires, Argentina, South America



In your forecast you need to include information about the following:

- time of year;
- current weather conditions;
- climate;
- comparison to the current UK weather and climate.

You may use a mixture of drawings, diagrams and role play to present your work. Viewing today's BBC weather forecast may help you to present your facts.



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