

## GEOGRAPHY · GRADES 3–6

# Climate Zones

Where, why, and what lives there

## What is climate?

Weather is what's happening today. CLIMATE is the pattern of weather over many years. The Earth has different climate zones because of how the Sun's heat reaches different parts of the planet.

## The five climate zones

Zone	Where	Climate	Example
Tropical	Near the equator	Hot and wet all year	Amazon rainforest
Dry	Around 30° north and south	Hot days, cold nights, little rain	Sahara Desert
Temperate	Middle latitudes	Four seasons, moderate temps	UK, France, Japan
Polar	Near the poles	Freezing cold all year	Antarctica
High-mountain	Tall mountain ranges	Cold even near equator	Andes, Himalayas

## Why are climates different?

### The Sun's angle

Sunlight hits the equator straight on — concentrated heat. At the poles, it hits at a slant — spread out and weak. This is why the equator is hot and poles are cold.

### Distance from the sea

Places near the sea have milder climates — water heats and cools slowly. Inland places have bigger temperature swings.



<p><b>Altitude</b></p> <p>Higher up = colder. Air is thinner and holds less heat. That's why mountain tops have snow even in tropical countries.</p>	<p><b>Wind and ocean currents</b></p> <p>Warm currents (like the Gulf Stream) make Britain milder than its latitude would suggest. Cold currents make some coastlines cooler.</p>
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## What lives in each climate?

Climate	Plants	Animals
Tropical	Tall trees, thick vines, ferns	Monkeys, parrots, jaguars, snakes
Dry	Cacti, tough grasses, scrub	Camels, lizards, scorpions, eagles
Temperate	Mixed forests, fields, deciduous trees	Foxes, deer, songbirds, badgers
Polar	Lichens, mosses, some grasses	Polar bears, penguins, seals
High-mountain	Hardy grasses, alpine flowers	Snow leopards, mountain goats

## Apply your knowledge

1. Why is Greenland called 'green' when it's mostly icy? (Hint: it was warmer 1,000 years ago, and Erik the Red wanted settlers!)
2. London and Moscow are at similar latitudes. Why is London much milder? (Hint: ocean currents)
3. Mount Kilimanjaro is in tropical Africa but has snow at the top. Why? (Hint: altitude)
4. Where would you most like to live, climate-wise — and why?

