

Climate graphs and world climates

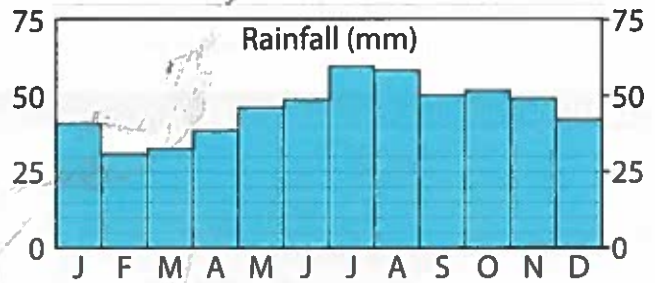
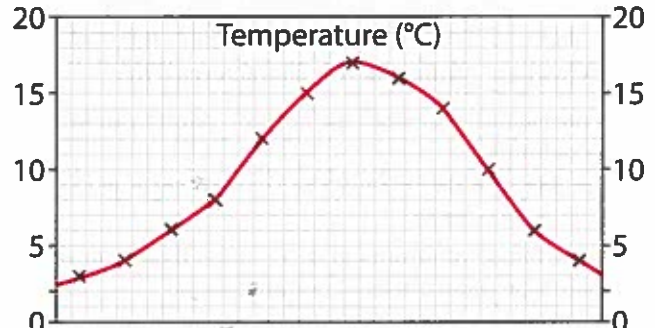
Many people mix up weather and climate. Climate is an average of weather conditions and describes what we expect to happen over a large area based on weather records over at least 30 years. Weather stations send information to meteorologists for daily forecasts while **climatologists** keep these records to produce climate data. As these records accumulate, climate data and graphs can be produced. From these emerge patterns which are used to produce a world map showing different climate types.

To decide how the climate we live in compares with others, we must have an idea of what an average climate is like. We need a place where it is neither too hot nor too cold, not too wet nor too

dry, as a reference point. The United Kingdom (UK) has a climate with no extremes. It is between the cold Arctic region (north of 66 ½°N) and the hot Tropic of Cancer (23½°N). Cambridge (52°N) is a good reference point for a climate between the two.

E Reading a climate graph

Cambridge, UK (52°N 0°E) Altitude: 6 metres



	J	F	M	A	M	J	J	A	S	O	N	D
Temperature (°C)	3	4	6	8	12	15	17	16	14	10	6	4
Rainfall (mm)	41	31	35	38	46	48	60	57	50	53	49	44

Average annual rainfall = 552 millimetres
Temperatures are average (mean) for each month

D World climates



Tropical wet rainforest	Tropical wet and dry savanna
Semi-arid	Arid or desert
Mediterranean	Humid sub-tropical
Temperate maritime	Continental warm summer
Continental cool summer	Sub-arctic
Tundra	Ice cap
Mountain	

TASK 4: Study Source D

- Which type of climate is experienced in the place where you live?
- What type of climate does Cambridge in the UK experience?

TASK 5: Study Sources B, D and E

- Using Source E, describe the climate of Cambridge. Refer to:
 - average monthly temperatures
 - annual temperature range
 - average annual rainfall
 - rainfall distribution.
- Referring to Source B, using exactly the same scales as for Cambridge, draw a climate graph for Gaborone.

- From Source D, identify Gaborone's climate type.
- Compare the climate of Gaborone with that of Cambridge. Refer to the same elements as in Task 1.
- How can you tell from the graph that:
 - Gaborone is in the southern hemisphere?
 - Cambridge is in the northern hemisphere?

TASK 6

- Find climate data for where you live. Draw a climate graph using the same scales as used in Task 5b.
- Compare your climate with that of Cambridge and Gaborone.