Climates around the world

Here you will see how climate varies around the world, and then give reasons why.

A world climate map
We can divide the Earth into different climate regions. Check out the key.

The different climates are due to the factors you met in Unit 3.9.

Look at the dark green region along the equator. The key shows that this region is hot and wet all year.

It is hot because the sun's rays are strongest at the equator. And wet because the hot air rises fast, its water vapour condenses to form thick clouds - and the rain pours down.

Now look at the place marked A on the map. What is the climate like here? Can you explain why?

The climate varies within regions
The map shows that the British Isles are in a region of warm summers, mild winters, and rain all year.

This does not mean that every part of the British Isles has the same climate. Some parts are warmer and drier, as you saw on page 46. But overall, the climate in the British Isles is quite mild, and quite damp.

What about 50 years from now?
50 years from now, a world climate map could look quite different, since the Earth is getting warmer. Places that are now very dry could become very wet, and vice versa. Find out more in Chapter 6.

Did you know?
- Deserts are places with less than 25 cm of rain a year.
- Some deserts are hot, some cold.

Your turn
1. Look at the map on page 50. What's the climate like at:
   a) B?  b) D?  c) E?
2. Look again at the map. It is a lot cooler at D than at B. Suggest a reason.
3. Which of the climates on the map would you:
   a) Most like to live in? Why?
   b) Least like to live in? Why?
4. Now look at the map below. It shows the world's main mountain ranges, and some winds and ocean currents.
   a) What are ocean currents? (Glossary?)
   b) There is a warm current to the west of UK. Is it called...? (Unit 3.9)
   c) Name a country that may be affected by a cold current. The map on pages 140-141 will help.
   d) In what way might the current affect it?
   e) Now name a country where the prevailing wind is:
      i) From the south east
      ii) From the north west
5. Below are some facts about places marked on the map on page 50. See if you can explain them. The map below, and what you learned in Unit 3.9, will help.
   a) It is cold all year round at C.
   b) G is at the same latitude as F, but is warmer.
   c) A is at the same latitude as H, but is colder.
   d) It is much hotter and drier at B than at H.
   e) It is drier at B than at I, and hotter in the daytime.

Did you know?
- The upper side of clouds reflects sunlight away, before it can reach the Earth.
- So clouds have a cooling effect during the day.