

WARM UP

Activity 1. Mark the following statements as true or false. Then, read the information below to check if you were right.

1. The UK has a temperate continental climate.
2. The Atlantic Ocean influences the climate of the UK.
3. The coastal places are cool in winter and warm in summer.
4. The western parts of the UK are drier than the eastern ones.
5. The south of the UK is influenced by the polar masses of air.

1. Climate

1. General Aspects:

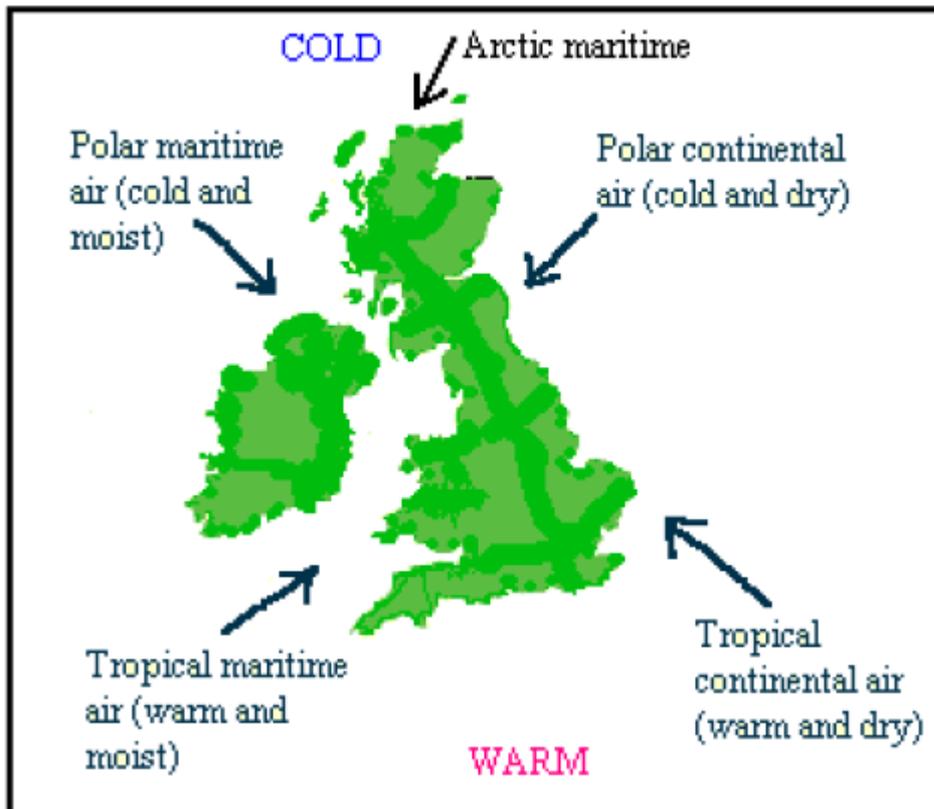
The climate of all of the United Kingdom is classified as a temperate oceanic climate with warm summers, cool winters and plentiful precipitation throughout the year. The UK's climate varies greatly according to season and location, but on the whole can be described as mild with few extremes.

Activity 2. Match the factors that influence the climate of the UK(column A) with their explanation (column B).

Column A	Column B
1. Location	a. The prevailing winds that affect the UK are from the west and south-west. They are moist and mild. This means that the western parts are wetter than the eastern parts, which are sheltered.
2. its close proximity to the Atlantic Ocean	b. The sea keeps coastal places warm in winter but may cool them in summer. Places far inland will have warmer summers and cooler winters.
3. Prevailing winds	c. the UK's northerly latitude (which ranges from 50° to 60° N); Places close to the Equator are warmer than those further away. In summer the south of the UK is warmer than the north.
4. Distance from the sea	d. The western side of the UK has more mountains and therefore receives more relief rain than the eastern side.
5. Relief	e. The climate of the United Kingdom is significantly influenced by the maritime tropical, maritime polar, continental polar and continental tropical air masses.
6. Air masses	f. the Atlantic Ocean is crossed by a warm ocean current called the Gulf Stream (North Atlantic Drift) (a current of warm water from the Gulf of Mexico, keeps winters quite mild whilst during summertime, warm but not excessively hot temperatures are experienced), which makes the west and south-west of the UK milder than the rest of the country.

Activity 3. Match the cardinal points (Column A) with the types of air masses (Column B) and their characteristics (Column C):

Column A	Column B	Column C
1. Northwest	a. arctic maritime	i. cold, moist
2. North	b. polar maritime	ii. very cold, moist; in winter
3. Northeast	c. tropical maritime	iii. very cold, dry; in winter
4. Southwest	d. polar continental	iv. warm, moist
5. South	e. tropical continental	v. hot, dry



The UK is at the boundary of convergence between the warm tropical air to the south and the cold polar air to the north. In this area, the large temperature variation creates instability and this is a major factor that influences the notoriously changeable and often unsettled weather the UK experiences, where many or all types of weather can be experienced in a single day.

The weather can be notoriously changeable from one day to the next but temperature variations throughout the year are relatively small.

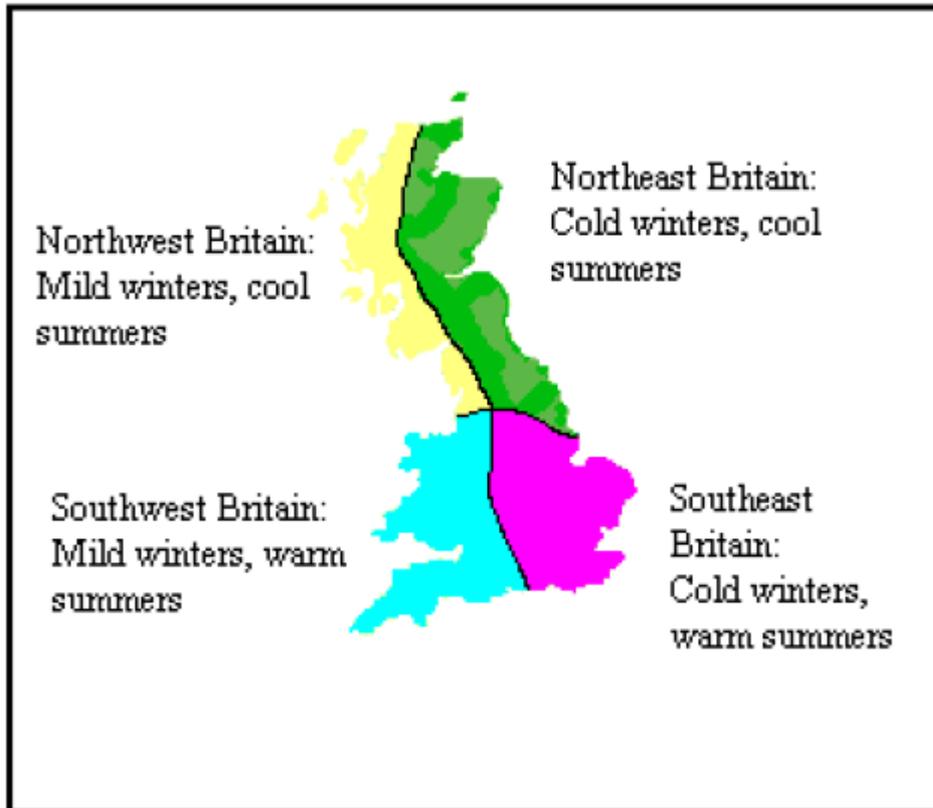
Geographical variation in the British climate

The general patterns of climate experienced in Britain have been identified. However, there are also noticeable differences that occur throughout Britain. The coldest winter temperatures in Britain occur in eastern Scotland and England. The western side of Britain is warmed by the influence of the tropical maritime airstream. Temperatures are therefore colder in the east than in the west during winter. During summer the south is warmer than the north. This is due to the differences in solar heat received, being greater in the south.

The British climate can be divided into four parts as shown on the map below. The northwest section is characterised by mild winters and cool summers and the northeast with cold winters and cool summers. The southwest experiences mild winters and warm summers and the southeast with cold winters and warm summers. Western parts of Britain generally experience a

more maritime climate during winter whilst eastern Britain is influenced by the cold airstreams from the European continent.

In summer, climate differences are more dominated by latitude.



Activity 4. Answer the following questions (NOTEBOOK): The UK and Romania lie at temperate latitudes. However, they have a different climate. Why? Which are the factors that influence the climate of your country? Are they the same as those that influence the climate of the UK? Why is the UK's weather changeable?

2. CLIMATIC ELEMENTS

Great Britain:

TEMPERATURE:

Mean annual temperature: 7-11°C

Mean maximum temperature: 13-18°C (Orkney, Shetland: 11°C)

Mean minimum temperature: 3-7°C

Temperature extremes:

Highest: 38.5°C (Brogdale, Kent; August 10, 2003)

Lowest: - 27.2°C (Braemar, Scotland, January 10, 1982)

PRECIPITATION

Precipitation: 600 to 1500 mm (extremes: 553 mm in Cambridge; 2-4000 mm in Scottish Highlands)

FOG: more than 50% of the days overcast;

Ireland:

TEMPERATURE

Mean maximum temperature: 14-16°C

Mean minimum temperature: 4-7°C

PRECIPITATION: 700-1400 mm (60% of it between August and January)

3. Seasons. Characteristics

Winter in the UK is generally a cool, wet and windy season. Temperatures at night rarely drop below -10°C and in the day rarely rise above 15°C . Precipitation is plentiful throughout the season, though snow is relatively infrequent despite the nations' high latitude. Snow falls intermittently and mainly affects northern and eastern areas and chiefly higher ground, especially the mountains of Scotland where the amount of lying snow may be significant enough on occasions to permit skiing. Snow however rarely lasts more than a week in most areas.

Spring is generally a calm, cool and dry season, principally since the Atlantic has lost much of its heat throughout the autumn and winter. However, as the sun rises higher in the sky and the days get longer, temperatures can rise relatively high and thunderstorms and heavy showers can develop.

There is a fair chance of snow earlier in the season when it is colder. Some of the country's heaviest snowfalls of recent years have happened in the first half of March and snow showers can occur infrequently until mid-April, even in southern areas.

Summer climatic differences are more influenced by latitude and temperatures are highest in southern and central areas and lowest in the north. Generally, however, summer temperatures rarely go above 30°C . The record maximum is 38.5°C recorded in Kent, in August 2003 - due to its proximity to the European land mass, the South East usually experiences the highest summer temperatures in the UK.

The north-west and north east have cooler summers (average $12.2 - 14.8^{\circ}\text{C}$), the south west has rather warmer summers (average $14.9 - 15.4^{\circ}\text{C}$) and the south and south east have the warmest summers (average $15.5 - 17.7^{\circ}\text{C}$).

Summer can often be a dry season but rainfall totals can have a wide local variation due to localised thunderstorms. These thunderstorms mainly occur in southern, eastern, and central areas and are less frequent and severe in the north and west.

Autumn in the UK is notorious for being extremely unsettled. As cool polar air moves southwards following the Sun in the sky, it meets the warm air of the tropics and produces an area of great disturbance along which the United Kingdom lies. This combined with the warm ocean, which due to heating throughout the spring and summer, produces the unsettled weather of autumn. In addition, when the air is particularly cold it may actually be colder than the ocean and this can result in significant amounts of condensation, producing clouds which eventually condense and bring rain to the UK. As such, autumn, particularly the latter part, is often the stormiest time of the year.

Activity 5. Choose the correct answer:

1. Britain has _____ summers and cool winters.
 - a. hot
 - b. warm
 - c. cool
2. Generally speaking, which part of the UK gets most of the rain?
 - a. the east
 - b. the south
 - c. the west
3. The polar maritime masses of air influence the _____ parts of the UK.
 - a. southern
 - b. north-western
 - c. western

UNIT 3.2. CLIMATE

4. The highest temperature in the UK was recorded in _____ in 2003.
 - a. Scotland
 - b. Wales
 - c. Kent
5. The UK's climate varies greatly according to _____ and location.
 - a. prevailing winds
 - b. season
 - c. relief
6. Temperature variations throughout the year in the UK are relatively _____.
 - a. high
 - b. moderate
 - c. small
7. The amount of lying snow in the mountains of _____ may be significant enough on occasions to permit skiing.
 - a. Wales
 - b. Northern Ireland
 - c. Scotland
8. _____ is often the stormiest time of the year.
 - a. summer
 - b. winter
 - c. autumn

Activity 6. Some of the words below are mixed up. See if you can unscramble them.

Britain is in the *merteatpe* climate *noze* British *eatwher* is dominated by frontal *piodressens* which give changeable weather. The Gulf *remSat* Drift causes western Britain to have *ldmi* winters.

Eastern Britain has *lerdoc*..... winters which are influenced by continental air masses. In *mumers*..... the south of Britain is warmer than the north due to higher levels of *lrsoa*..... heat in the south.