

# Seasonal Changes

## Seasons

There are four seasons in the United Kingdom. These are winter, spring, summer and autumn.

## Trees

There are two main types of trees. Deciduous trees have leaves that change colour and fall from the trees in autumn and winter. Evergreen trees shed old leaves and grow new leaves all year round. This means that they keep their leaves in winter.



deciduous trees



evergreen trees

## Animals through the seasons

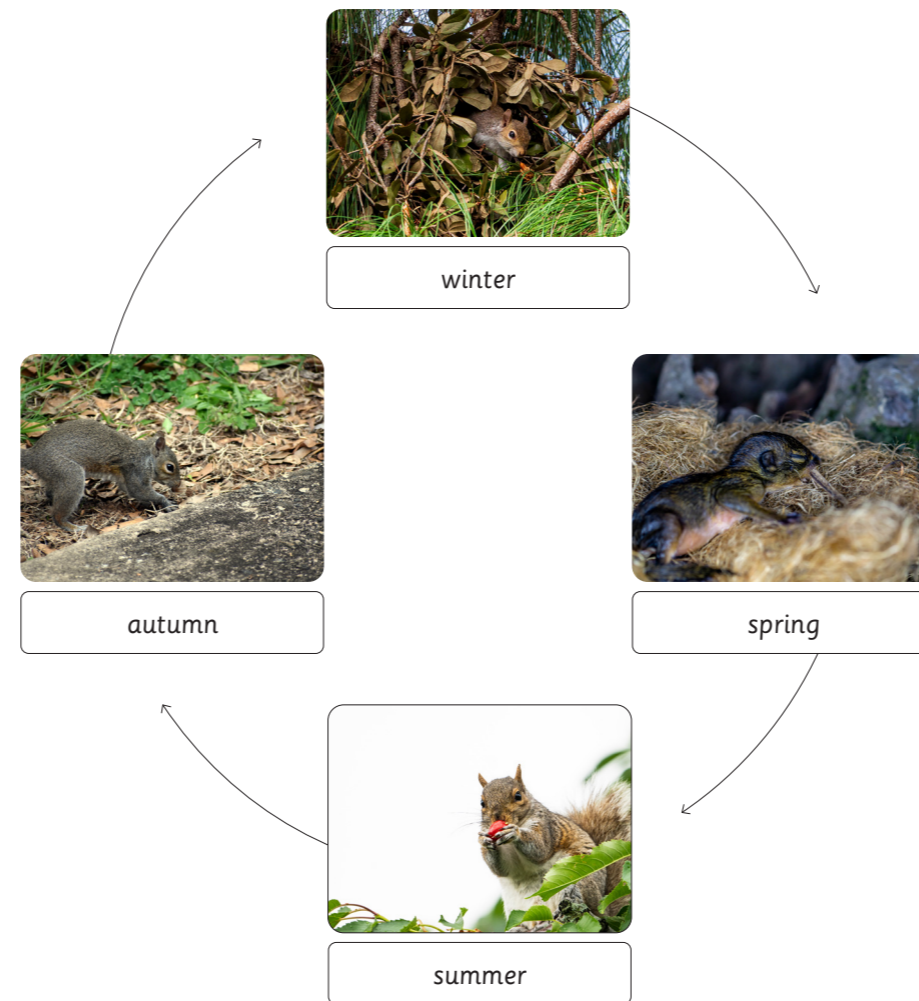
The temperature and the hours of daylight in each season affect how animals behave.

In **spring**, many animals give birth to young or lay eggs.

In **summer**, young animals grow and learn how to find food.

In **autumn**, animals prepare for winter or migrate.

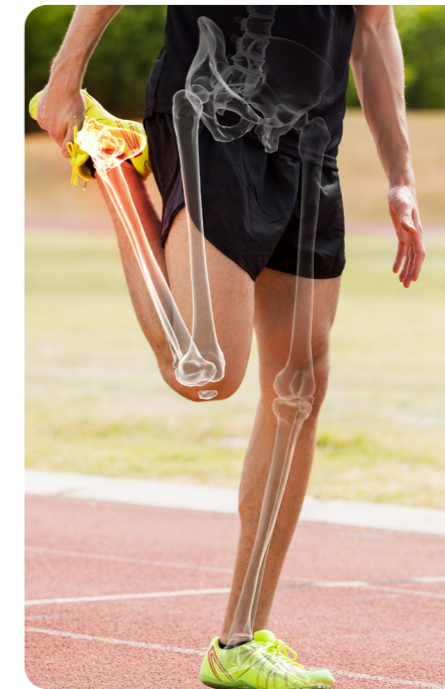
In **winter**, some animals spend more time in their nests or hibernate until spring. Then the cycle begins again.



Grey squirrels behave differently in different seasons.

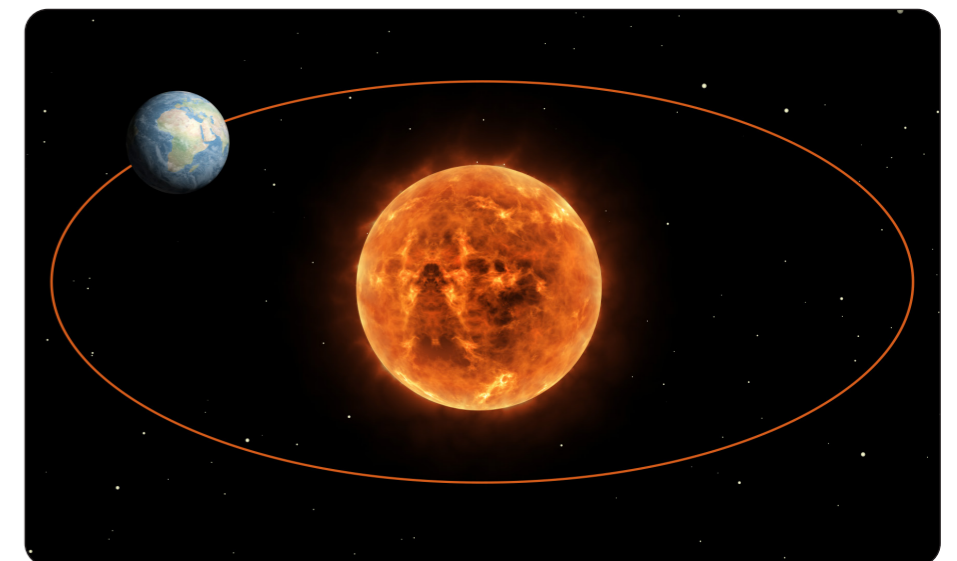
## The Sun

The Sun gives Earth heat and light. People need sunlight to make vitamin D, which keeps our bones healthy. However, we must protect ourselves from too much sunlight because it can damage our skin.



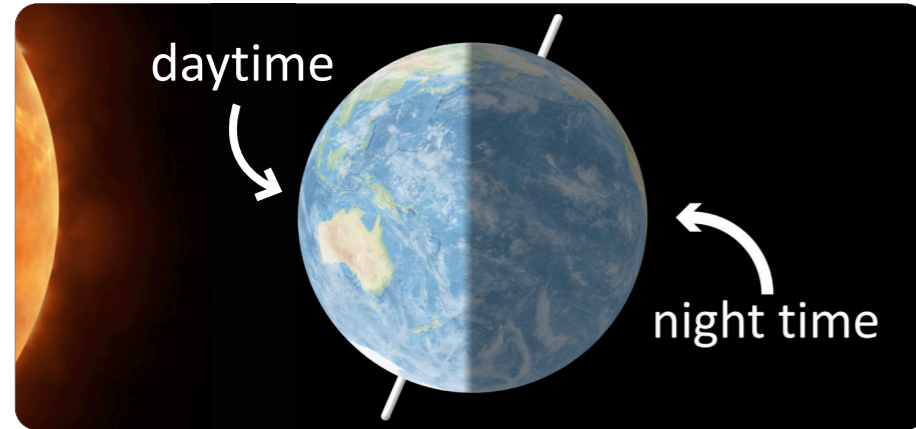
## The Sun and the seasons

The Earth travels around the Sun once every year. This journey makes the seasons.



## Daytime and night time

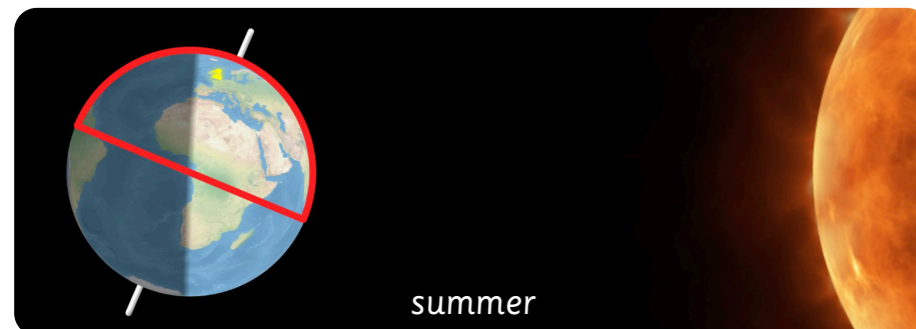
The Earth spins. It takes one day for it to complete one full turn. When places on Earth face the Sun, it is daytime. When places on Earth face away from the Sun, it is night time.



The length of daytime and night time changes every day in the United Kingdom. In winter, the daytime is short, and the night time is long because the Northern Hemisphere is tilted away from the Sun and doesn't get as much light.

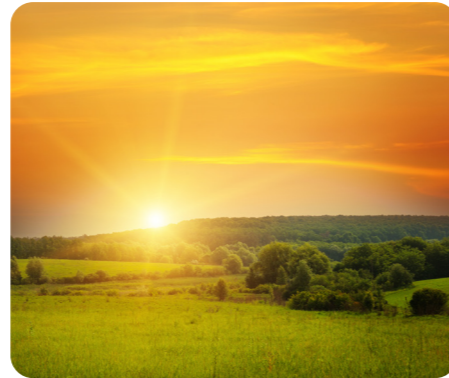


In summer, the daytime is long, and the night time is short because the Northern Hemisphere is tilted towards the Sun and gets lots of light.



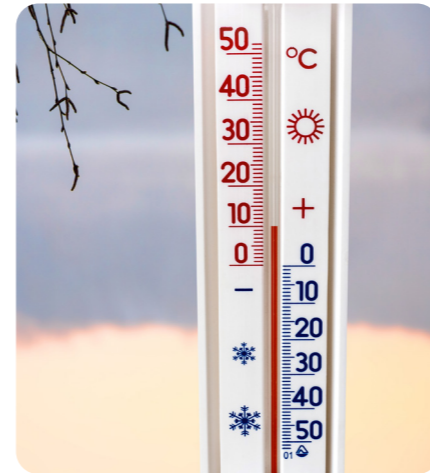
## Weather

The weather is what the air outside is like in one place and at one time. The Sun makes the weather on Earth. The weather can be sunny, cloudy, foggy, rainy, snowy or windy.



## Temperature

Temperature is a measurement of how hot or cold something is. The temperature on Earth changes during the day. We use a thermometer to measure the temperature.



## Precipitation

Precipitation is water that falls from the clouds. Precipitation can fall as rain, sleet, snow or hail, depending on the temperature. We use a rain gauge to measure the volume of rainfall.

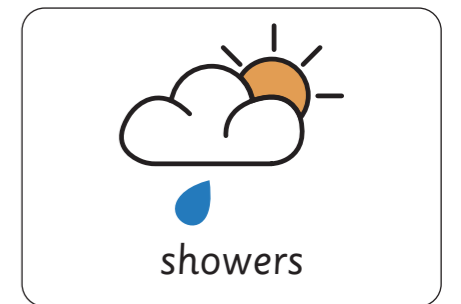
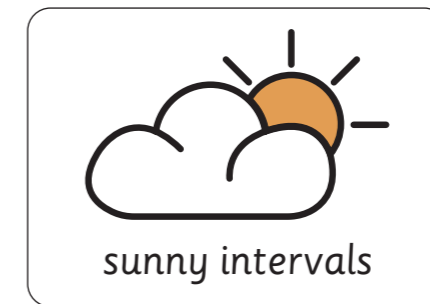


## Wind speed

The Beaufort Scale was invented in 1805 by Commander Francis Beaufort of the British navy. He watched the effects of the wind at sea and gave names to 13 wind speeds from calm to hurricane force. We use a windsock or anemometer to observe or measure the wind.

## Weather forecasting

Scientists measure the temperature, precipitation and wind speed to predict the weather. They also look at satellite images and information from supercomputers. Sometimes they use symbols to tell us what the weather will be like.



## Glossary

<b>hibernate</b>	When animals become dormant, or inactive, during the winter months.
<b>migrate</b>	When animals travel to a different place when the season changes.
<b>Northern Hemisphere</b>	The half of the Earth that is north of the equator. The United Kingdom is in the Northern Hemisphere.
<b>volume</b>	The amount of space an object takes up.

