

Seasons

The Earth goes around the Sun once a year. This produces the seasons – spring, summer, autumn and winter.

The Earth moves in two ways – it tilts as it spins, and it travels around the Sun. These two movements give us our **SEASONS** – spring, summer, autumn and winter.

Tilted Earth

The key to the seasons is the way the Earth is slightly tilted onto its side as it spins (Picture 1).

This tilt causes one part of the Earth to face more directly into the sunlight. This is summer. Meanwhile,

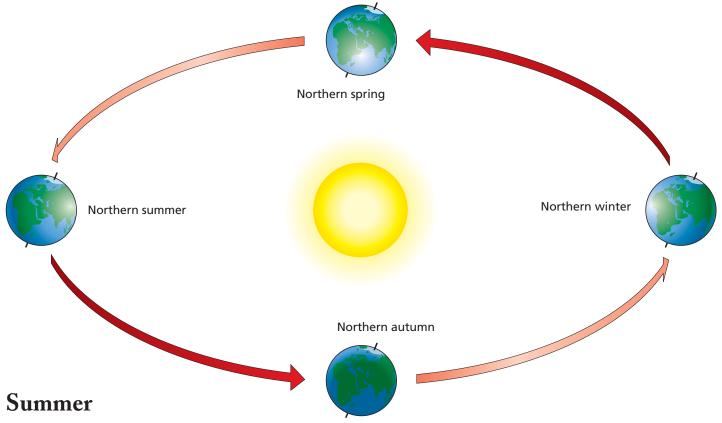
the other part of the Earth is less directly in the sunlight.

This is winter (Picture 2).



(Picture 1) The tilt of the Earth causes one part of the Earth to face more directly into the Sun for half of the year, and away from the Sun for the rest of the year. This tilt causes the seasons.

▼ (Picture 2) Here you can see how the tilted Earth moves around the Sun. Because the tilt is always in the same direction, for one part of the year the northern hemisphere faces towards the Sun more directly. This gives summer.



When the northern part of the Earth is tilted more directly towards the Sun it gets more sunlight each day. The Sun shines for a longer time each day and rises higher in the sky. This means that more sunshine reaches that part of the Earth and it gets hotter. This is summer in the northern half of the Earth.

Winter

When the northern part of the Earth is tilted away from the Sun it gets less sunlight each day. The Sun shines for a shorter time each day and rises less high in the sky. This means that the northern part of the Earth does not get much warmth. This is winter.

Spring and autumn

Spring and autumn are half way stages in the orbit of the Earth. They are the times when all parts of the Earth have equal day and night. This happens because the Earth is facing sideways to the Sun, with neither northern nor southern hemispheres having more sunshine.

Summary

- The seasons are caused by the way the Earth is tilted.
- The northern hemisphere has summer when it is tilted towards the Sun.
- The northern hemisphere has winter when it is tilted away from the Sun.