

# S1 Seasons

## What are the four seasons?

We divide the year into seasons. Each season last three months. Summer is usually the hottest, winter is the coldest, and spring and autumn (fall) are in between.

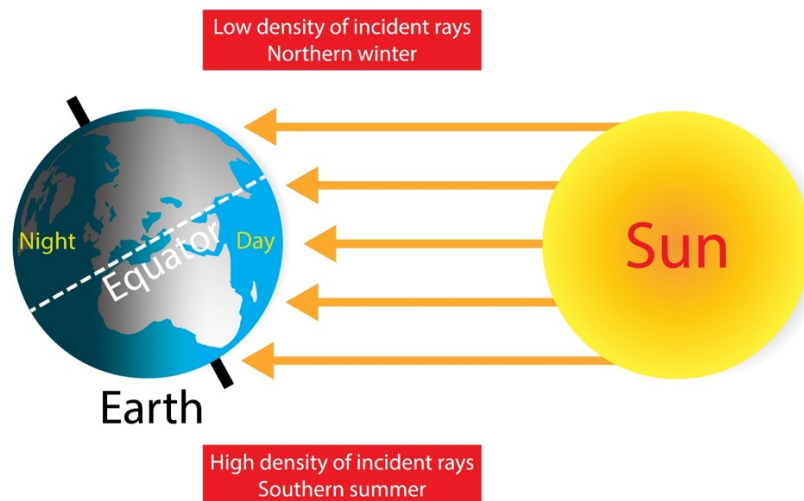
	
spring	summer
	
autumn (fall)	winter

### Why do seasons occur?

Seasons are caused by the Earth's changing relationship with the sun. The Earth travels (orbits) around the Sun every 365 days. As the Earth orbits the Sun, the amount of sunlight each place on the planet gets changes every day. This causes seasons.

### The Earth is tilted

The Earth travels around the Sun every year, but it also rotates on its axis every 24 hours. Each 24 hours is one day. The Earth doesn't rotate in a straight line. It is tilted (see picture below). This is important because it means that for half of the year, the North Pole is tilted more towards the sun and for the other half of the year, the South Pole is more pointed towards the Sun. When the North Pole is tilted towards the sun, the days are longer and the nights are shorter. This creates summer in the Northern Hemisphere. During this time, it is winter below the equator. As the year progresses, the tilt changes and the North Pole is pointed away from the sun (see picture below) and this means it is winter in the Northern Hemisphere. During this time, it is summer below the equator. The seasons are opposite on different sides of the equator. When it is summer in North America, Europe and most of Asia, it is winter in Brazil and Australia, and vice-versa.



### **What happens in each season?**

**Spring** – flowers start to grow, and animals are born.

**Summer** – the temperature is hot, and people go to the beach.

**Autumn (fall)** – the leaves on trees change colour and fall off.

**Winter** – the temperature is cold and in some places it snows. Some animals go to sleep (hibernate) for the winter months. Some birds fly to warmer climates.