

Seasons in the Southern Hemisphere and the Poles

Look outside your window. Which of Earth's four seasons is it where you are?

Is it hot and sunny summertime?

Or maybe cool and colorful autumn?

Is it nippy and white winter?

Or warm and floral spring?

Do you know what causes the four different seasons on Earth? Well, remember that the Earth rotates on its axis, the imaginary line that connects the North and South Poles.

In relation to the sun, the Earth's axis is tilted slightly, 23 and a half degrees, to be exact.

Now, the Earth has a northern half and a southern half. These hemispheres are separated by the equator, an imaginary line that runs around the center of the Earth, like a belt.

Because of the Earth's tilted axis, the intensity of the sunlight hitting the planet varies. For example, when the northern hemisphere is tilted toward the sun, it receives more direct rays of the sun's energy than the southern hemisphere.

When the Earth is in this position in its revolution around the sun, it is summer in the northern hemisphere.

Which season is it in the southern hemisphere? If you answered winter, you are correct!

When the northern hemisphere is tilted away from the sun, the sunlight is less direct than it is in the southern hemisphere.

When the Earth is in this position in its revolution around the sun, it is winter in the northern hemisphere.

Which season is it in the southern hemisphere? If you guessed summer, you are getting the hang of this quickly!

What about the north and south poles? Are there seasons there? Well, sort-of. The sunlight that hits the poles is always indirect so it's pretty cold there all year-round. We will learn more about the poles a little later.

For now, think about where you are on planet Earth and which season you are experiencing. Are you leaning in toward the sun enjoying the warm direct rays of summer? Are you leaned away from the sun, bundled up for winter? Or are you somewhere in between experiencing fall or spring?

Whatever season you are in right now, you are somewhere along Earth's revolutionary path around the sun, travelling through space.

What do you think summer is like in the North Pole? Well, let's take a look!

If you started at the north pole and walked all the way to the equator, the invisible line that runs around the planet like a belt, you'd experience more direct sunlight as you walk south.

The poles receive the least intense amount of sunlight, overall, where the equator receives the most.

Although the energy that radiates toward the poles is angled and low-intensity, during the summer, it is always light outside.

This means that in the summer in the poles, it is still cool out, but the sun doesn't set for six months!

When it's summer in one pole, it's winter in the other.

During the winter, polar regions receive no sunlight for several months!

Imagine it being completely dark in the middle of the day!
