

Weather Science Lab: Change of seasons

Why does the weather change? Why is it never stable? Why do we always have 4 seasons and their sequence doesn't change?



Earth and Sun Activity

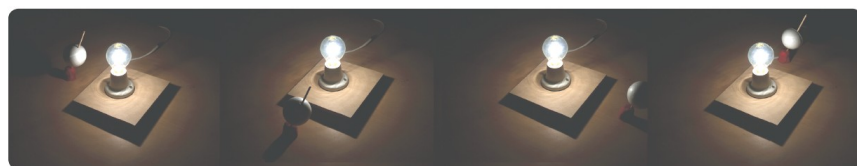
Let's imagine for a minute that the earth is an orange.

1. Create a hole in the bottom part of the orange and put a wooden stick or a pencil through it. This is the earth!
2. Note the position of your country with the help of your teacher.
3. Put a torch in a stable place. This is the sun!
4. Start moving the orange around the torch; this is the earth rotating around the sun. We observe how and in what intensity the sunlight reaches our country.



Earth spins around its axis and completes one full rotation around its axis every 24 hours...or in other words... One day!

Additionally, the earth rotates around the sun in a fixed orbit; a journey that takes 365 days, or...in other words... one year ... or 4 seasons!



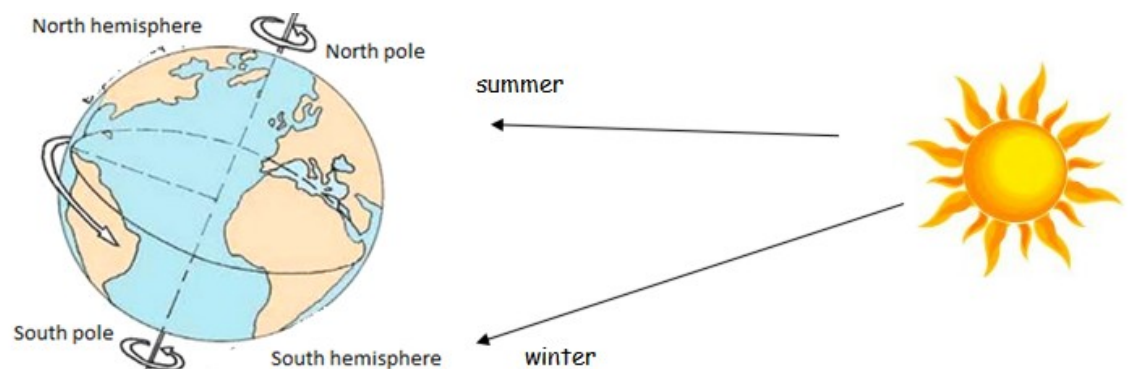
What seasons do you think are at the positions A and B of the north hemisphere? Use the words summer and winter.



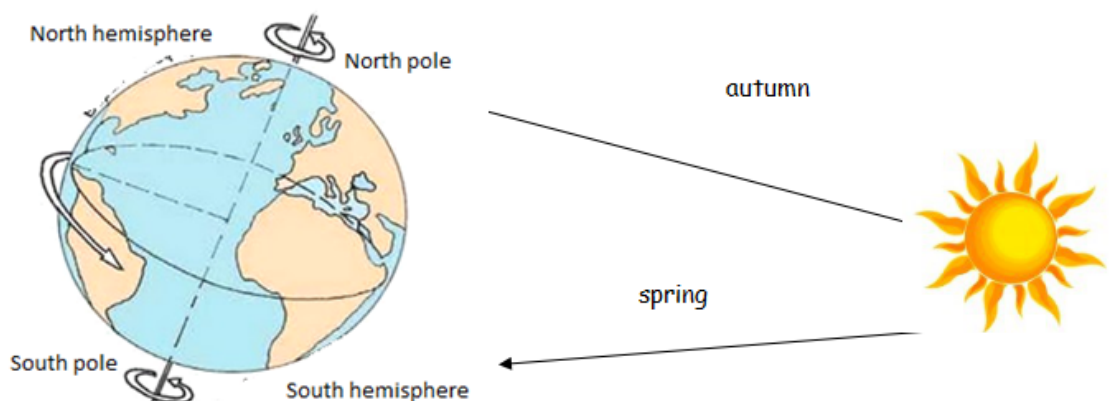
When does summertime start?

Once a year, the _____ hemisphere tilts closer to the sun, so that the sun rays are striking that part of Earth at a more direct angle. Welcome summer!

On the contrary, the sun's rays are less direct on the _____ hemisphere and that part of Earth cools. It's _____.



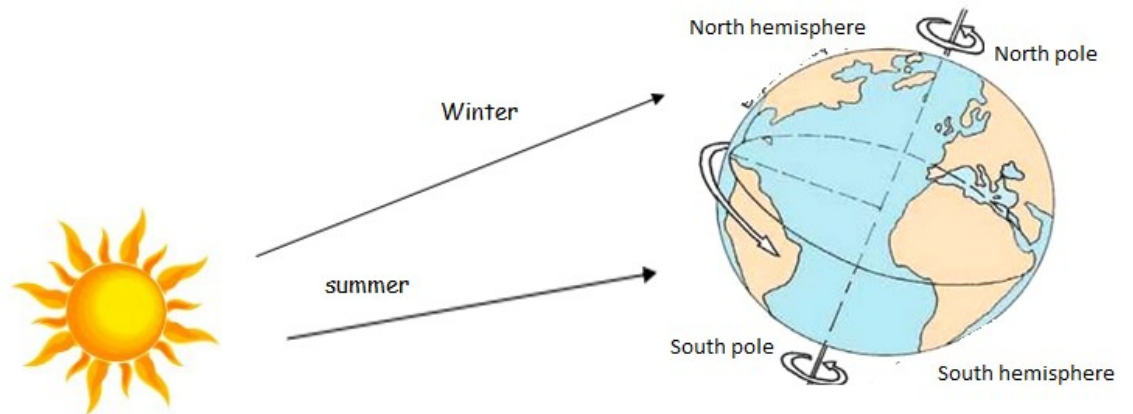
After three months, the _____ hemisphere has moved far away from the sun. The sun rays have a longer journey now for reaching the earth. The days start getting _____ while the nights _____. Welcome, _____!



On the other hand, the _____ hemisphere tilts a bit closer to the sun. Have a nice _____!

After three months, the _____ hemisphere is further away from the sun. The sun rays lose their strength until they reach our country. It's _____ is here.

However, on the other hemisphere it's _____ because the sun rays are striking that part of Earth at a straighter angle.



Three more months are needed so that the earth tilts a bit closer to the sun, on the _____ hemisphere. The weather gets warmer because the sun rays travel a shorter distance to the earth. It's spring!

The _____ hemisphere tilts way from the sun now! Happy autumn!

