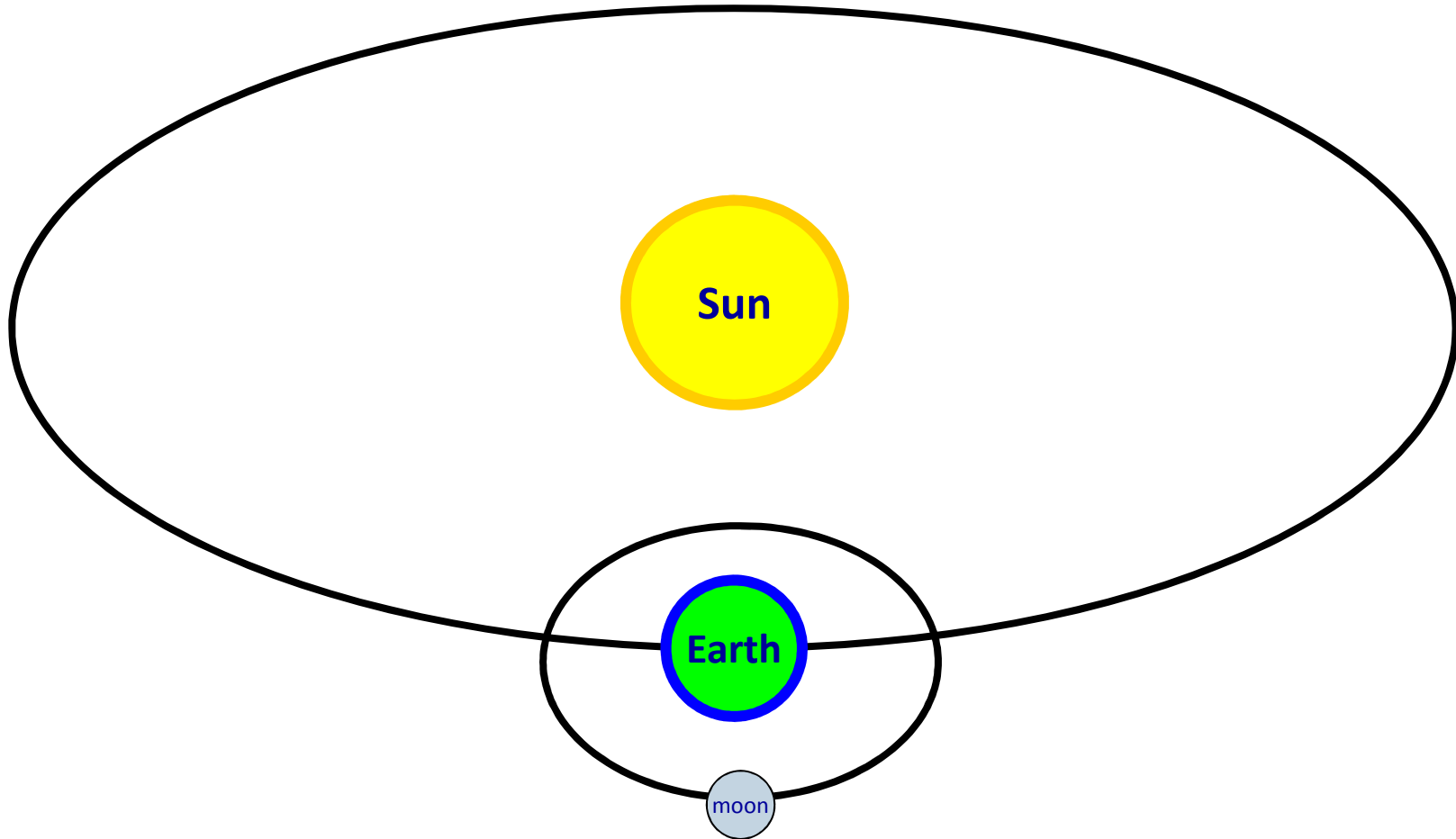
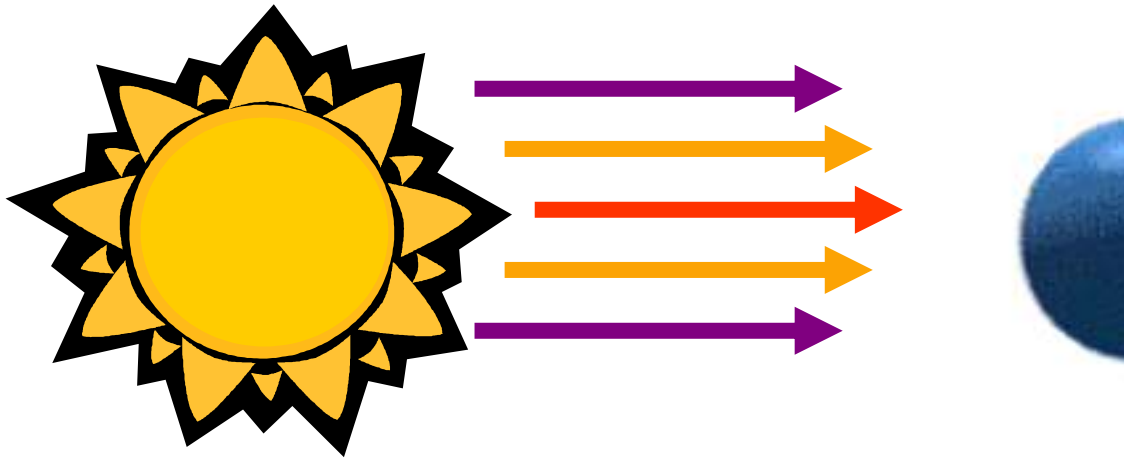


The moon orbits the Earth, as the
Earth orbits the sun.



***At any time, half of the Earth faces the sun
and therefore receives light.***

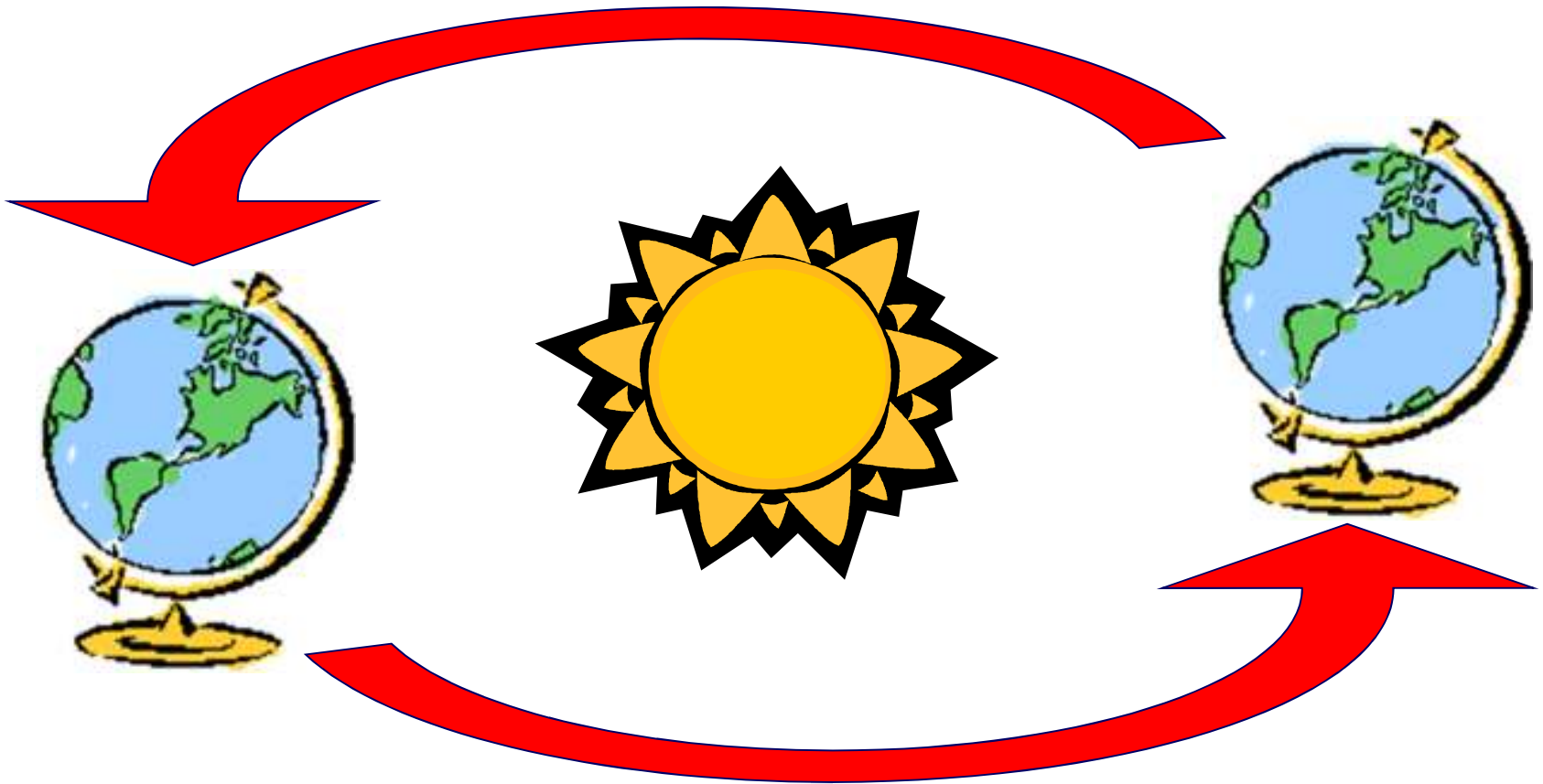
This part is in day.



This part is in night.

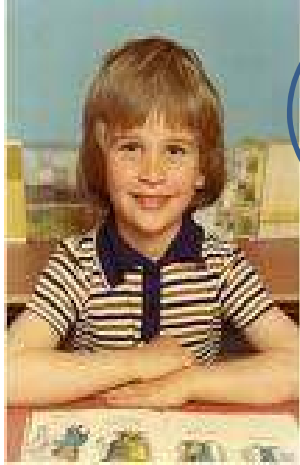
***The other half faces away from the Sun,
and so receives very little light.***

As the Earth orbits around the Sun, it also spins on its own axis; which is tipped, *like a globe's*.



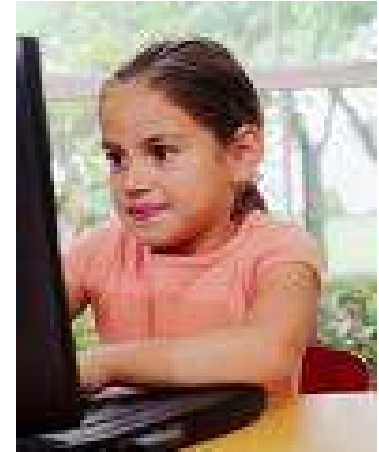
Why do the seasons occur?

(Which do you think is correct?)



The seasons happen because of the weather and the plants.

It is cold in winter because the sun is far away



Winter happens because there are more clouds to block out the sun.

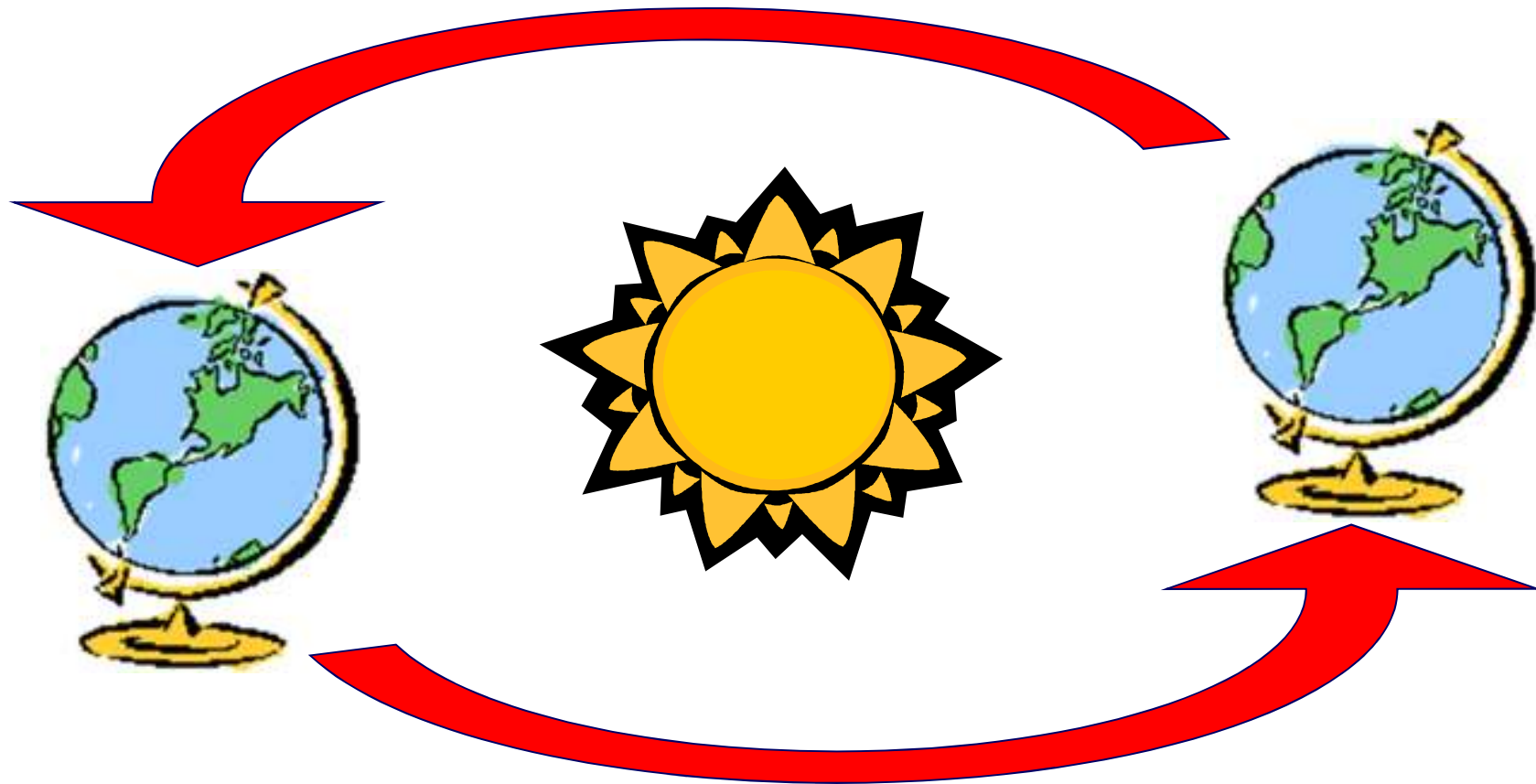
The seasons happen due to the tilt of the Earth's axis.





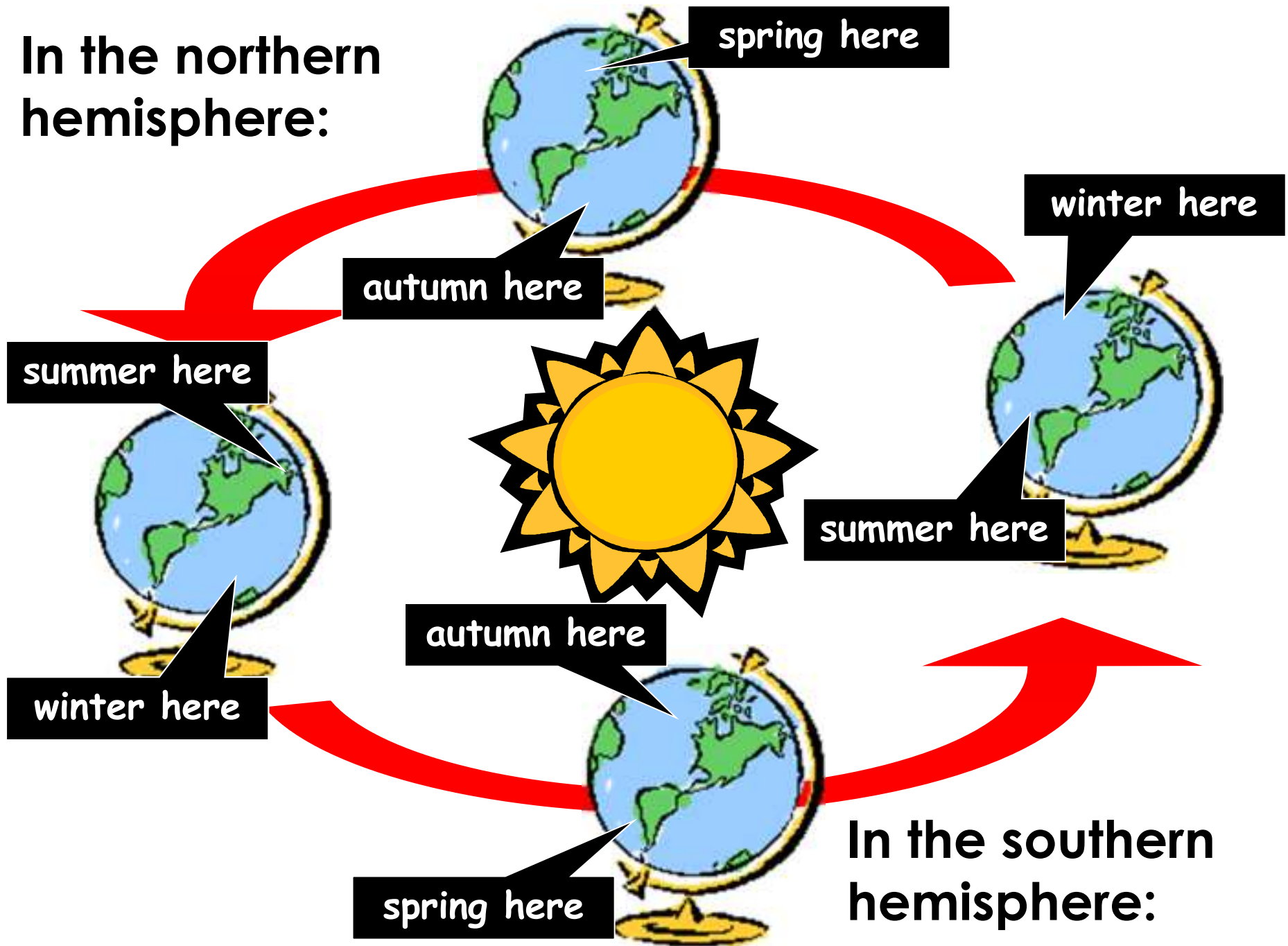
- The Earth is tilted at an angle of 23.5 degrees.
- The Earth tilts the same way as it orbits the sun.
- This causes the seasons.

What causes the Earth's seasons?



As the Earth orbits the Sun, when its axis **tips towards the Sun**, the weather gets warmer and it gets more direct sunlight. When it **tips away**, the weather gets colder and it gets less direct sunlight, causing the Earth's seasons.

In the northern hemisphere:



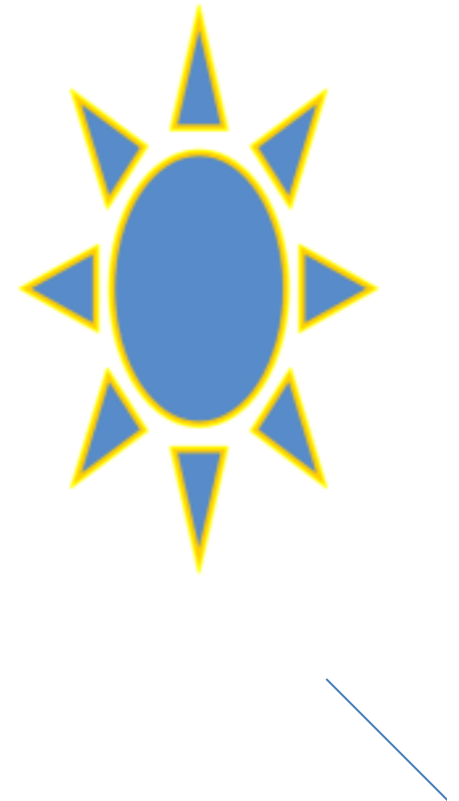
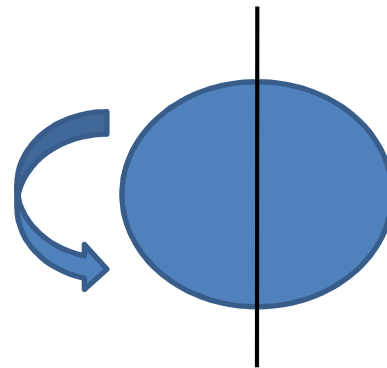
In the southern hemisphere:

- LO: To know that it is the Earth's orbit around the sun and the tilt of its axis that causes the seasons.
- Draw a diagram to show the position of the Earth for winter and summer in the Northern Hemisphere.
- Why do we get more hours of daylight per day in the summer?

Challenge

What would happen if....

- The Earth's axis was not tilted, but straight vertically.
- How would this effect day/night and the seasons?



Challenge 2

What would happen if...

- The Earth's axis was horizontal rather than vertical.
- How would this effect day/night and the seasons?

