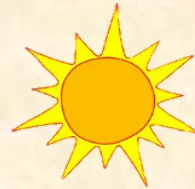


THE EARTH & SUN

WHAT MAKES DAY AND NIGHT?



WHAT MAKES THE SEASONS?



Summer



Fall



Winter



Spring

**A Read and Discuss
Presentation
by Mrs. Sheridan**

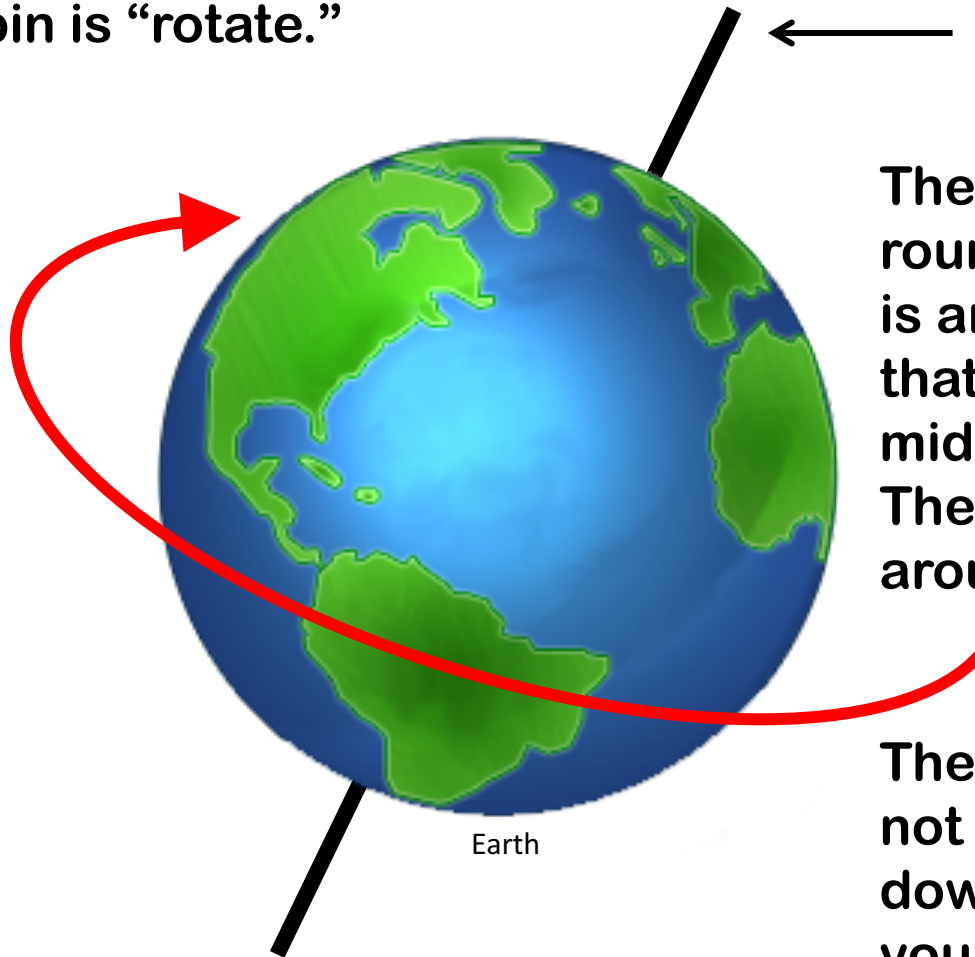


Earth

The science word for spin is “rotate.”

Axis

The Earth is like a round ball. The axis is an invisible line that goes through the middle of the ball. The Earth spins around and around.



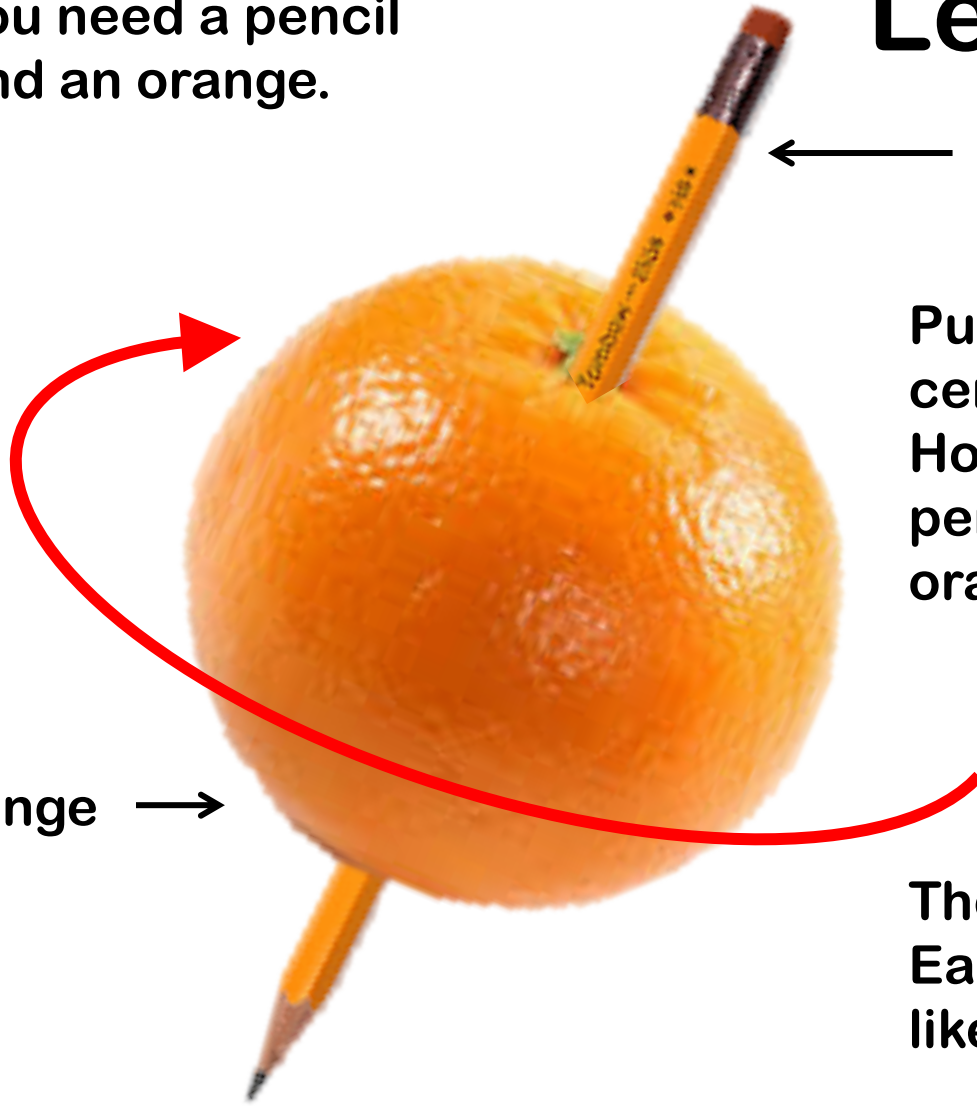
The Earth's axis is not straight up and down. It is tilted. Can you see how the Earth spins?

The Earth rotates on an axis.

You need a pencil
and an orange.

Let's try it!

← pencil



Put a pencil through the
center of an orange.
Hold the ends of the
pencil and rotate the
orange.

orange →

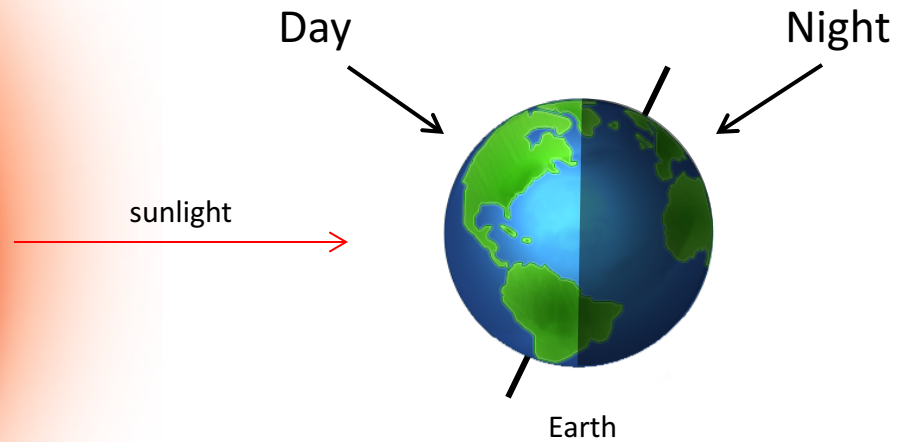
The orange is like the
Earth, and the pencil is
like Earth's axis.

The Earth rotates on an axis.

What makes day and night?



Sun



The Earth rotates completely around and back again in one night and day. It takes 24 hours. The side of the Earth that is facing the sun is day. The side facing away from the sun is night.

Can we feel the Earth move?

We cannot feel the Earth move. We can see that the Earth is moving by looking at the sun in the sky.

The sun seems to rise up in the morning.

Morning



Earth

The sun looks straight up above us in the middle of the day.



Noontime



Earth

The sun seems to go down at the end of the day.

This is caused by the Earth rotation.
It looks like the sun is moving, but it is actually the Earth turning first toward, then away, from the sun.

Evening



Earth

Let's try it!

Stand near a chair. Pretend it is the sun.

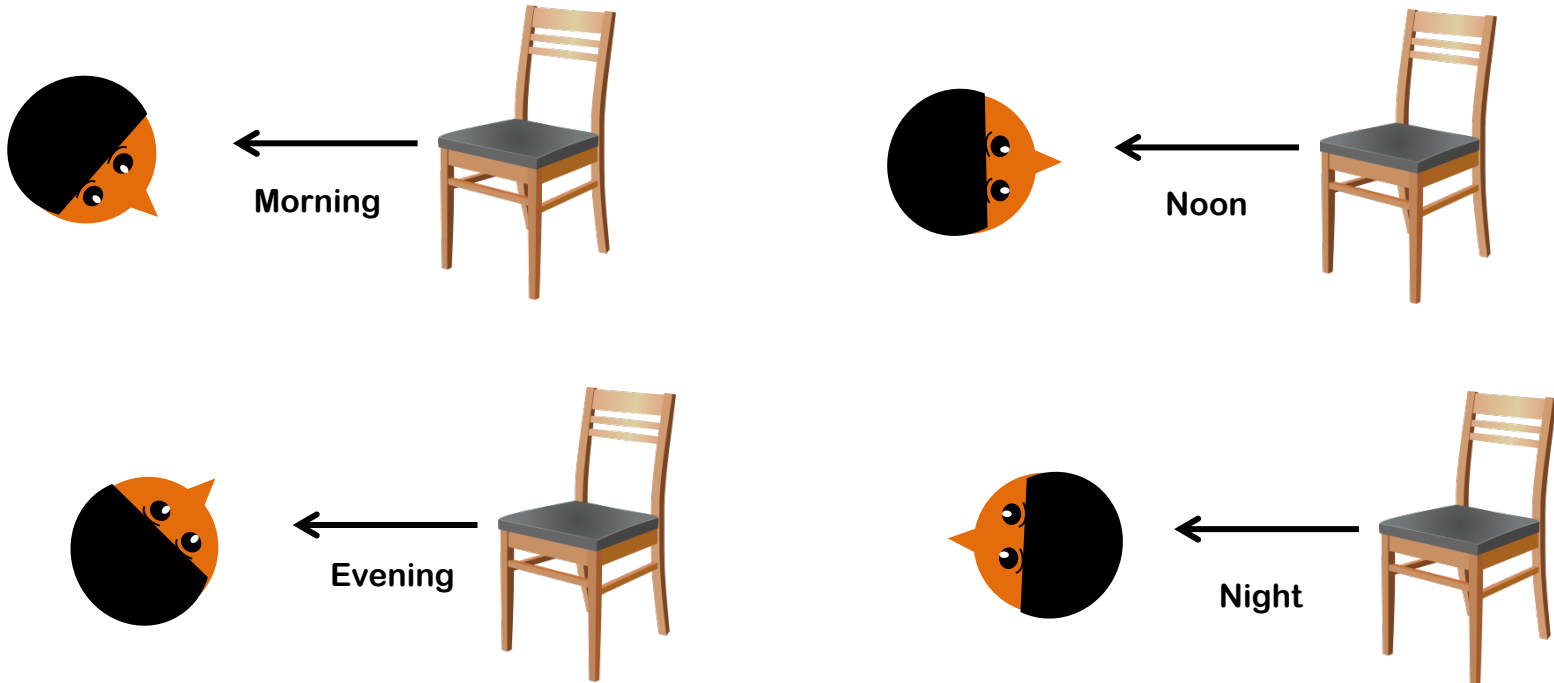
Turn your body slowly. Pretend it is the earth.

First turn so your left ear is facing the chair. This is morning.

Next, turn so your nose is facing the chair. This is noon.

Then, turn so your right ear is facing the chair. This is evening.

Finally, turn so your body is facing away from the chair. This is night.



The sun did not move. The earth moved.

What makes the seasons?

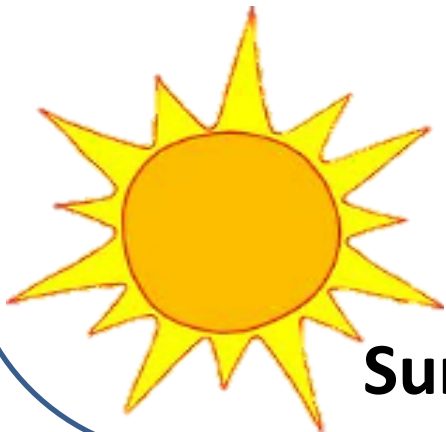


Fall



Winter

**We have
4 Seasons**

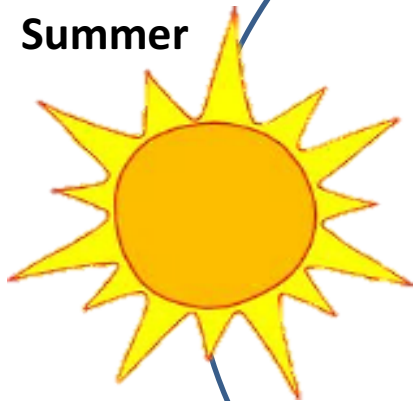


Summer

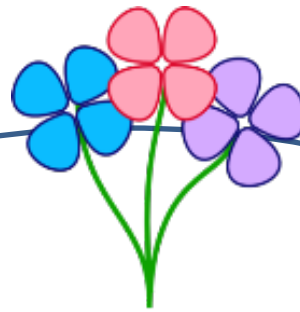


Spring

**The seasons
change as the
Earth orbits
around the sun.**



Summer



Spring

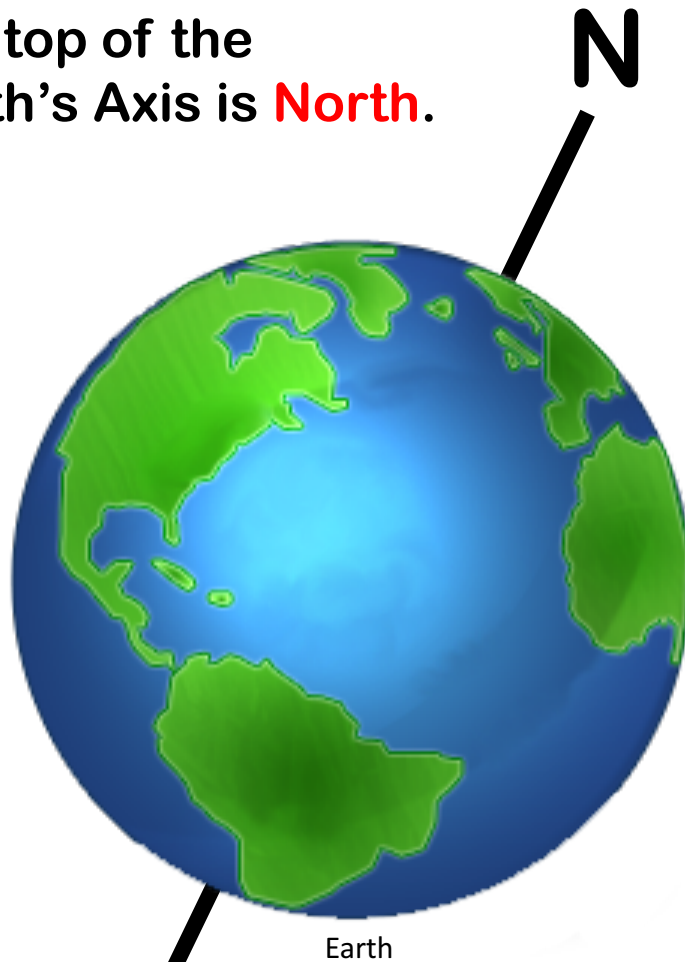


Winter



Fall

The top of the Earth's Axis is **North**.



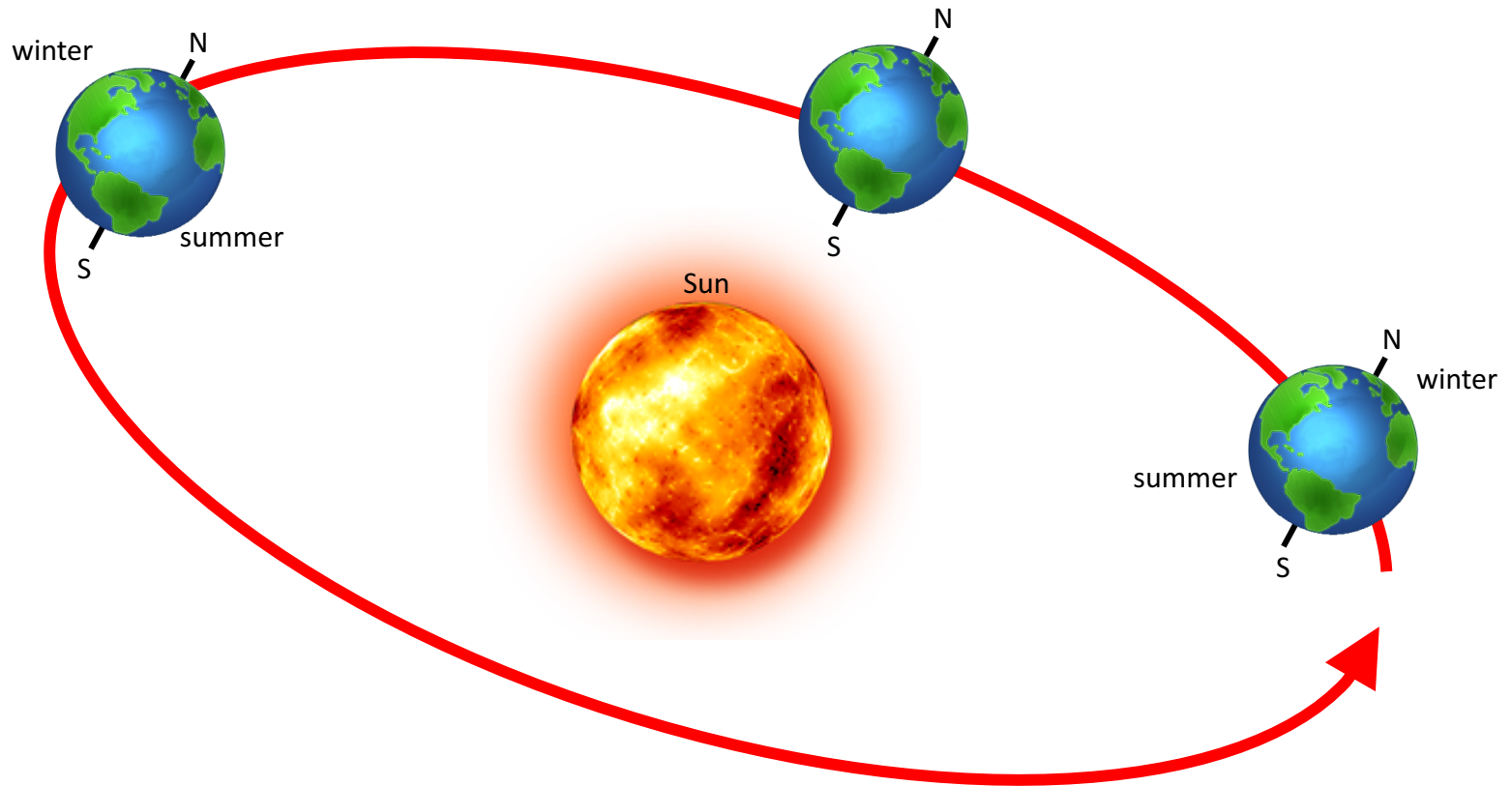
The bottom of the Earth's Axis is **South**.

When the Earth orbits the sun, the tilt of the Earth's axis stays the same.

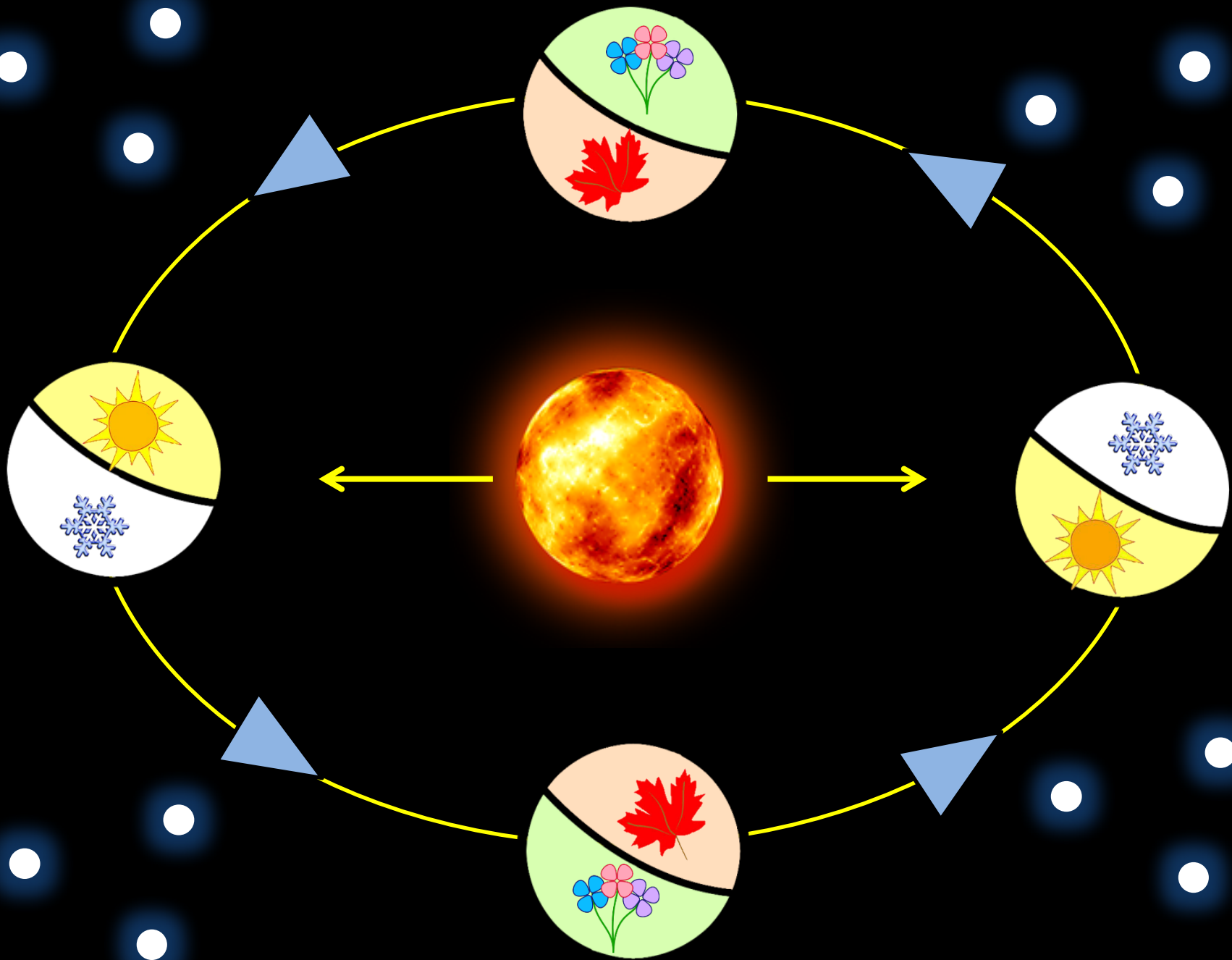
If the south is tilted toward the sun, it is summer in the south.

If the north is tilted toward the sun, it is summer in the north.

What makes the seasons?



The Earth orbits the sun. It takes 12 months. The area of the Earth that is tilted close to the sun is summer. The area facing away from the sun is winter.



<https://www.youtube.com/watch?v=9n04SEzuvXo>