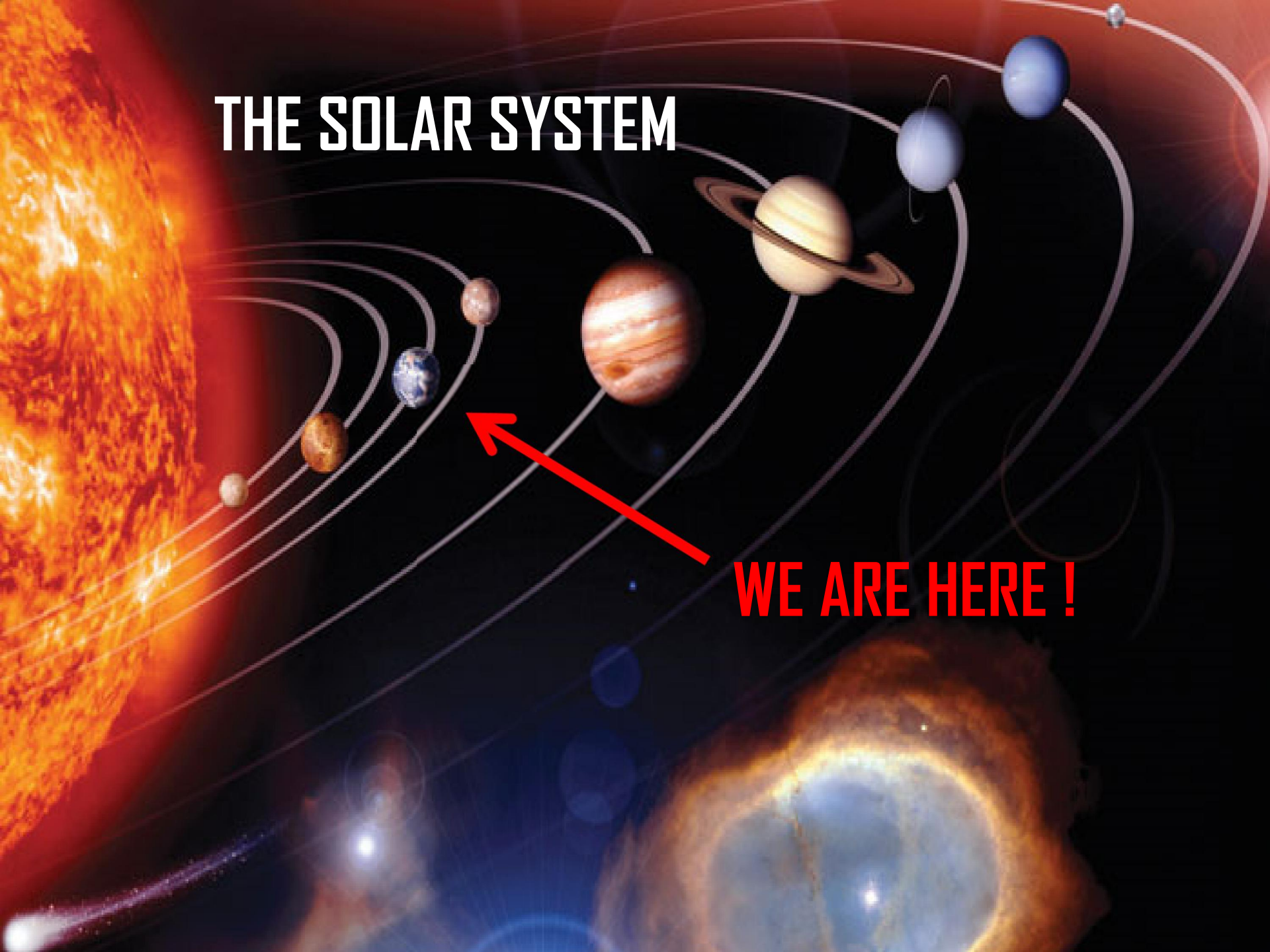
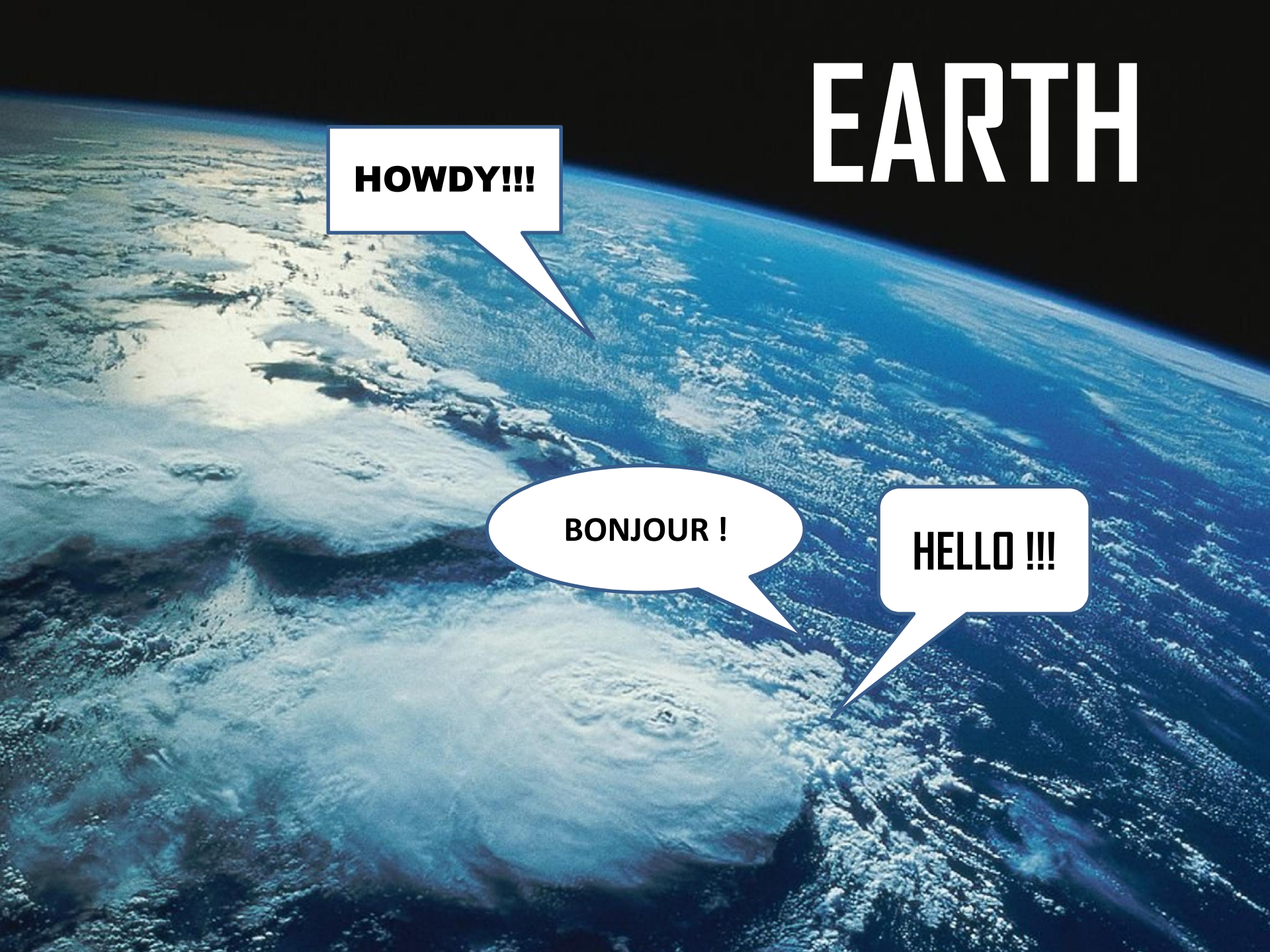
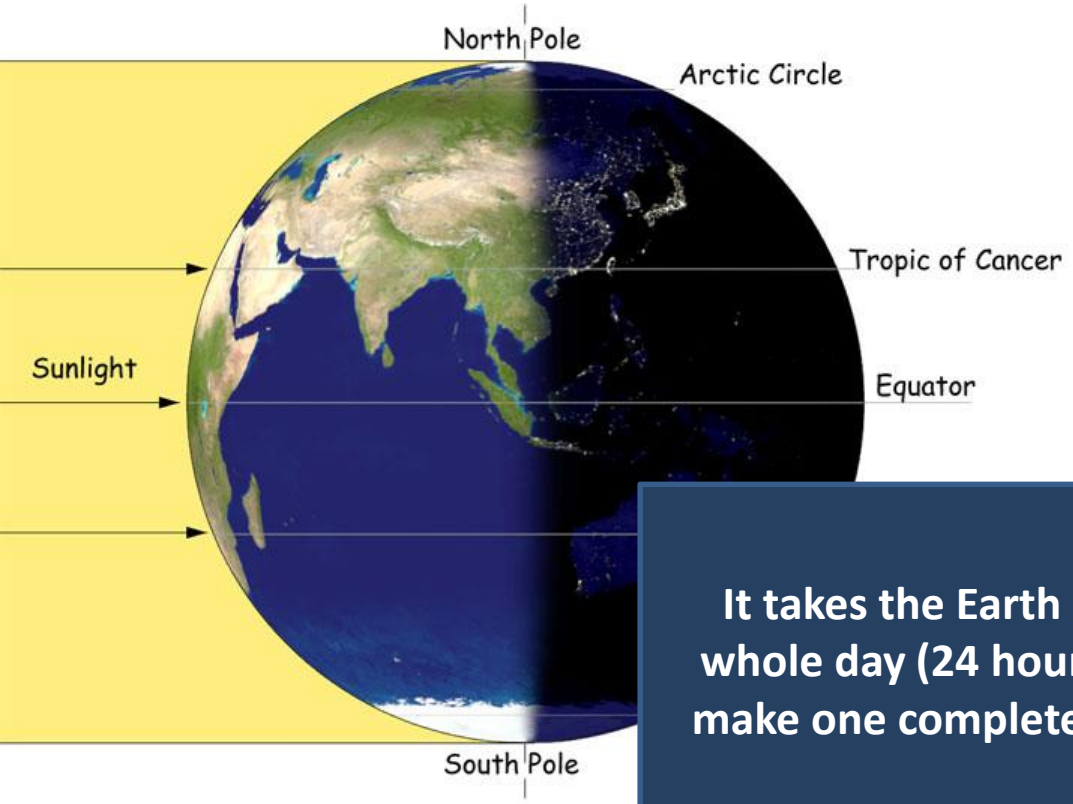
# THE EARTH... AND BEYOND


THE SOLAR SYSTEM
WE ARE HERE !


EARTH
HOWDY!!!
BONJOUR !
HELLO !!!

# WHY DO WE HAVE DAY AND NIGHT?



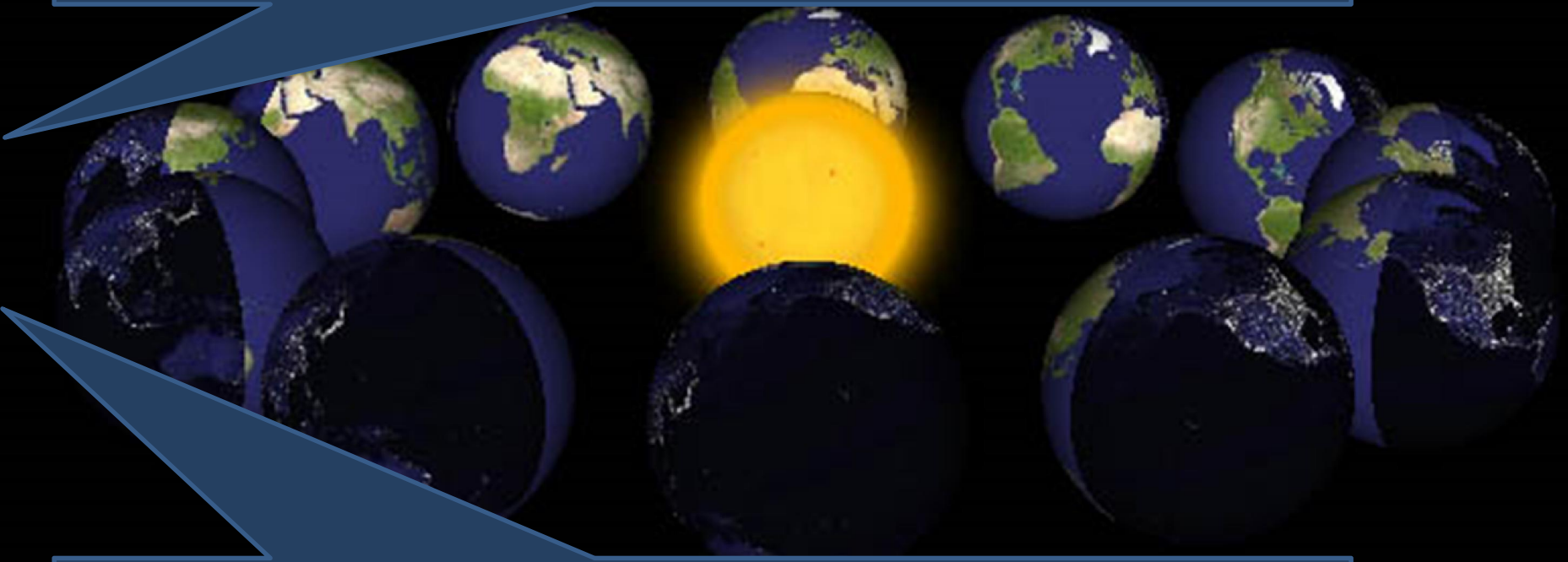

We have day and night because the Earth rotates. It spins on its axis, which is an imaginary line passing through the North and South Poles.

The Earth spins slowly all the time, but we don't feel any movement because it turns smoothly and at the same speed.

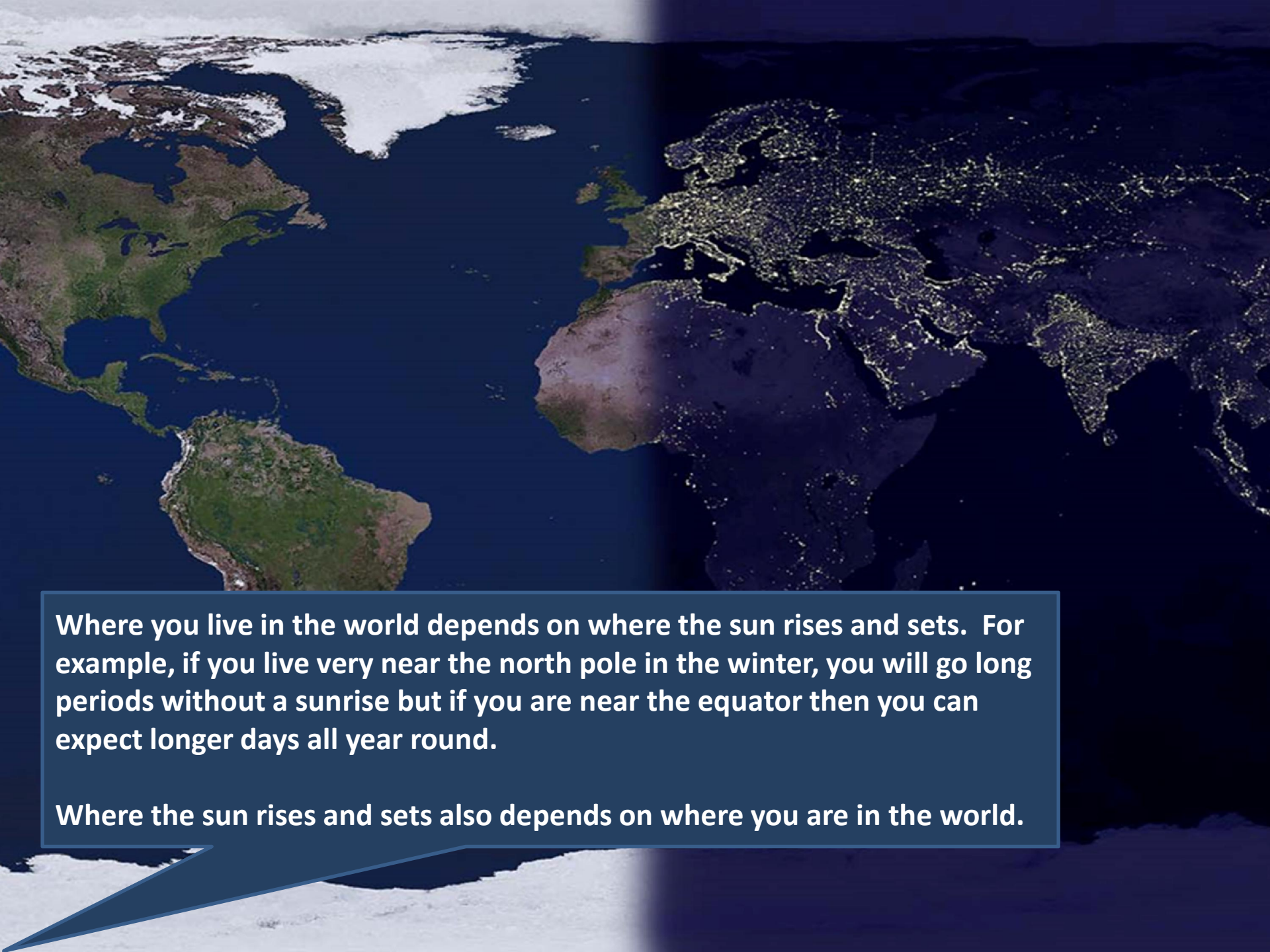
It takes the Earth one whole day (24 hours) to make one complete turn

In ancient times, as people watched the sun move across the sky each day, they thought that the sun travelled around the earth.

Scientists later found out that the sun remains in one place while the earth and the other planets travel around it.



The Earth orbits the sun whilst spinning itself. At the same time different sides of the Earth face the sun and different times. The side of the Earth facing the sun is day and the side facing away from the sun is night...



Where you live in the world depends on where the sun rises and sets. For example, if you live very near the north pole in the winter, you will go long periods without a sunrise but if you are near the equator then you can expect longer days all year round.

Where the sun rises and sets also depends on where you are in the world.

# But how do we know the Earth is spherical?

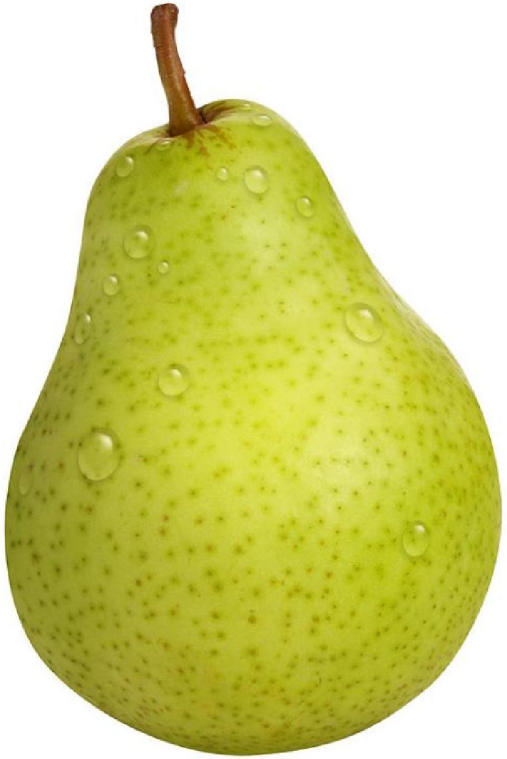
Long ago people used to believe the world was flat because of the way the ships used to disappear over the horizon.

However, many theorists put forward that the world was not flat, but round. This was eventually proved by Christopher Columbus who successfully circumnavigated the globe, travelling around the world and back to where he started, like this...


Or like this...

**Since then man has travelled into Space and taken many pictures of Earth. Despite this though the Earth is actually not a perfect circle. Some people suggest that it is actually shaped more like...**

=



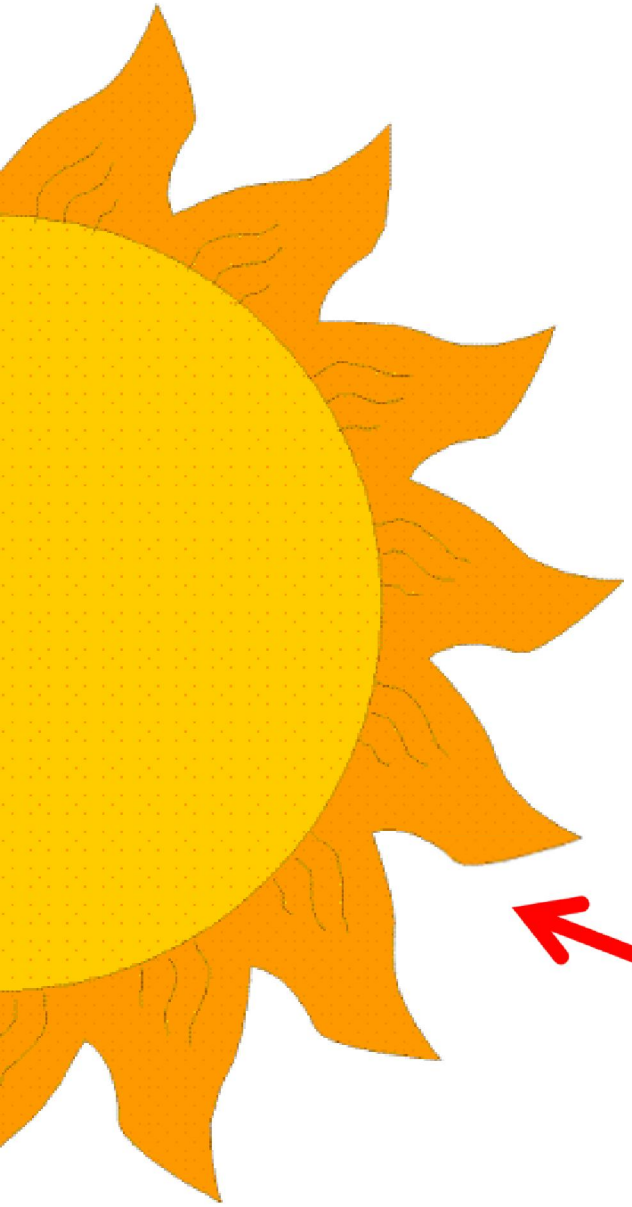
**...a pear.**

# THE MOON

# How long does the moon take to revolve around the Earth?

The Moon orbits the Earth in the same way the Earth orbits the sun. It takes about 27 days (27 days, 7 hours, 43 minutes, 11.6 seconds) to go all the way around the Earth and return to its starting position.

# Is the sun bigger than the moon?



sun

moon

When you look up into the sky at the sun and the moon, they appear to be pretty equal in size. But that is far from true. The sun is actually 400 times larger than the moon, with a diameter of 865,000 miles as compared to the moon's 2,160 miles.


The End