# Lesson 1:
## The Cycle of Day and Night

**Day and night on Earth occur in a *cycle,* or a process that repeats.**

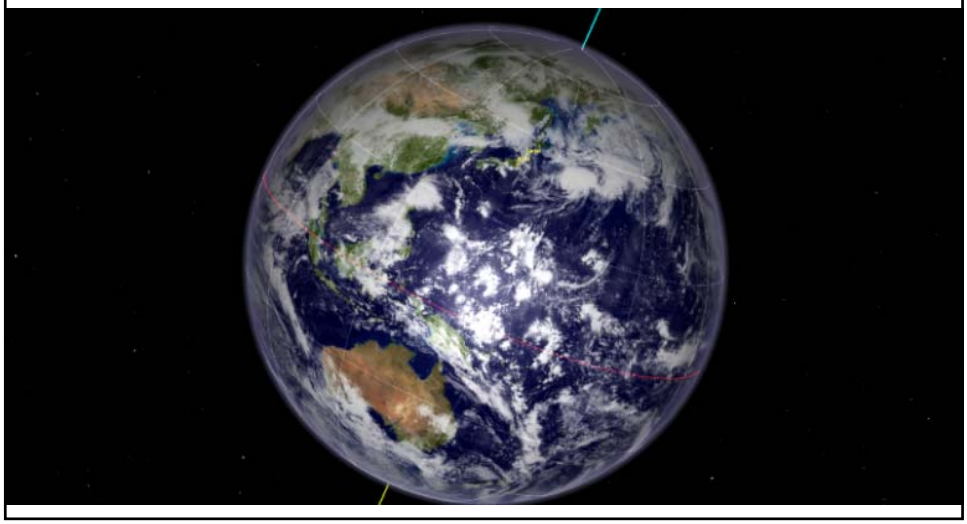
**Earth's 24 hour day is based on this cycle.**

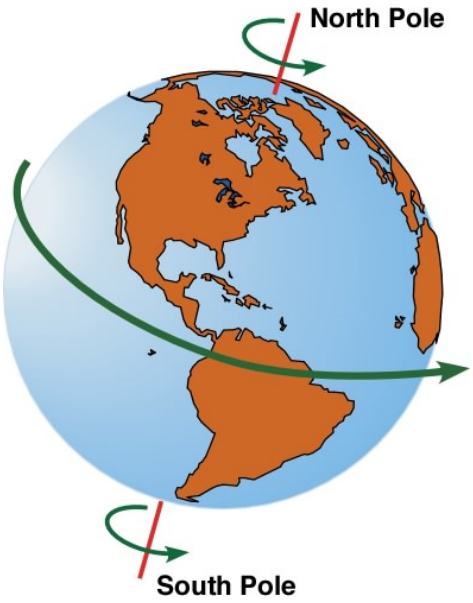
## Discovery Education Video:

## Earth's Rotation

Earth rotates on its axis once every twenty-four hours, which prevents temperatures from fluctuating wildly. The Earth's tilt on its axis accounts for the seasons. A solstice occurs twice a year, in winter and spring, and is the point in Earth's orbit of maximum tilt toward or away from the sun.

## Earth is constantly moving in space. Its movement causes changes in day, night, and the seasons.

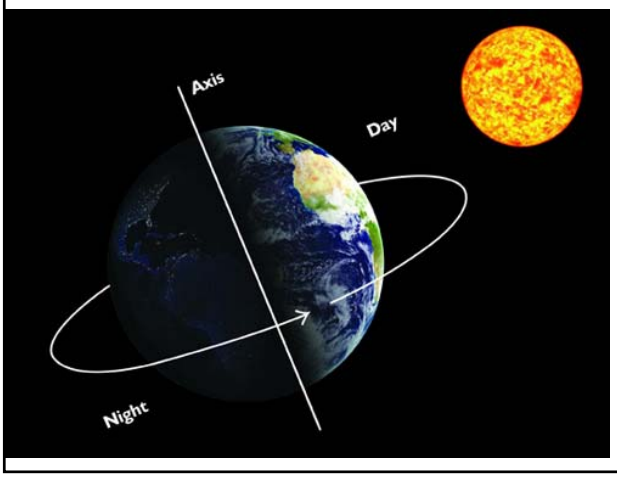





Earth spins on an invisible axis – an imaginary line through the center of our planet.

**This spinning is called rotation.**

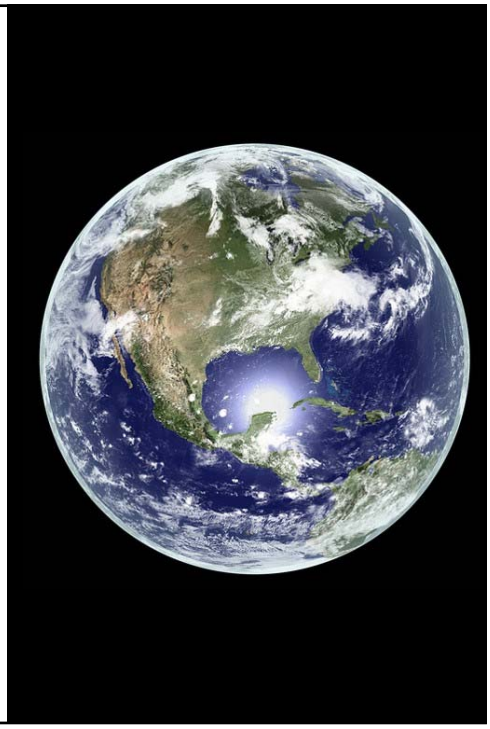
**As the earth rotates, half of the planet will face toward the sun and half will face away from the sun.**




The half facing the sun will have daylight, while the side facing away from the sun will have darkness.

**Earth completes one rotation every 24 hours.**

**That is why there are 24 hours in a day!**



## Discovery Education Video:

## Rotation and Revolution

The earth revolves around the sun in about 365 days and rotates on its axis in about 24 hours. The earth's day and night cycle is caused by its rotation on its axis.

# Cycle of Day and Night: Key Questions

1. What causes the cycle of day and night on Earth?

2. When it is day on one side of the Earth, what is happening on the other side of Earth?

3. How does Earth's rotation affect the way we view the planets, the sun, and the stars around us?