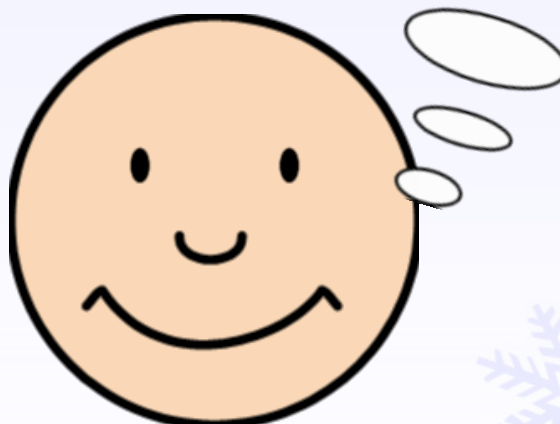


I want you to think about this question. What ways are you moving right now?

Rotating

Revolving

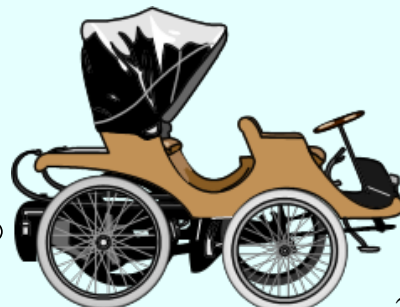
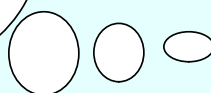
Write down student answers.

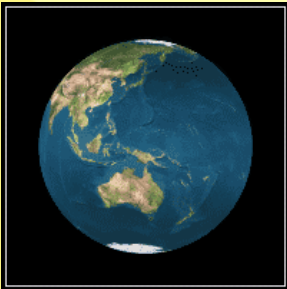


We live on the planet Earth, and the Earth is moving two different ways.



Let's see the two types of Earth's motions.





The Earth is spinning.



Revolution

The Earth travels around the Sun.

Let's start with the Earth Spinning.⁴

Vertical Axis

SKATER

EARTH Axis 23.5° Angle

To the Sun
Ecliptic

LOG Horizontal Axis

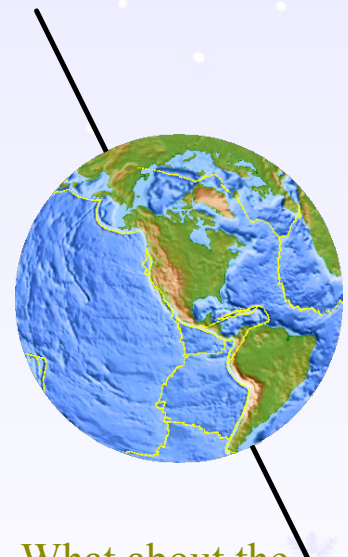
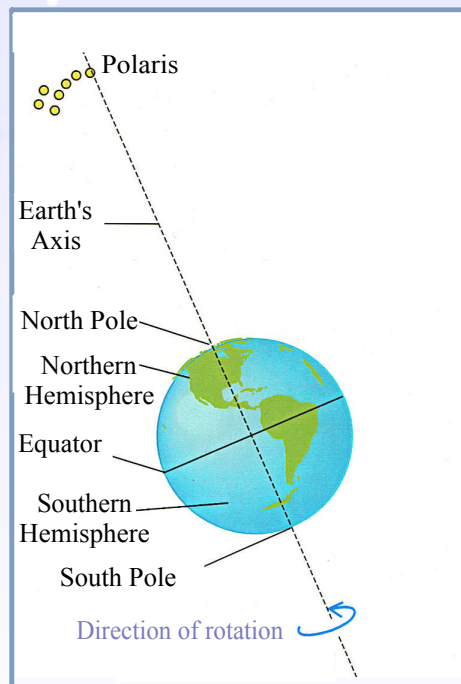
Look!!! The Earth is tilted on its axis

Axis- An imaginary line from the north pole to the south pole.

5

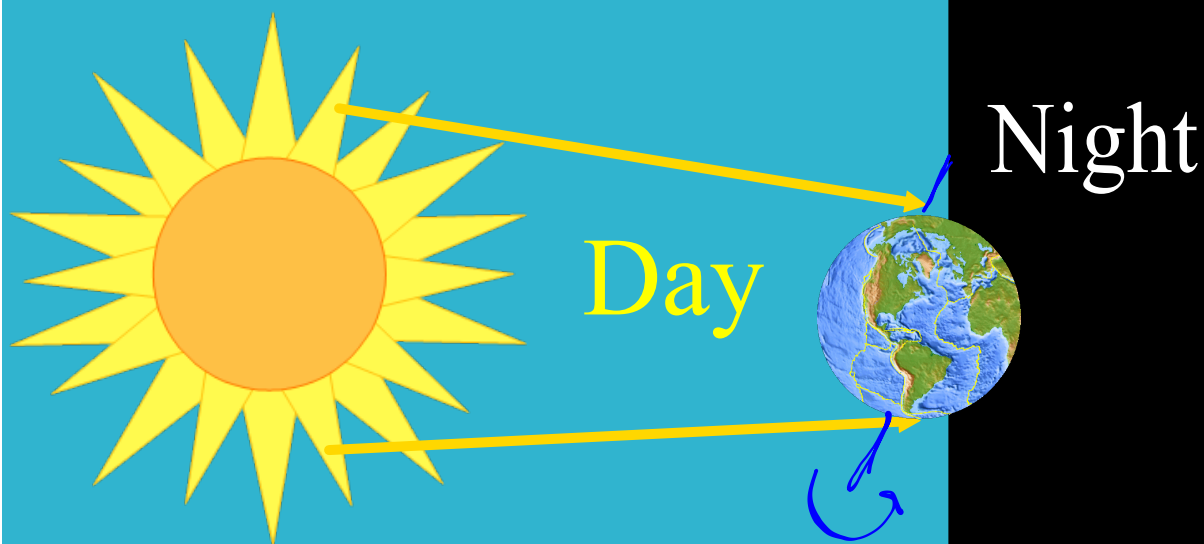
(Spinning)
Rotation- The
movement of
an object
around its
axis.

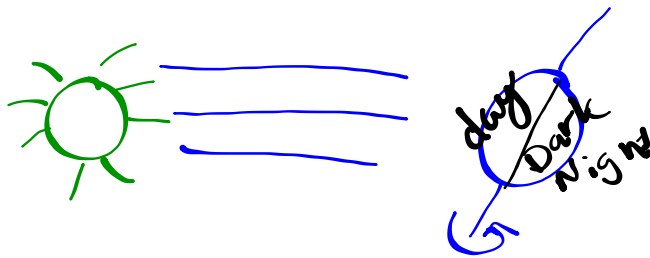
→ 24 hours



What about the
other planets?
[Click Here](#)

As the Earth rotates on its axis, the part of the Earth facing the Sun is experiencing day, and the part away from the Sun is experiencing night. **One rotation of Earth takes 24 hours.**







Use the Spotlight to again show day and night. By placing the spotlight on the line, we can see how the Earth experiences day and night.

https://www.youtube.com/watch?v=lz4KtSy_81k



Put Here



That means
that there are
24 time zones
on the Earth.

If I try to
phone my
friend in
China at six
o'clock at
night here, it
is six in the
morning for
him.



9

Miramichi

Japan

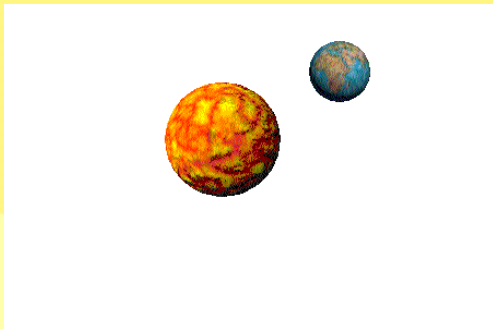
Philadelphia

set 11
hours
ahead

set one
hour
behind



The Earth is spinning.



The Earth travels around the Sun.

Now let's try the Earth going around the Sun.

REMEMBER

Vertical Axis

SKATER

EARTH

Axis 23.5° Angle

To the Sun Ecliptic

LOG

Horizontal Axis

Yup! It's still tilted. How might this effect the Earth?

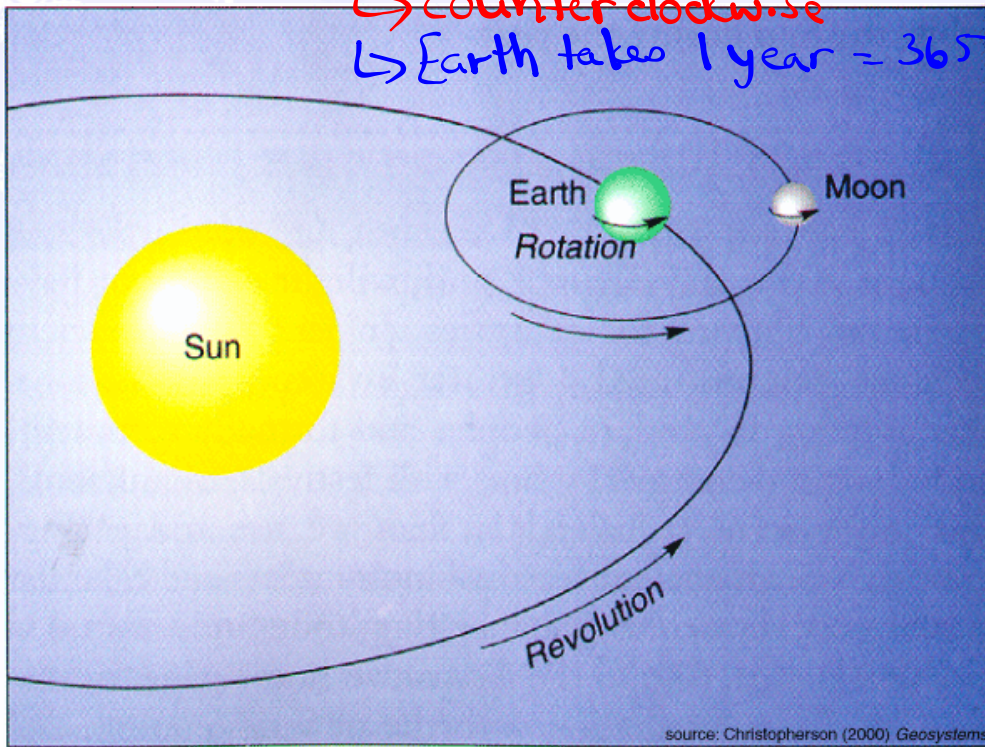
Axis- An imaginary line from the north pole to the south pole.

Revolution-The movement of an object around another.

(earth goes around sun)

↳ counter clockwise

↳ Earth takes 1 year = 365 days



source: Christopherson (2000) Geosystems

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

Attachments

student response no tilt.avi

seasons.avi

Uranus student response(4).avi