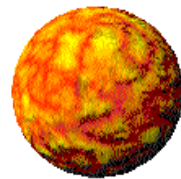


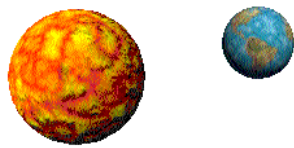
Nov 7, 2011

1) Earth Motion



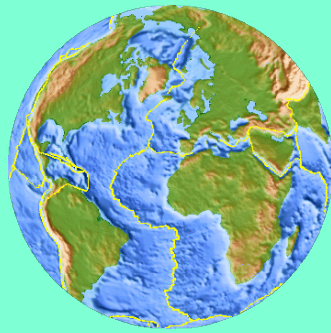
Warm-up:

How fast does the Earth go around the Sun? In km/h.



The Earth moves at about 100,000 km/h around the Sun (which is 1000 times faster than the speeds we go at on a highway!)

The Effects of Planetary Motion

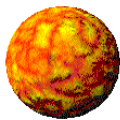


Section 13.3 Pages 404-405

There are two ways the earth moves.



The Earth is spinning (rotation)

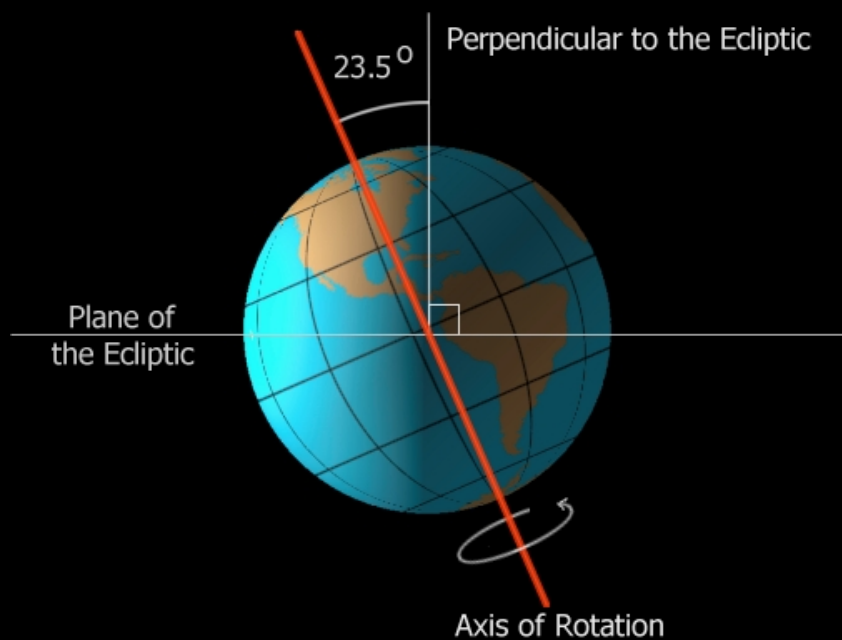


The Earth travels around the Sun (revolution)

Let's start with the Earth Spinning.

Rotation- The movement of an object around its **axis**.

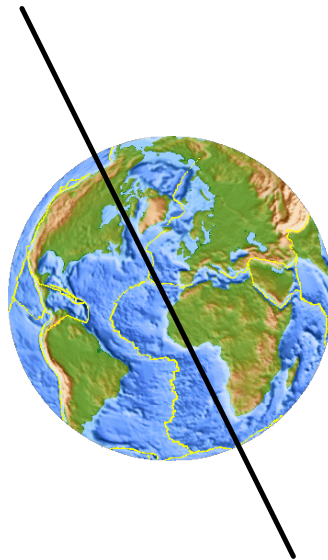
Axis- An imaginary line from the north pole to the south pole.

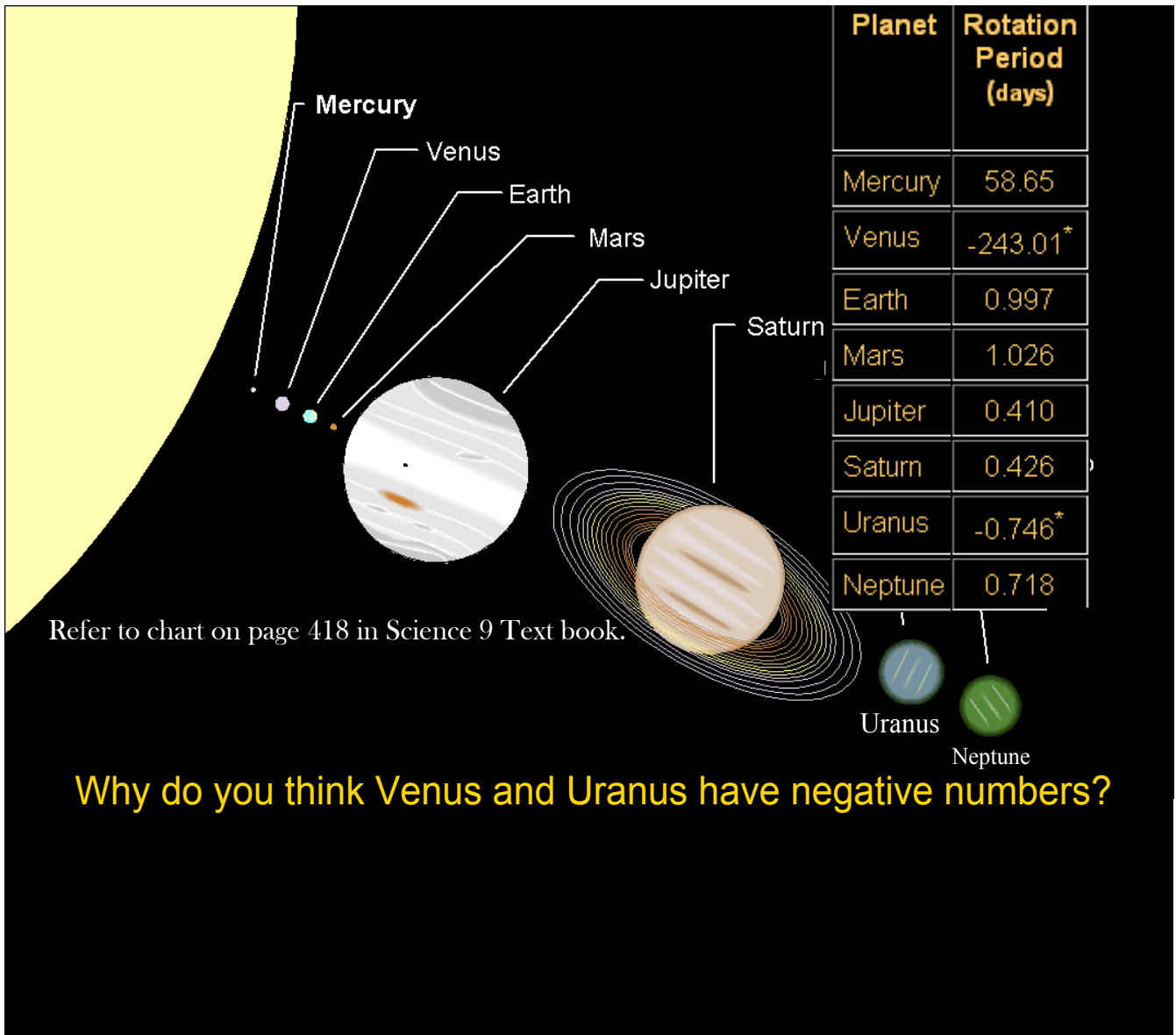


Thought to be 23.5° because asteroid or large object hit the earth and tilted it.

How long does
it take the
Earth to make
one complete
rotation?

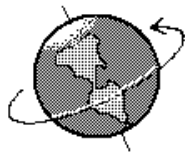
**What about the other
planets length of
rotation?**



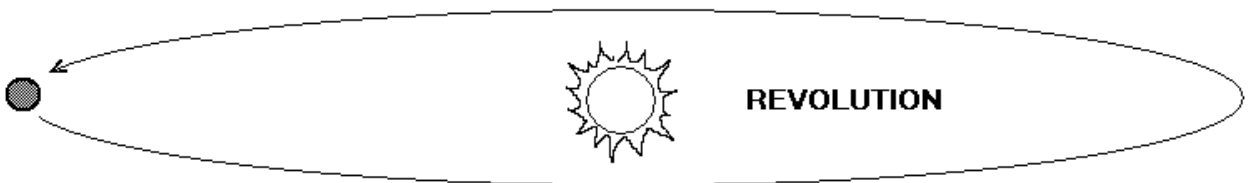


revolution: the movement of one object travelling around another.

The Earth and the other planets in our solar system revolve around the Sun.



ROTATION



REVOLUTION

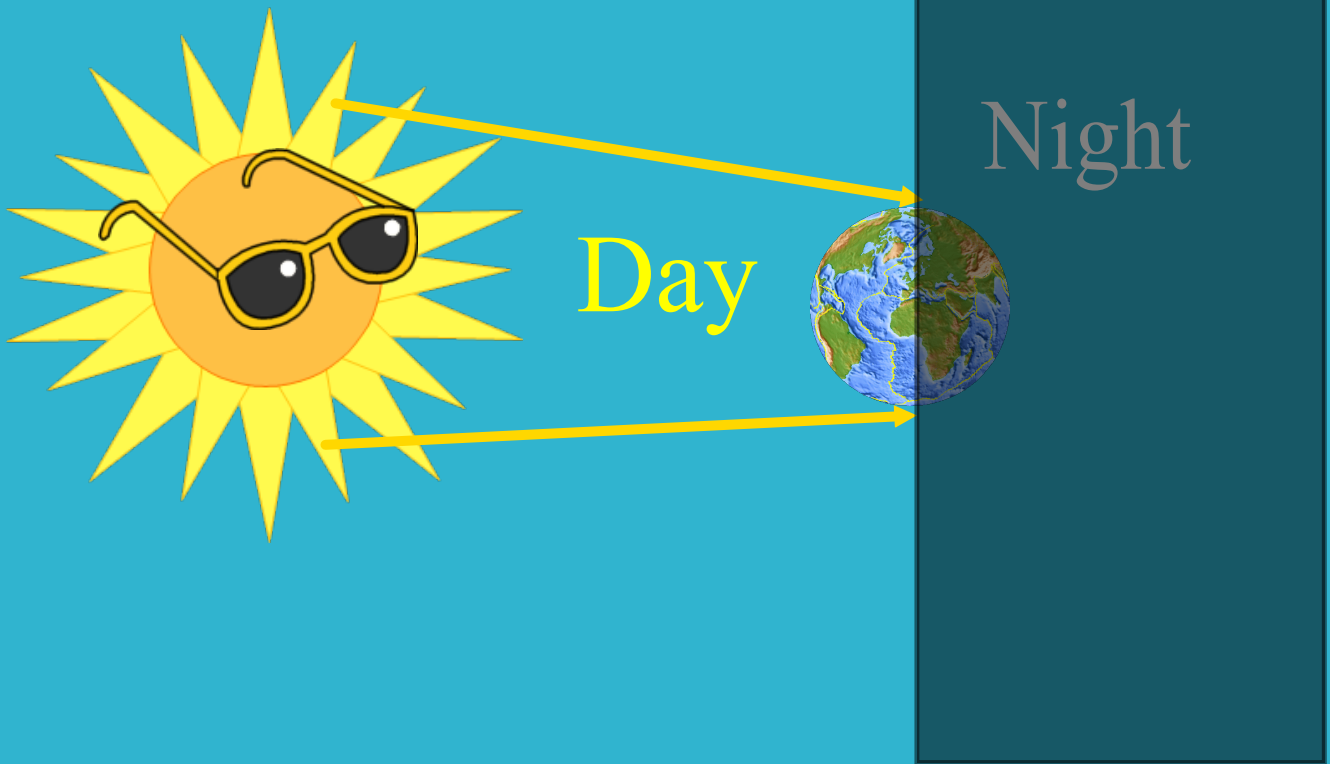
The period of time for one revolution around the Sun is called an orbital period.



How long does it take the Earth to make one revolution?

Orbit- The path planets take as they revolve around the Sun.

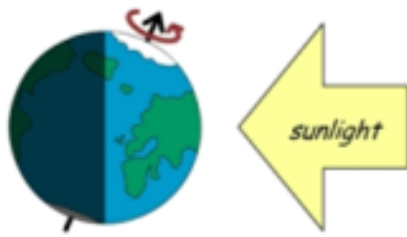
As the Earth rotates on its axis, the part of the Earth facing the Sun is experiencing day, and the part away from the Sun is experiencing night.



Day & Night

The Earth **spins** on its axis once every **24 hours**.

Northern summer

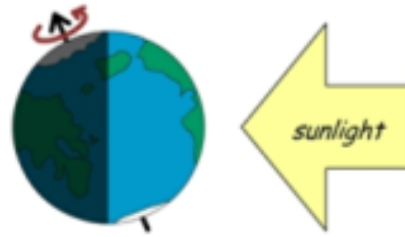


For the northern hemisphere...

longer days

shorter nights

Northern winter

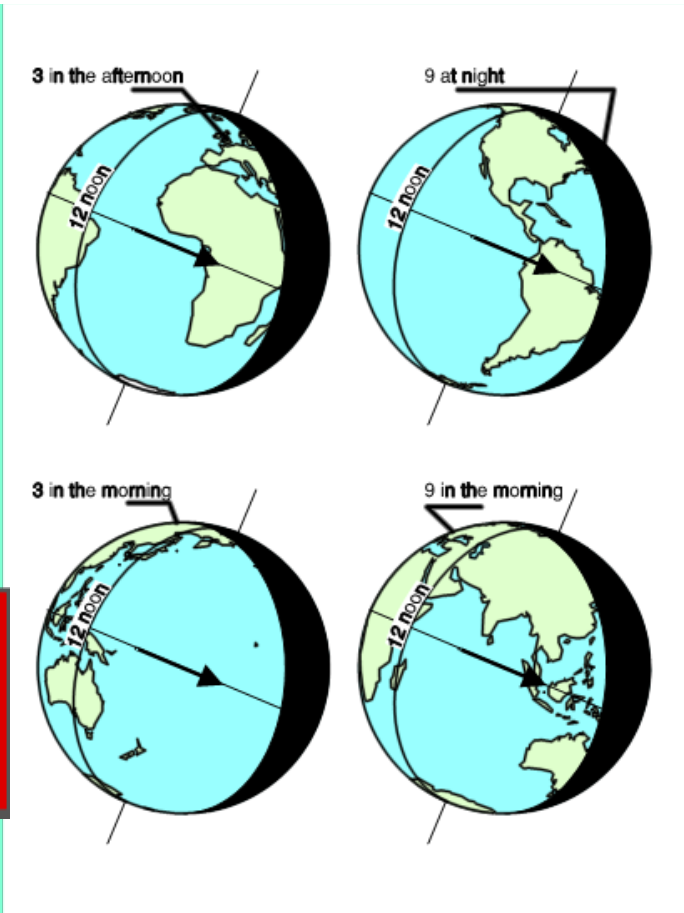


For the northern hemisphere...


shorter days

longer nights

That means that there are 24 time zones on the Earth. If you try to phone your friend in China at six o'clock at night here, it is six in the morning for them.




Miramichi



Japan

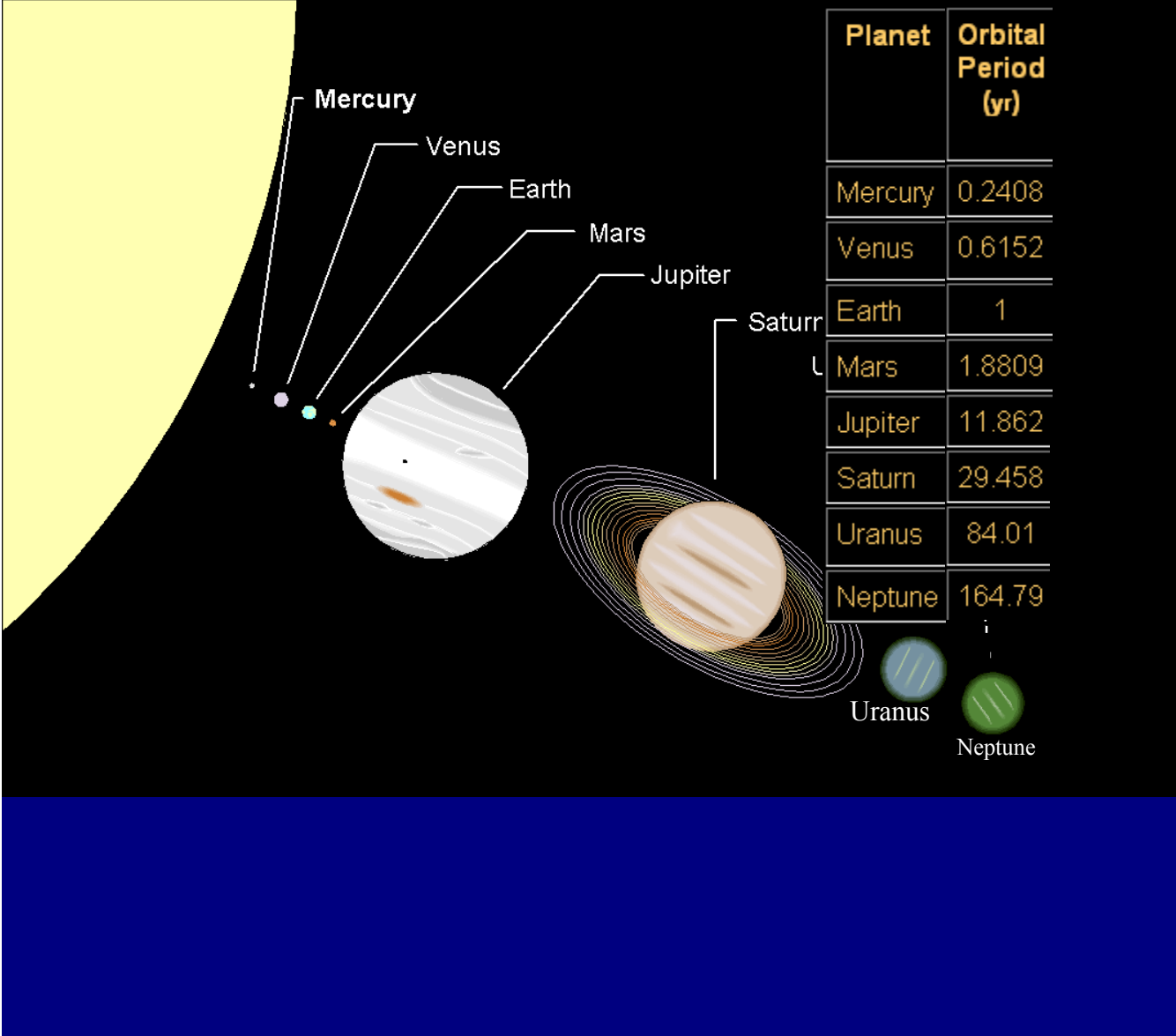


Philadelphia



set 11 hours ahead

set one hour behind



Attachments

Uranus student response(4).avi

student response no tilt.avi