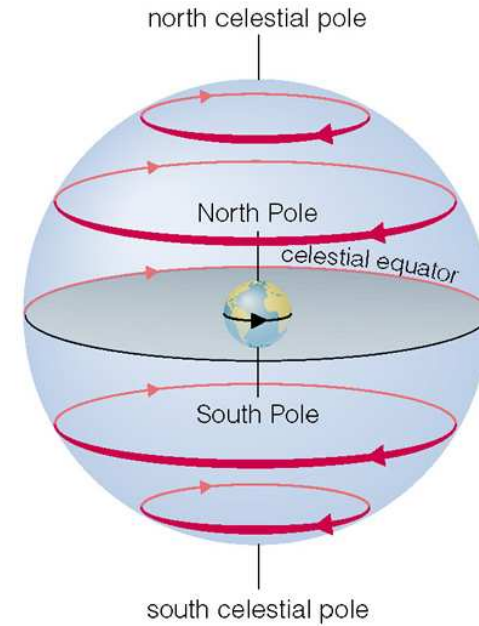
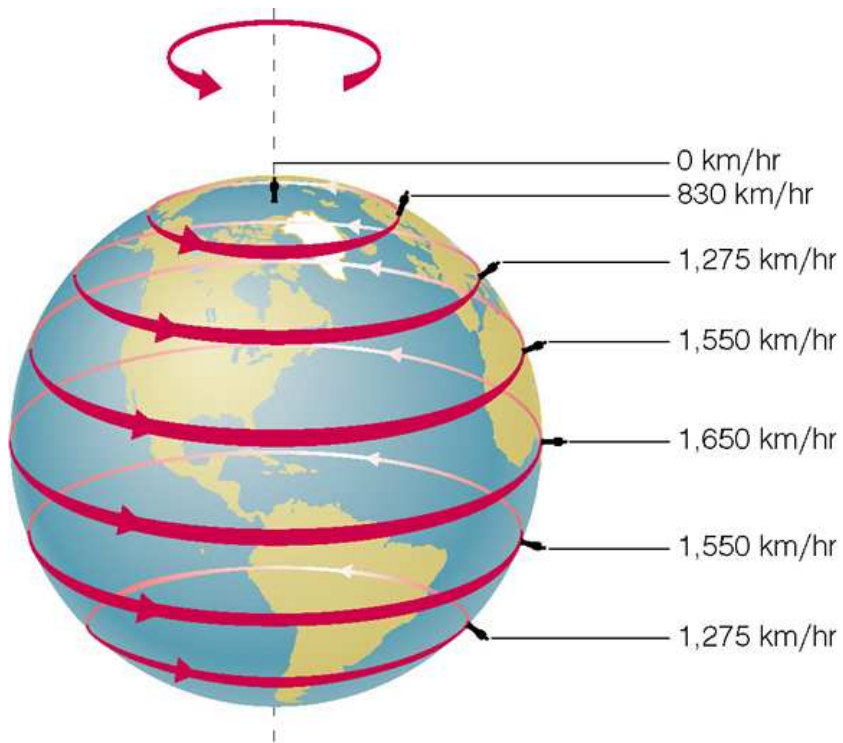
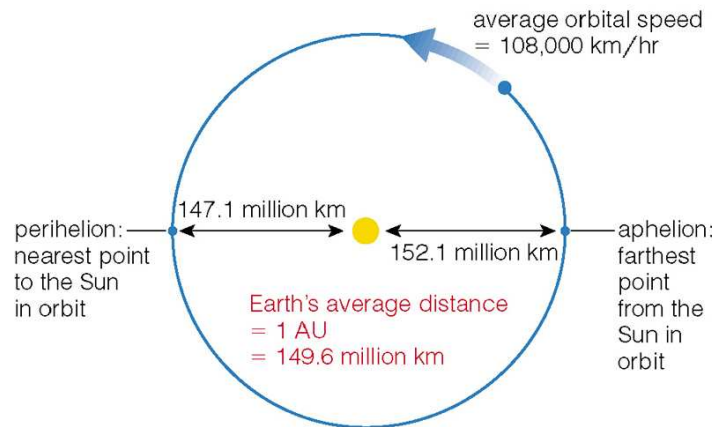
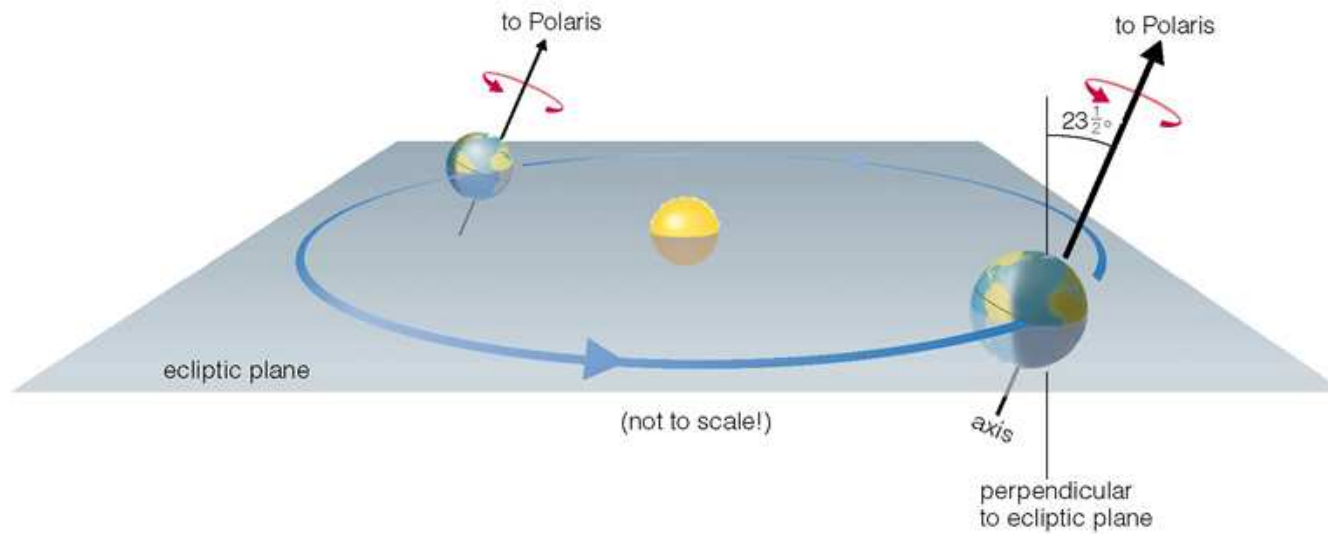


Spin of Earth about its axis

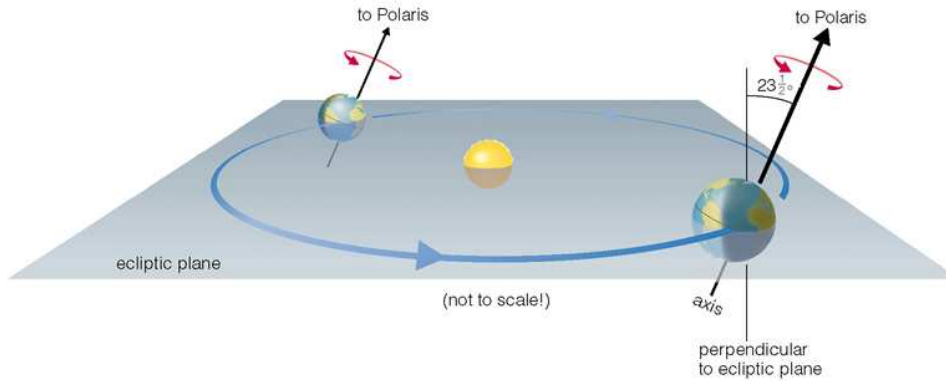


Why the Sun sets
to the West ?

Orbital Motion of Earth about Sun

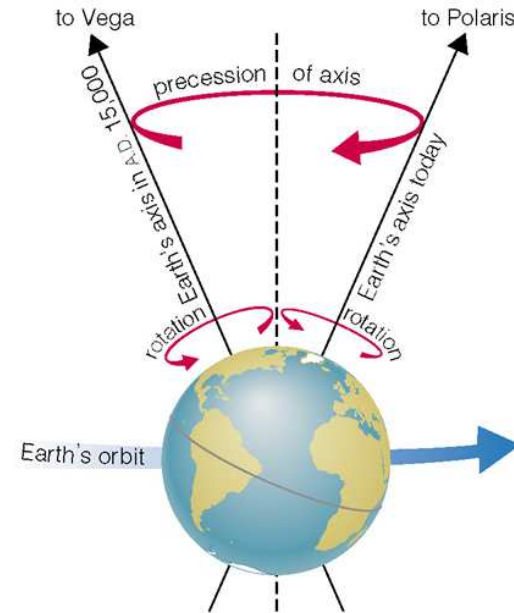
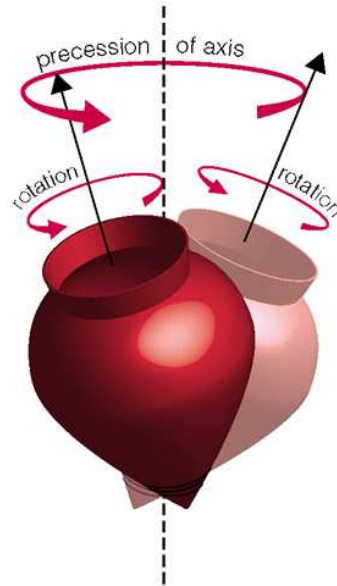


Earth's tilted axis and its precession



Tilt = 23.5 deg

Precession period
= 26000 years

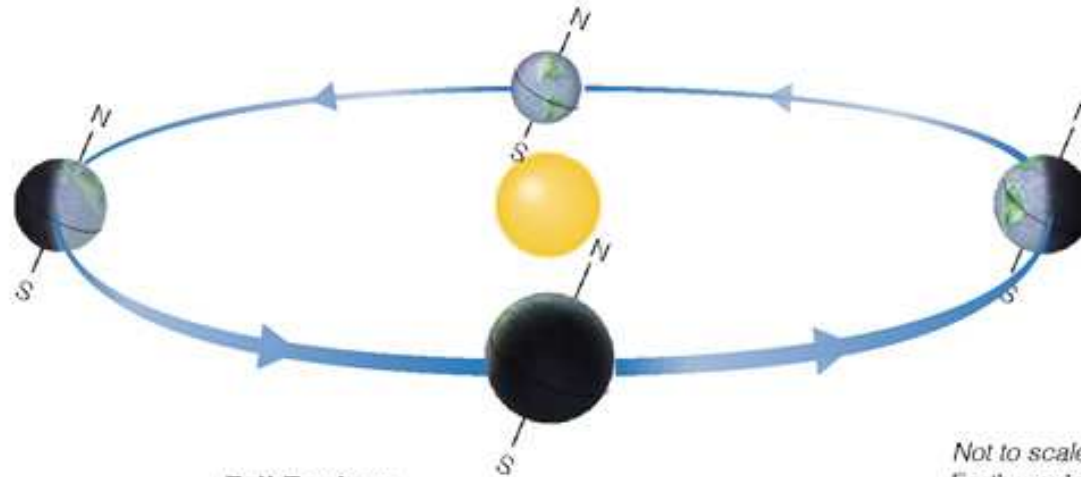


Why do we have seasons ?

-- As the Earth orbits around the Sun (period=1 yr), the amount of Sunlight hitting N and S hemisphere changes with time of year becausethe Earth's axis is.....

Spring Equinox

The Sun shines equally on both hemispheres. Northern Hemisphere is entering spring; Southern Hemisphere is entering fall.



Summer Solstice

Northern Hemisphere receives its most direct sunlight of the year (beginning of summer); Southern Hemisphere receives its least direct sunlight (beginning of winter).

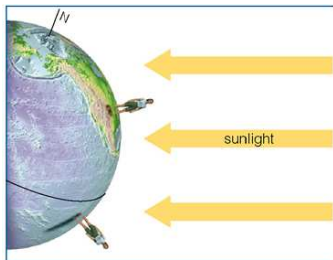
Winter Solstice

Northern Hemisphere receives its least direct sunlight of the year (beginning of winter); Southern Hemisphere receives its most direct sunlight (beginning of summer).

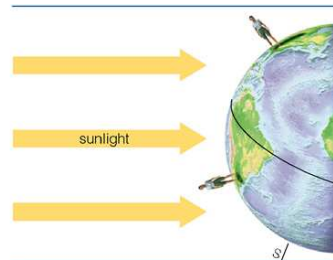
Fall Equinox

The Sun shines equally on both hemispheres. Northern Hemisphere is entering fall; Southern Hemisphere is entering spring.

Not to scale! On the scale the orbit is drawn. Earth would be too small to see (and the Sun would be a tiny dot).



Summer Solstice: Midday sunlight strikes Earth more directly in the Northern Hemisphere—meaning the Sun is higher in the sky and casts smaller shadows—than in the Southern Hemisphere.



Winter Solstice: The situation is reversed from the summer solstice, with midday sunlight striking the Southern Hemisphere more directly and the Northern Hemisphere less directly.