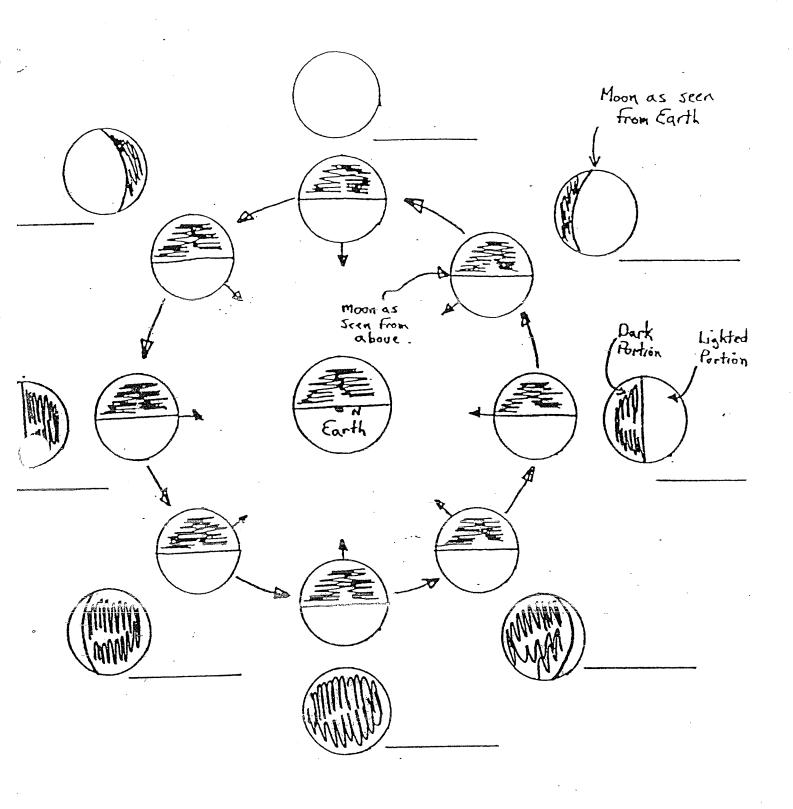
Phases	of	the	Moon

- only the moon is lit at one time by the sun			
- phases depend on of that lit side of the moon we can actually			
- depends on the of the Earth, moon and sun - moon takes 27 and 1/3 days to Earth, Earth spins on axis once every hours			
- phases are the Earth casting its shadow on the moon!			
- i.e. a moon is only "visible" during the (we are "seeing" the side only) - a moon is only visible at (rises as the sun sets, sets as the sun rises), we are seeing the entire side - note: the moon's orbital plane is inclined degrees to our orbital plane around the sun, that is why we don't see eclipses normally, just phases - note of interest: moon's rotation takes as long as revolution so the always faces Earth! (always see the "man in the moon")			
<u>Eclipses</u>			
Lunar Eclipse - when the shadow of the Earth covers the moon - can only happen near the full moon phase - happens twice a year - entire night side of Earth sees it, so we see them more often that a solar eclipse			
Solar Eclipse - when the moon blocks the sun from our view - can only happen near the new moon phase - happens 2 to 5 times a year - small shadow, one spot on Earth will only see a full solar eclipse once every 300 years			
What happens to stars in the sky as a result of our rotation (on axis)? from view temporarily, night turns to day, too light revolution (around the sun)? - see different stars (different ones on each of sun), the dippers, etc. are always there because they are more the solar system rather than beside			

Phases of the Moon



AAAA Sunlight