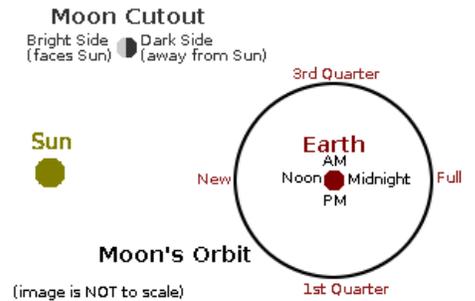


Motion of Celestial Bodies (Ch 10.1)

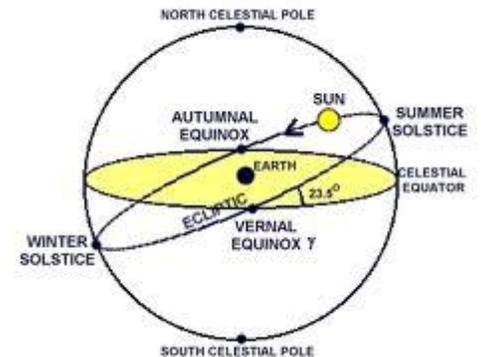
Moon

- a celestial body that orbits a planet
- the earth's Moon is our only natural satellite and orbits the earth every 28 days
- the nearside hemisphere is the side of the Moon that always faces Earth
- the amount of the Moon's surface that is lit by the sun changes throughout the month.

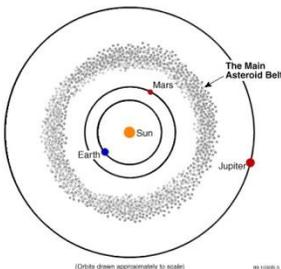


Sun

- follows the same ecliptic path through the sky every day
- Eight planets along with asteroids and comets orbit the Sun
- Some of these objects lie beyond Pluto but all are controlled by the Sun's powerful gravity.



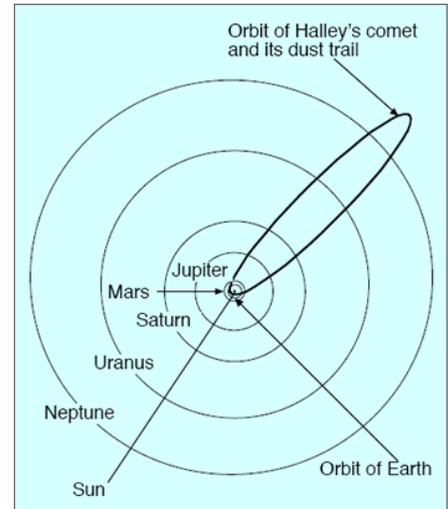
Asteroids



- the many rocky or metal bodies in the solar system
- most orbit the Sun between Mars and Jupiter, while some are beyond Pluto and others have wide elliptical orbits that cross the orbit of Earth

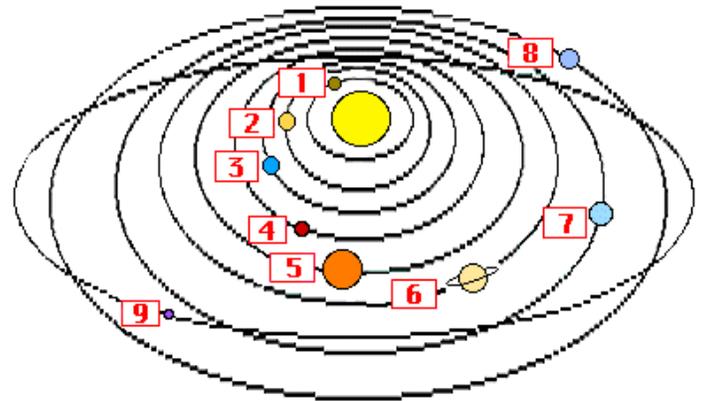
Comet

- a small body made up of rock and ice that occurs in the Kuiper Belt and Oort Cloud (beyond Pluto)
- comets can be bumped into the inner solar system, where the Sun's light may make the comet's tail visible from earth
- Comets orbit in a different direction than planets; a Comet's orbit can be above or below the orbit of Earth
- for example, "Halley's comet" is probably the most famous, it appears every 75 or 76 years and last flew past Earth in 1986.



Planet

- a celestial body that orbits one or more stars and is the only body occupying it's orbital path
- As the planets revolve around the Sun they orbit at different rates along their ecliptic path: the planets inside the Earth's orbit (Mercury and Venus) seem to race through the sky compared to the other planets.
- Most planets have at least one moon orbiting them; the four largest planets also have rings.



- 1) Mercury
- 2) Venus
- 3) Earth
- 4) Mars
- 5) Jupiter
- 6) Saturn
- 7) Uranus
- 8) Neptune
- 9) Pluto (Dwarf planet)