

Perihelion
Aphelion
Retrograde
Zenith
North & south celestial poles
Celestial equator
Asterism
Precession
Vernal & autumnal equinoxes
Summer & winter solstices
Ecliptic
Annular
Umbral
Penumbral
Heliocentric
Geocentric
Epicycle
Distant from earth to sun in au and lightyear units
Lunar & solar eclipses
Understand the contributions of Kepler, Copernicus, Tycho, Galileo, and Newton
Kepler's three laws of planetary motions
Newton's three laws of motion
Ptolemy's model of the universe
Gravity and the inverse square relationship – the formula
The between weight and mass
The velocity or speed of light in a vacuum
Types of telescopes: optical, x-ray, radio, etc.
Chromatic aberration
Resolving power
Grazing incidence
Angular resolution
Energy of a photon
The range of wavelength of the visible spectrum in nanometer (10^{-9} m) and micrometer (10^{-6} m)
Relative wavelengths of the electromagnetic wave from x-ray to radio and television waves
Relative frequencies of the electromagnetic wave from x-ray to radio and television waves
Relationship between wavelength, frequency, and velocity
Relationship between frequency and period
Relationship between energy and frequency of electromagnetic wave
Excited atom
Peak radiation wavelength and its relationship with the surface temperature of a star
Surface temperature of the star and its relationship with luminosity
Intensity & luminosity
Surface temperature of the Sun
Size (%) of the our Sun relative to all objects of the solar system
Red shift and blue shift
Doppler effect
Iron meteorites and other form of meteorites
Composition of the rings of Saturn
Material composition of asteroid
The theory of solar system formation
General characteristic of comet, its size, and composition

Earth's atmospheric gases
The Trojan asteroids
The Oort Cloud is believed to be
Kuiper belt
Differentiation, volcanism, tectonics, gradation
Subdivisions of the earth atmosphere
Characteristics of the earth's core
Theories to explain the Moon's origin
Gasses from our volcanic eruptions
Earth's magnetic fields
The lunar mare are found
Understand the phenomenon of the near side of the Moon to always face us
conservation of angular momentum
Earth's tidal force
Age of the solar system, earth, and moon
Rate of impact cratering of the moon lunar highland
Planetary orbits of the solar system