

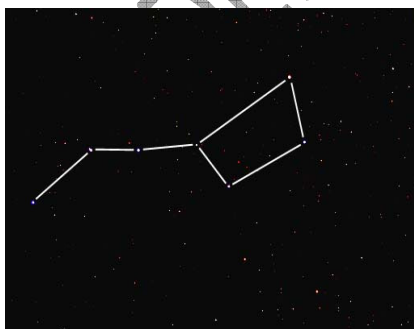
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Topic: Solar System



Celestial Bodies : The Sun , the moon and all those objects shining in the night sky are called celestial bodies. We are not able to see these celestial bodies during the day time because of the bright light of the sun.

Stars : Stars are the celestial bodies which are very big, hot and made up of gases. They have their own heat and light which they emit in large amounts. Sun is a star which is closest to the Earth. Other stars are vary far and appear as small, tiny twinkling objects in the sky.

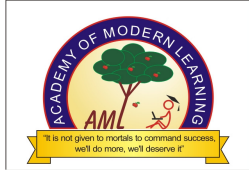
Constellation-A constellation is a group of stars with a name assigned to it; the name is usually from Greek mythology. The stars of a constellation are located close to each other and form a pattern, although in most cases it is pretty much hopeless to try to picture a constellation looking like its namesake. Imagine the constellation's picture being formed by straight lines drawn between its stars. The lines form geometric shapes, which are easy to remember.



Ursa Majoris



Orion The Hunter



Solar System- The Sun along with eight planets revolving around it in elliptical orbits, asteroids, meteoroids, comets form the Solar System. Our solar system broadly consists of :

1. The sun, around which all of the planets orbit.
2. The inner planets, which include Mercury, Venus, Earth, and Mars.
3. Third part is a large asteroid belt which separates the inner and the outer planets. This acts as a sort of dividing line for the makeup of the planets too, as the inner planets have few to no moons and are typically made up completely of minerals, while the outer planets have more satellites and are larger and gaseous.
4. The outer planets, made up of Jupiter, Saturn, Neptune, and Uranus.

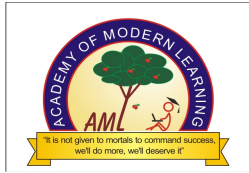
There are other parts to our solar system such as comets, [asteroids](#), meteoroids.

The [Sun](#) and the planets are-

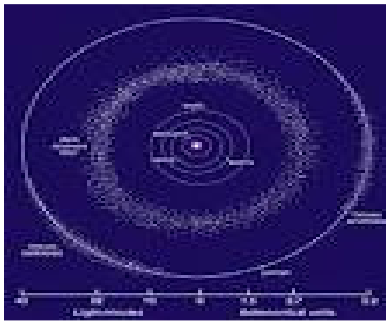
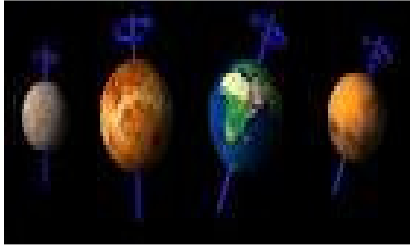
[Mercury](#), [Venus](#), [Earth](#), [Mars](#), [Jupiter](#), [Saturn](#), [Uranus](#), [Neptune](#), and . It includes: the satellites of the planets; numerous [comets](#), [asteroids](#), and meteoroids; and the interplanetary medium.



Sun- The Sun is the biggest feature in our solar system. The Sun is a star, just like those we see twinkling at night. It however, is so much closer to us on Earth that it looks much bigger, much brighter, and we can even feel heat coming from it on sunny days. Many of the stars that appear so small in the night sky are actually much bigger than our Sun and are much hotter, and some are so cool and dim that we can barely see them. The Sun is made of hot gases, containing elements like hydrogen, helium, calcium, sodium, magnesium, and iron. Without the Sun, life on Earth would not exist. Our planet would be a frozen dark ball, drifting in space. We need the Sun for light, heat and energy. The Sun is the richest source of electromagnetic energy (mostly in the form of heat and light) in the solar system. Plants need Sunlight to prepare food and grow, and thus, animals get food to eat. The Sun's output changes over time. These changes affect not only our daily lives and climate, but also our communications, such as by satellites.



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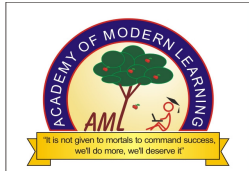


Inner planets- The inner planets are the planets in the inner part of the Solar System that orbit closest to the sun. The 4 inner planets are Mercury, Venus, Earth, and Mars. There are a number of differences between the inner and outer planets aside from location. The inner planets are composed mostly of rock, while the outer planets are gas giants. Generally, inner planets are both smaller and denser than their counterparts. They also have few or no moons and no rings circling them, while the outer planets often have dozens of satellites and rings composed of particles of ice and rock.

Asteroid belt- The asteroid belt is the region of the [Solar System](#) located roughly between the orbits of the [planets Mars](#) and [Jupiter](#). in which most asteroids are located. The Asteroid Belt or Main Belt, probably contains millions of asteroids ranging widely in size.



Outer planets- The Outer Planets are [Jupiter](#), [Saturn](#), [Uranus](#) and [Neptune](#). They are also sometimes known as the Gas Giants as they are all huge in comparison to the [Inner Planets](#) and made up mostly of gas so don't have solid surfaces. The first of the Outer Planets is [Jupiter](#). It is also the largest of the Outer Planets and is so big that [Earth](#). As well as all being huge and being made up mostly of gases, all four have rings spinning around them, with [Saturn](#)



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having the [most famous rings](#). All four planets also have large numbers of moons orbiting them.



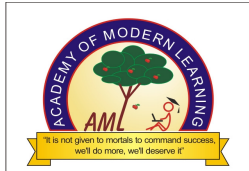
Earth –Earth is a unique planet and a habitable planet. It is the only planet in the solar system that supports life. All forms of life right from the minutest microscopic organism to huge land and marine animals. It is neither as hot as Mercury or Venus nor as cold as Jupiter or Pluto. It has abundance of water (71%) which no other planet has. It has the biosphere which provides us with food, shelter, clothing and minerals. It does not have poisonous gases like helium or methane as Jupiter has. It is rich in oxygen which makes life possible on the earth. Its atmosphere acts as a blanket protecting the earth from extremes of temperature.



Moon- The celestial orb which revolves round the earth; the satellite of the earth; a secondary planet, whose light, borrowed from the sun, is reflected to the earth, and serves to dispel the darkness of night.



Galaxy-A collection of stars, gas, and dust bound together by gravity. The smallest galaxies may contain only a few hundred thousand stars, while the largest galaxies have thousands of billions of stars. The Milky Way galaxy contains our solar system



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Comets-A celestial object that orbits the Sun along an elongated path. A comet that is not near the Sun consists only of a nucleus a solid core of frozen water, frozen gases, and dust. When a comet comes close to the Sun, its nucleus heats up and releases a gaseous coma that surrounds the nucleus. A comet forms a tail when solar heat or wind forces dust or gas off its coma, with the tail always streaming away from the Sun.



Asteroids-A rocky or metallic object, smaller than a [planet](#) but bigger than a [meteoroid](#), that orbits the Sun or another star .Any of numerous small celestial bodies that revolve around the sun, with orbits lying chiefly between Mars and Jupiter.



Meteoroids- A small, rocky or metallic body revolving in interplanetary space around the Sun. A meteoroid is significantly smaller than an asteroid, ranging from small grains or particles to the size of large boulders.