



Orion constellation

One of the largest star known as Betelgeuse and another bright star called Rigel are situated at its two corners.

The Indian name of Orion constellation is Vyadha or Mriga.

4. Scorpio (Vrishchika)

This constellation contains seven bright stars. Along with other faint stars, it forms the shape of a scorpion It is visible during winter months. The Indian name of Scorpio constellation is Vrishchika.



Scorpio constellation

5. Cassiopeia (Sharmishtha)

This constellation is a group of five stars arranged in the form of W. It is seen near pole star and is visible in the month of October in northern sky. The Indian name of Cassiopeia constellation is Sharmishtha.

6. Pleiades (Kruttika)

The stars in this constellation do not have any particular arrangement. It looks like a cluster of stars and twinkling gems in the night sky. The cluster of stars in this constellation are called globular clusters. It is visible in winter months. The Indian name of Pleiades constellation is Kruttika.

	Galaxy	Constellation
1.	It is a collection of billion of	It is a star-pattern having a few
	stars	stars
2.	There are around 100 billion	There are 88 constellation
	galaxies in the universe	identified till date
3.	A galaxy get its shape due to	The pattern of a constellation is
	actual distribution of stars in it.	due to the apparent positions of
		bright stars

COMETS

Comets are very small sized celestial bodies which revolve around the sun in highly elliptical orbits. Comets appear like a ball of fire with a long tail. The length of the tail of a comet increases while coming towards the sun. It disappears again when "comet moves away from the sun. The tail of comet always points away from the sun because of pressure of solar radiations.

THE UNIVERSE



FACT FILE

- The saying once in a blue moon refers to the occurrence of two full moons during one calendar month.
- A full moon is nine times brighter than a halfmoon.
- (2) ARTIFICIAL SATELLITES

A man made object made to revolve around the earth is called an artificial satellite. Ex.–Aryabhatta. Nowadays it is very easy to make long distance calls through telephone, forecast weather, locating mineral resources etc. It all became possible because of artificial satellites. Several countries including India have sent artificial satellites into space. These satellites revolve around the Earth continuously. The first artificial satellite was sent by USSR (now Russia) on October 4, 1957. It was called Sputnik-I. India sent her first satellite into space on April 19, 1975. It was called Aryabhatta. Some other Indian satellites are Bhaskara, Rohini, Insat 1-B and Insat 2-B. Today, there are various satellites in space.



An artificial satellite

Artificial sattelites :-

They are of two types :-

(1) Geostationary or Geosynchronous satellites

A satellite which revolves around the earth in an equtorial plane in the same direction with same time period as that of earth is called goestationary satellite.

It appears stationary with respect to any point on the surface of earth.

(2) Polar Satellite

A satellite which revolves around the earth in an orbit which passes over its north and south poles is called polar satellite.

IMPORTANCE OF ARTIFICIAL SATELLITES

- 1. Radio and television transmission.
- 2. To study and forecast weather.
- 3. Long distance telephone communication.
- 4. Locating mineral resources.
- 5. Gathering information about outer space.