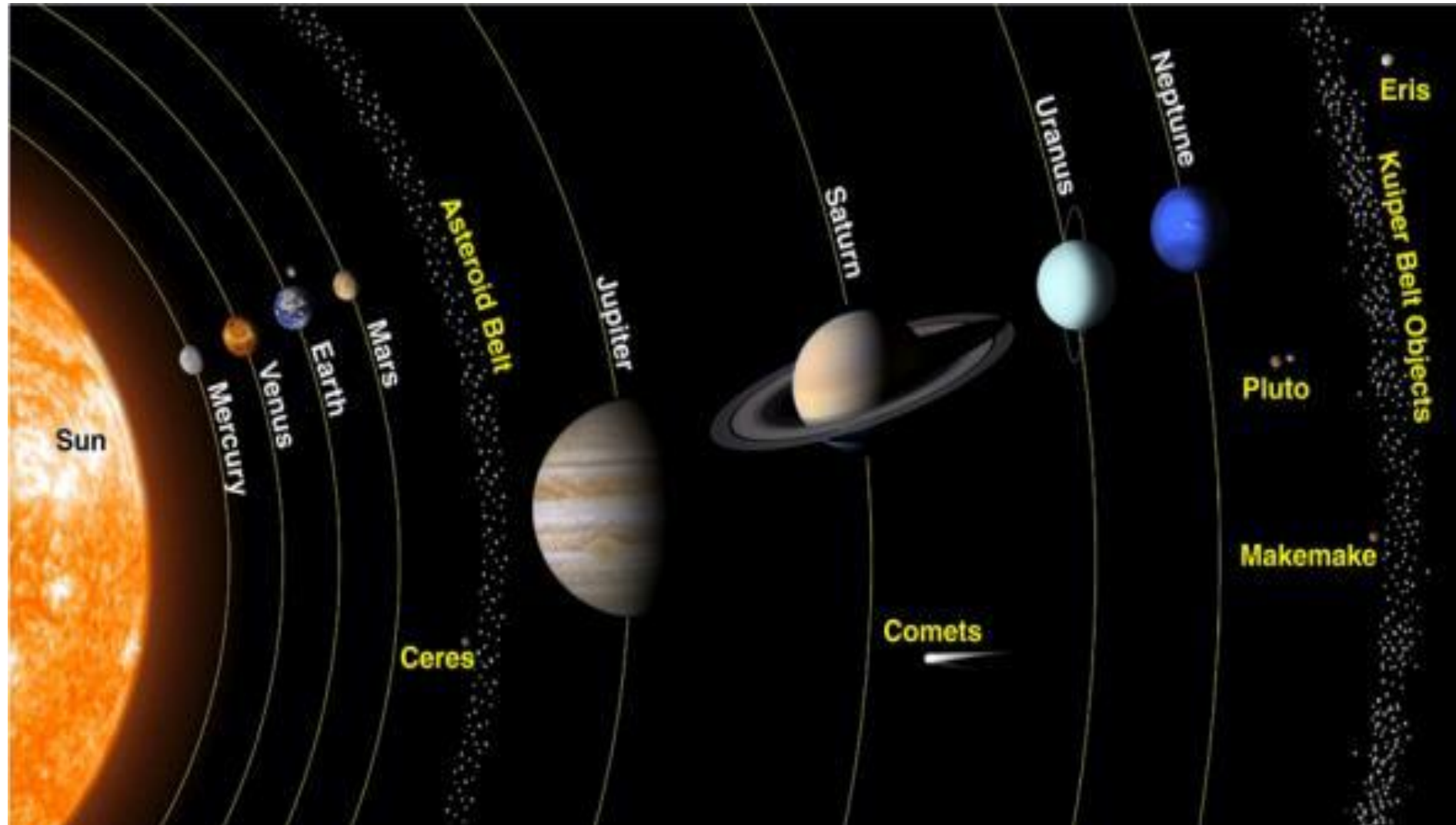


# CHAPTER - 11

## OUR SOLAR SYSTEM

CLASS 5<sup>TH</sup> (04.08.20 TO 07.08.20)



## Our Solar System

Solar system



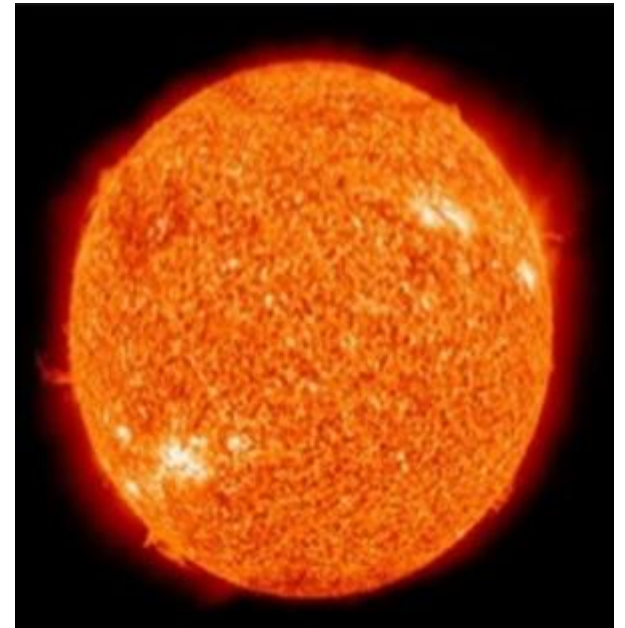
- Stars, Planets, Satellites all together are called solar system.
- Many solar system are there but we can see only one

# What is Solar System

- The Sun, its planets and all the objects moving around them collectively are called Solar System.
- The Solar System is entirely dependent on Sun & the only one which is self- luminous i.e which has its own light.
- Rest of the planets reflect the light received from Sun

# The Sun

- Central part of the solar system.
- A ball of hot burning gas.
- A luminous body which produces light of its own.
- Very large and massive as compared to all planets.
- Source of huge energy.
- Essential for growth of all form of life.



# Solar energy

Energy received from Sun in the form of heat and light

## Uses of Solar energy

- Solar cookers
- Solar geysers
- Solar cells in calculator and watches
- Solar power plants for electricity.

# Planets

- Planets are celestial bodies which moves around the sun in a defined path (**orbit**). This movement of planet around the Sun is known as **revolution**.
- Planet do not have light of their own.
- There are eight planets in our solar system these are- Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.



# Mercury (*Budh*)

- Smallest and closest to the sun.
- Hot dry and almost airless planet.
- There is no atmosphere around this.



# Venus (*Shukra*)

- Its size is nearly same as that of the earth.
- Has very thick atmosphere.
- Brightest and hottest of all planets.



# Earth (*Prithvi*)

- Appears like a small beautiful blue and green spherical ball.
- Earth completes one revolution around the sun in nearly 365 days.
- It completes one rotation about its axis in 24 hours.
- Only planet that can sustain life on it.
- It has atmosphere & water.





# SEASONS ON EARTH

**Northern Hemisphere**

**Spring Equinox**

Days longer than nights  
Days get longer

Nights longer than days  
Nights get shorter

**Summer**

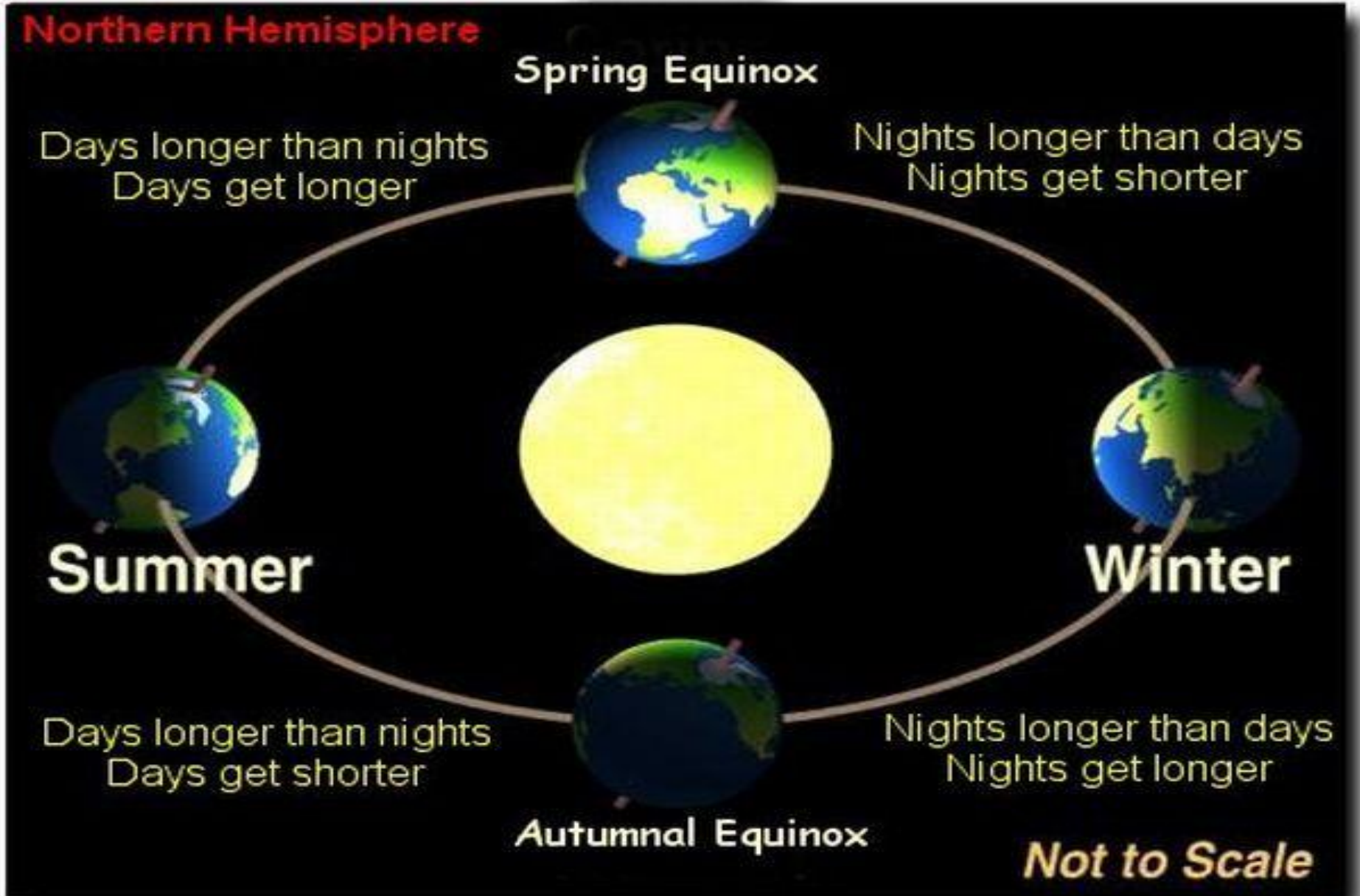
**Winter**

Days longer than nights  
Days get shorter

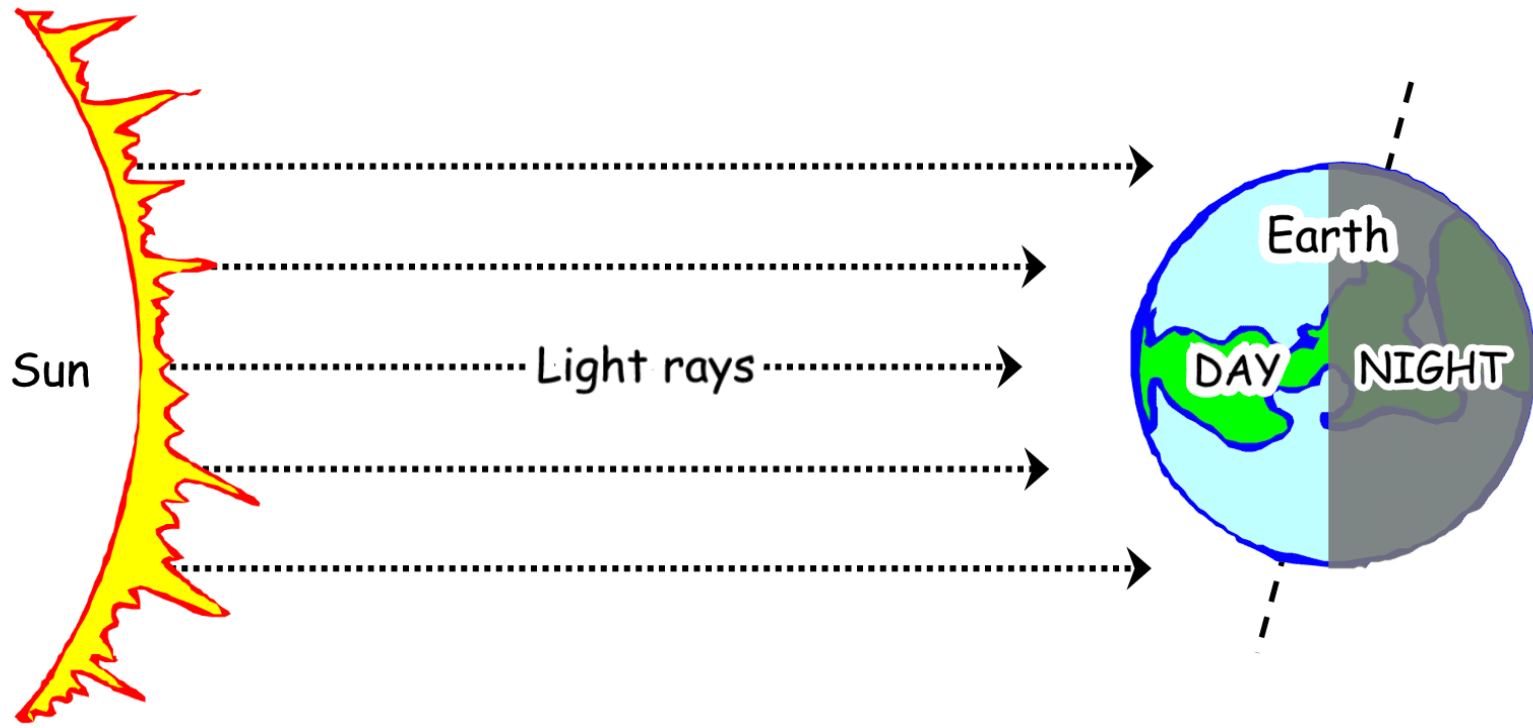
Nights longer than days  
Nights get longer

**Autumnal Equinox**

*Not to Scale*

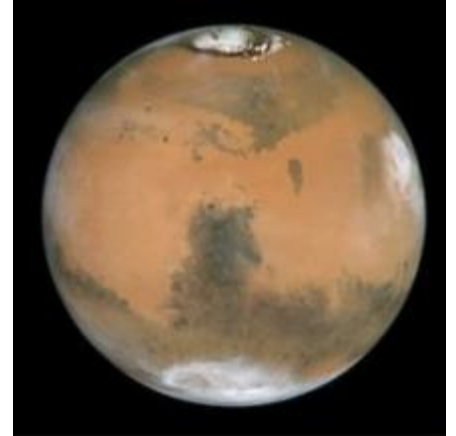


# DAY AND NIGHT ON EARTH



# Mars (*Mangal*)

- It is almost half of the earth.
- It appears to be red and often called as red planet.
- It has structure similar to that of earth.
- Its atmospheres is much thinner than the earth.
- It is mostly made up of rocks and metal.



# **Jupiter (*Brihaspati*)**

- It is very cold planet.
- It is fifth planet in term of distance from sun.
- It is the largest of all the planet.



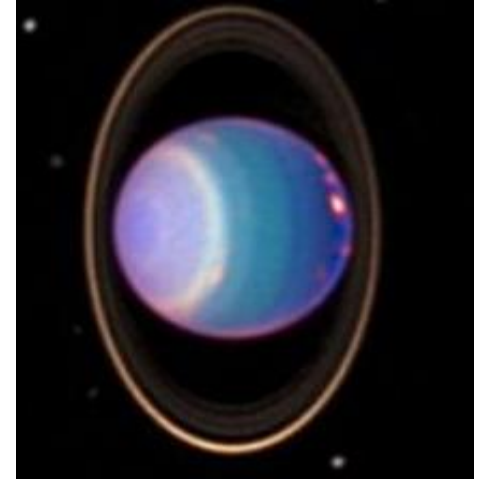
# **Saturn (*Shani*)**

- It is sixth and second largest planet of the solar system.
- It has beautiful rings surrounding it, therefore known as ringed planet.



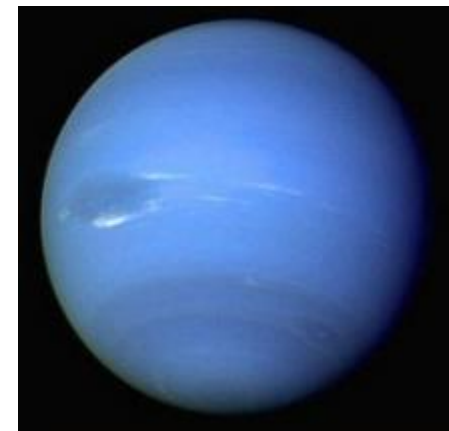
# Uranus (*Arun*)

- It is fifth planet in term of distance from sun.
- It is the third largest and also has a ring system
- It is a 'gas giant' without any solid surface.



# Neptune (*Varun*)

- It is eighth planet in solar system.
- Known as windy planet as very strong winds blow on its surface.



# Satellites

- It revolves around a much larger object.
- These are of two types-Natural satellites and Artificial satellites.





# Natural Satellites

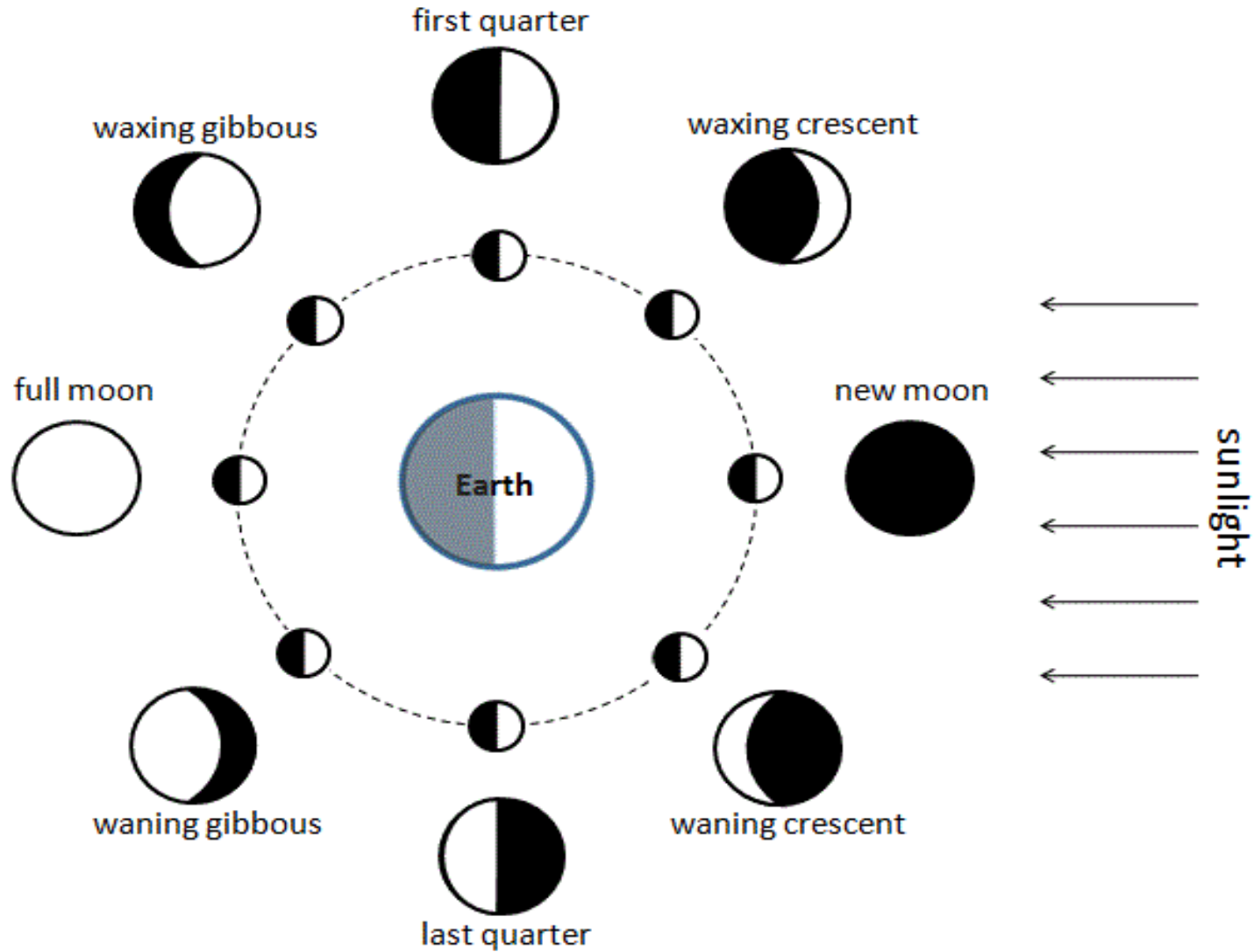
Celestial bodies which revolve around the planet are known as the Natural satellites.

Moon is the natural satellite of earth.

## Moon

- It does not have its own light.
- It reflects a part of sunlight which it receive from the sun.
- It takes 28 days to complete one revolution around the earth.

# PHASES OF MOON



# Artificial Satellites

- Artificial satellites are man made objects which can be made to revolve around the earth.
- They are used in communication for transmitting radio, telephone and television signals.
- They are used for weather forecasting
- They are also used for collecting information about the other planets.

# Artificial Satellites

ROHINI



ARYABHATA

April 19, 1975



India's 1st  
Satellite Launched



**CHANDRAYAAN-1** —

— INDIA'S FIRST SCIENTIFIC MISSION TO THE MOON



THAKS