

# Subject- Geography

## Class- VI

### Chapter 1- The Earth in the Solar System

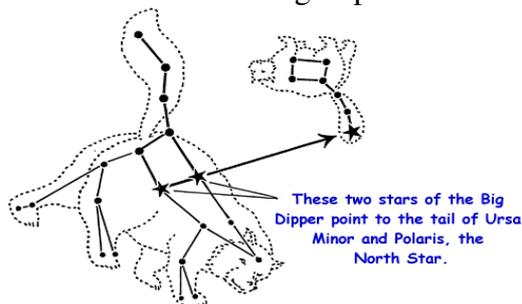
The sun, the moon and all those objects shining in the night sky are called celestial bodies. Some celestial bodies are very big and hot. They are made up of gases. They have their own heat and light, which they emit in large amounts. These celestial bodies are called stars. Some celestial bodies do not have their own heat and light. They are lit by the light of the stars. Such bodies are called planets. The word 'planet' comes from the Greek word "Planetai" which means 'wanderers'.

**STARS:** A star is a huge, bright ball of burning gas that is held together by gravity. Stars contain mostly hydrogen as well as helium and smaller amounts of other elements. The Sun is the closest star to Earth.

**THE SUN:** The Sun is a star and the biggest object in the Solar System, it burns brightly in the center as planets and other objects orbit around it. It has a diameter around 110 times bigger than the Earth's and is located around 150 million kilometres (93 million miles) away.

**GALAXY:** A galaxy is a large group of stars, dust, gas and dark matter held together by gravity. They vary in size with some containing millions of stars while others could contain as many as a trillion. They can also form in different shapes such as elliptical galaxies and spiral galaxies. Our solar system is a part of THE MILKY WAY or THE AKASH GANGA Galaxy. There are millions of such galaxies that make the Universe. It is difficult to imagine how big the universe is.

**CONSTELLATION:** A constellation is a group of stars that make an imaginary shape in the night sky.



**THE SOLAR SYSTEM:** The sun, eight planets, satellites and some other celestial bodies known as asteroids and meteoroids form the solar system.

#### The Sun

The sun is in the centre of the solar system. It is huge and made up of extremely hot gases. It provides the pulling force that binds the solar system. The sun is the ultimate source of heat and light for the solar system. But that tremendous heat is not felt so much by us because despite being our nearest star, it is far away from us. The sun is about 150 million km away from the earth.

#### Planets

Planets are celestial bodies that revolve around the earth in their fixed path called orbit.

There are eight planets in our solar system. In order of their distance from the sun, they are: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune.

MY VERY EFFICIENT MOTHER JUST SERVED US NUTS.

The largest planet in the solar system is Jupiter, followed by Saturn, Uranus, Neptune, Earth, Venus, Mars with the smallest being Mercury.

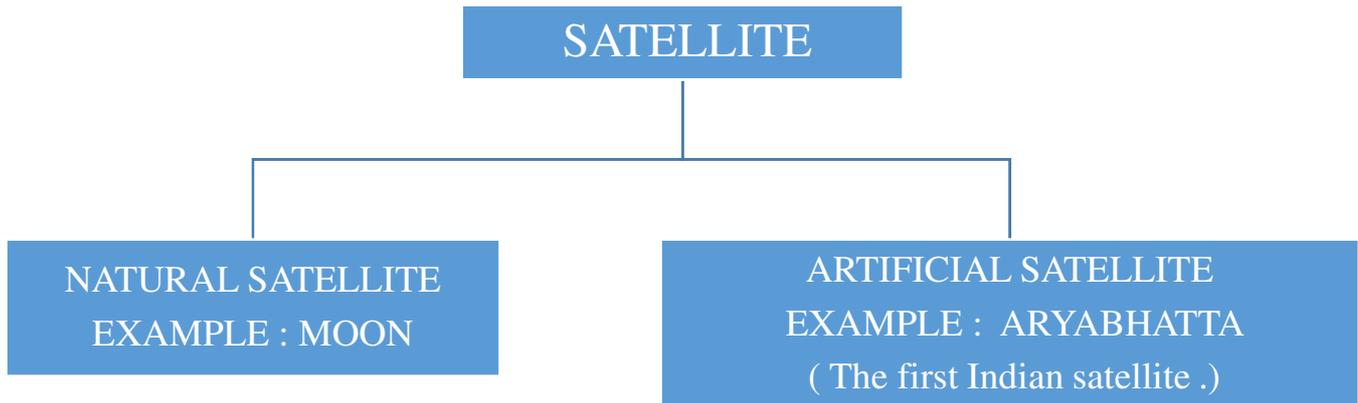
## The Earth

The earth *is* the third nearest planet to the sun. In size, it is the fifth largest planet. It is slightly flattened at the poles. That is why; its shape is described as a Geoid. Geoid means an earth-like shape, Earth is a water world, with two-thirds of the planet covered by ocean that is why it is also called BLUE PLANET. It's the only world known to harbor life. Earth's atmosphere is rich in life-sustaining nitrogen and oxygen.

Diameter: 7,926 miles (12,760 km)

- Orbit: 365.24 days
- Day: 23 hours, 56 minutes

**SATELLITES:** Satellites are celestial bodies that revolve around the planet in a fixed orbit.



## The Moon

Our earth has only one satellite, that is, the moon. Its diameter is only one-quarter that of the earth. It appears so big because it is nearer to our planet than other celestial bodies. It is about 3,84,400 km away from us. Now you can compare the distance of the earth from the sun and that from the moon. The moon moves around the earth in about 27 days. It takes exactly the same time to complete one spin. As a result, only one side of the moon is visible to us on the earth. The moon does not have conditions favourable for life. It has neither water nor air. It has mountains, plains and depressions on its surface. These cast shadows on the moon's surface.

## Asteroids

Apart from the stars, planets and satellites, there are numerous tiny bodies which also move around the sun. These bodies are called *asteroids*. They are found between the orbits of Mars and Jupiter. Scientists are of the view that asteroids are parts of a planet which exploded many years back.

## Meteoroids

The small pieces of rocks which move around the sun are called meteoroids. Sometimes these meteoroids come near the earth and tend to drop upon it. During this process due to friction with the air they get heated up and burn. It causes a flash of light. Sometimes, a meteor without being completely burnt, falls on the earth and creates a hollow.

## Some famous Indian Astronomers:

**Aryabhata, Brahmagupta, Bhāskara I, Varāhamihira, Bhāskara II**

## In-Text Questions

### 1. Answer the following questions briefly.

- (a) How does a planet differ from a star?
- (b) What is meant by the 'Solar System'?
- (c) Name all the planets according to their distance from the Sun.
- (d) Why is the Earth called a unique planet?
- (e) Why do we see only one side of the Moon always?
- (f) What is the Universe?

### 2. Tick the correct answers.

- (a) The planet known as the "Earth's Twin" is
  - (i) Jupiter
  - (ii) Saturn
  - (iii) Venus
- (b) Which is the third nearest planet to the Sun?
  - (i) Venus
  - (ii) Earth
  - (iii) Mercury
- (c) All the planets move around the Sun in a
  - (i) Circular path
  - (ii) Rectangular path
  - (iii) Elongated path
- (d) The Pole Star indicates the direction to the
  - (i) South
  - (ii) North
  - (iii) East
- (e) Asteroids are found between the orbits of
  - (i) Saturn and Jupiter
  - (ii) Mars and Jupiter
  - (iii) the earth and Mars

### 3. Fill in the blanks.

- (a) A group of \_\_\_\_\_ forming various patterns is called a \_\_\_\_\_.
- (b) A huge system of stars is called \_\_\_\_\_.
- (c) \_\_\_\_\_ is the closest celestial body to our Earth.
- (d) \_\_\_\_\_ is the third nearest planet to the Sun.
- (e) Planets do not have their own \_\_\_\_\_ and \_\_\_\_\_.

### Additional Questions

- Q.1.** What are asteroids?
- Q.2.** What are Meteoroids?
- Q.3.** What is a Satellite? What are different types of satellites?
- Q.4.** What is the Milky Way?

## 5. Multiple Choice Questions (MCQ)

(a) The following is (are) example(s) of celestial body (ies).

- (i) Sun
- (ii) Moon
- (iii) Stars
- (iv) All of the above

(b) The following is (are) true about Sun.

- (i) It is made up of gases
- (ii) It has its own heat and light
- (iii) Sun is a star
- (iv) All of the above

(c) The following constellation consists of seven main stars.

- (i) Ursa major
- (ii) Ursa minor
- (iii) Hercules
- (iv) Lyra

(d) The following planet(s) has(have) ring around it(them)

- (i) Jupiter
- (ii) Saturn
- (iii) Uranus
- (iv) All of the above

(e) The sun is \_\_\_ million km away from the earth.

- (i) 100
- (ii) 150
- (iii) 200
- (iv) 250

(f) The correct ascending order of distance of planets from sun is

- (i) Mars, Earth, Jupiter, Saturn
- (ii) Earth, Mars, Jupiter, Saturn
- (iii) Earth, Mars, Saturn, Jupiter
- (iv) Earth, Jupiter, Mars, Saturn

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# Subject- History

## Class- VI

### Chapter 1- When, Where and How

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How can anyone find about what happened yesterday, one month ago or long, long years ago?

- (a) By newspaper                      (b) By radio                      (c) By magazine or by asking someone?



Let us know how?

#### 1. What can we know about the past?

☞ **We can find out about the lives of**

Hunters, herders, farmers, rulers, merchants, priests, artists, musicians etc.

☞ **Where they would have lived and what they did?**

- (a) Near rivers' banks like the Ganga, Indus and Narmada
- (b) Were skilled gatherers – the people who gathered their food like roots, fruits, etc.
- (c) Also hunted animals
- (d) Grew crops such as wheat and barley
- (e) Reared animals like sheep, goats, cattle etc.
- (f) Lived in villages, cave shelters and near hills like Suleiman and Kirthar, Garo hills, Vindhya hills



☞ **Why they would have travelled? --- to share ideas?**

- (a) They travelled impossible journeys in search of livelihood.
- (b) To escape from natural disasters like flood, droughts.
- (c) They marched in armies, conquering other's lands.
- (d) Merchants travelled with caravans or ships carrying valuable goods.
- (e) Religious teachers to offer instructions and advice.
- (f) Some people travelled to discover new and exciting places.

☞ **Movements of people from frontiers**

- (a) Hills, mountains and seas form the natural frontiers of the subcontinents.
- (b) These movements enriched our cultural traditions
- (c) New ways of carving stones, composing music
- (d) Cooking food

## ☞ **How our country was named?**

- (a) India comes from Indus
- (b) Iranians and Greeks called Indos or Hindos
- (c) People those who lived in North-west called it Bharat(mentioned in Rigveda)

## ☞ **Sources of history**

### **1. Literary sources**

- Religious
  - (a) Epics
  - (b) Vedas
  - (c) Manuscripts(writings on palm leaves by hand)
- Secular (Books based on)
  - (a) Lives of kings
  - (b) Medicine
  - (c) Science
  - (d) Plays

### **2.Archeaological sources**

- (a)Inscriptions :-  
Writings engraved on hard surfaces
- (b) Coins
- (c) Monuments
- (d) Temples and pillars
- (e) Seals
- (f) Artefacts (toys, pots , ornaments, weapons etc.)

## ☞ **People involved**

### **1. Archaeologists**

- (a) Study remains of buildings, paintings and sculpture
- (b) Explore and excavate ( digging under the surface of the earth)
- (c) Find artefacts like tools ,weapons, pots , pans, ornaments and coins
- (d) Find out what people ate, plants' remains etc.

### **2. Historians**

- (a) Scholars who study the past
- (b) Collect information from manuscripts, inscriptions, archaeological remains etc.

## ☞ **Dates in History**

- (a) Dates generally assigned to the birth of Jesus Christ.
- (b) The dates counted backwards usually have the letters BC(Before Christ). Eg 2000BC
- (c) AD(ANNO DOMINI) meaning 'in the year of the Lord'. Eg AD2005
- (d) As the Christian Era is now used in most countries of the world so, CE instead of AD is used and stands

for 'COMMON ERA'

(e) BCE instead of BC is used and stands for 'BEFORE COMMON ERA'

***“If you don't know history, then you don't know anything. You are a leaf that doesn't know it is a part of the tree”***

***By Michael Crichton***



**Q.1. Name the following.**

- (a) The word India comes from the name of this river.
- (b) The people who called India as Indos or Hindos.
- (c) The tree found in Himalayas whose bark was used to write manuscripts.
- (d) The person who study archaeological remains.
- (e) The person who studies the past.
- (f) Scholars try to understand the scripts and languages through a process known by this name.

**Q.2. Answer the following questions in short.**

- (a) Why is India called a Sub-continent?
- (b) What do you mean by BC and AD dates?
- (c) Define manuscripts and inscriptions.
- (d) Calculate the number of years between 4500 BC to 3050 AD.
- (e) Arrange the following dates on Time-Line.

(i) 457BC            (ii) 600 BC            (iii) 705 AD            (iv) 345 BC            (v) 600 AD

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