

PARAGON CONVENT SCHOOL

SECOTR : 24 B, CHANDIGARH

LESSON - 13

THE SOLAR SYSTEM

Summary :

- Universe includes all the heavenly bodies like the stars, planets, satellites and meteoroids.
- Moon is the natural satellite of the Earth.
- The rotation of the Earth causes day and night and revolution of the Earth causes seasons.
- Seasons vary in regions above and below the equator of the Earth.
- Earth rotates from west to east on its axis.
- Both revolution and tilting of the Earth are responsible for change in seasons in different parts of the Earth.

Multiple Choice Questions (Page No. 103)

1. (b) 2. (b) 3. (c)

Multiple Choice Questions (Page No. 105)

1. (c) 2. (a) 3. (a)

EXERCISES

Oral Questions

Q1.- Which movement of the Earth causes different seasons?

Ans.- Revolution

Q2.- Why do we see stars mostly at night?

Ans.- We see stars mostly at night because during the daytime, the sunlight is

brighter than the light of the stars.

Q3.- Name the biggest planet of the solar system.

Ans.- Jupiter

Science Quiz

Q1.- Name the sixth planet of the solar system.

Ans.- Saturn

Q2.- How many satellites does Jupiter have?

Ans.- 67

Q3.- Name the red planet of the solar system.

Ans.- Mars

Worksheet

Multiple Choice Questions

1. (b) 2. (b) 3. (c)

Circle the odd ones. Give reason for your choice

1. Venus Earth Sun

Ans.- Sun - Others are planets, whereas the Sun is a star.

2. Axis Earth Equator

Ans.- Earth - Others are imaginary lines, related to Earth, whereas it is a planet.

3. Solar day Solar year Hemisphere

Ans.- Hemisphere - Others are related to the Sun.

Fill in the blanks with the help of the given words

1. moon 2. Mercury 3. Saturn

4. west to east 5. winter

Identify the following planets and write their names in the spaces provided

1. Saturn 2. Jupiter 3. Mercury

Section B

Multiple Choice Questions

1. (a) 2. (a)

Very short answer questions

Q1.- Name the planet where life exist.

Ans.- Earth

Q2.- Which planet is called the morning and the evening star?

Ans.- Venus

Q3.- Which is the largest planet in our solar system?

Ans.- Jupiter

Q4.- Which planet is closest to the Sun?

Ans.- Mercury

Short answer questions

Q1.- What is solar system?

Ans.- The Sun, the eight planets and their satellites (moons), and other heavenly bodies like comets and asteroids are together called the solar system.

Q2.- Why does the Sun appear to rise in the east and set in the west?

Ans.- The Earth rotates from west to east on its axis. So, the Sun appears to rise in the east and set in the west.

Q3.- The Sun gives its heat and light to all without any discrimination.

A) What is the Sun made up of?

B) What value do we learn from the Sun?

Ans.- (a) The Sun is a star made up of glowing gases.

(b) We should not discriminate people on the basis of money, religion and gender. We should treat each living being equal.

Q4.- Why does life exist only on the Earth?

Ans.- The Earth has water and air (oxygen), thus life exists only on the Earth.

Q5.- Why does the moon shine?

Ans.- The moon shines because it reflects the light of the Sun falling on it.

Long answer questions

Q1.- What is the difference between the rotation and revolution of the Earth?

Ans.-

<u>Rotation</u>	<u>Revolution</u>
(i) The spinning of the earth on its own axis is called rotation.	(i) The movement of the Earth around the Sun is called revolution.
(ii) Rotation of the Earth causes day and night.	(ii) Revolution of the earth causes change in seasons.
(iii) Earth completes one rotation in 24 hours.	(iii) Earth completes one revolution in 365 days and 6 hours.

Q2.- How does change in season takes place due to the movement of the Earth?

Ans.- The Earth revolves around the Sun. During the revolution, the Earth remains tilted on its axis at an angle of 23.5° . As a result, at a certain time of year, the northern hemisphere is bent towards the Sun while the southern hemisphere is away from it. The hemisphere which is tilted towards the Sun gets the direct Sun rays, so it is warmer. It has summer. At the same time, the other hemisphere that is away from the Sun, gets slanting sun rays, so it is cooler. It has winter.

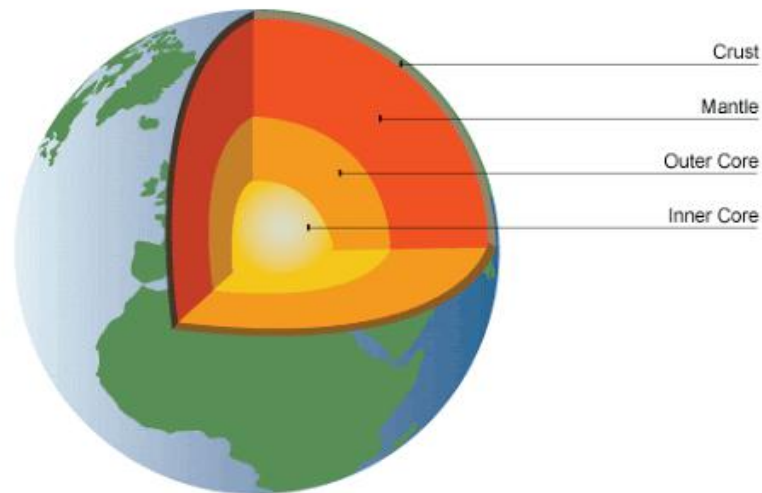
Q3.- Explain the structure of the Earth.

Ans.- The Earth has an egg-like structure. At its centre is a yolk of metal called core which is surrounded by an egg white of soft rocks called mantle and an outer hard cover of rocks called crust.

Crust : It is the outermost layer of the Earth. Its thickness varies from place to place. It varies from 6-11 km under oceans but at high mountains, it is about 70 km thick. It is made up of rocks.

Mantle : It is the middle layer lying between the crust and the core of the Earth. It is partially molten layer. It is about 2900 km thick and contains a lot of iron and magnesium.

Core : Core forms the centre of the Earth. It is divided into two parts called outer and inner core. The outer core is about 2300 km thick and is made of molten iron and nickel. Inner core is also made of iron and nickel. It is about 1200 km thick and is like a solid ball of metal.



STRUCTURE OF THE EARTH