

G. Science

Worksheet 1 : 13/10/2020

Class - VII

CHAPTER 12: THE SOLAR SYSTEM AND OUR EARTH

Instructions:

- ✓ Read the chapter in your book quickly and thoroughly, preferably more than once.
- ✓ Contact me in case of any difficulty in understanding.

Cognitive Questions (Mark 1)

1. What is solar system?

Ans.: The system consisting of the sun, the planets of the sun, the satellites of the planets, some revolving luminaries and the huge space around the sun is called solar system.

2. What is diurnal motion?

Ans.: The motion that the earth takes 24 hours to rotate once on its axis from the west to the east is called diurnal motion of the earth.

Analytical Question (Mark-2)

1. Why did men think before that the sun moves round the earth?

Ans.: It seems from the earth that the sun moves round the earth from the east to the west. man used to think so in ancient time. At that time there was no instrument to observe these luminaries. They would believe as they observed with their bare eyes. Even scientists like Aristotle and mathematician astrologer Ptolemy used to believe that the sun moves round the earth. This motto was believed by men for a long.

2. Who told about the sun centric instead of earth centric model?

Ans.: Copernicus proposed the model of sun centric instead of earth centric. The main theme of this model is that the earth moves round the sun. He also told a new thing, that is, the earth rotates on its own axis.

3. Explain the earth's two way motion citing an example.

Ans.: The earth's two way motion can be explained by the following example:

The top rotates standing on the pointed head.

At the same time it travels circular or elliptical way from one place to another on the soil. Thus the top has two way motions. One is to rotate on its own axis and another is to travel a way on the soil. The earth has two way rotation like top.

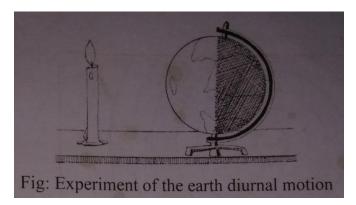
The earth takes 24 hours to rotate once on its axis from the west to the east. This is called the earth's diurnal motion. The second thing is that the earth takes 365 days 6 hours to revolve around the sun in its orbit. This is called annual motion. Days and night occur because of the diurnal rotation of the earth.

Creative Questions

(Solve yourself)

- Supti and Shumi went to visit space centre situated at Agargaon in Dhaka. They saw a wall map of solar system hanging on the wall. Supti observed that sun is in the centre and eight planets are revolving around it keeping a particular distance. Shumi said, "Planets of this solar system have no light and heat of their own. They get heat and light from the sun."
 - a) How different planets are getting heat and light according to Shumi's opinion? Explain.
 - b) Discuss the features of different planets that Supti saw on that wall map.

2. Observe the figure and answer the following questions.



- a) How do days and nights occurs? Explain in case of figure in the stem.
- b) Why the difference arise in the day and night of Bangladesh and USA?