

Sub: SST

Ch- 3 Movement of the Earth

(Textbook Exercise)

- 1) The fixed path along which the Earth revolves around the Sun is called its orbit
- 2) The part of the Earth facing away from the Sun has
- 3) The imaginary line along which the Earth rotates is called its axis
- 4) Day and night on the Earth are caused by the rotation of the Earth
- 5) In the month of June the North is tilted towards the Sun

D) Write T for true and F for false.

- 1) The Earth takes 24 hours to revolve around the Sun.-False
- 2) The hemisphere of the Earth that is tilted away from the Sun gets longer hours of the sunlight.-False
- 3) When the North Pole is tilted towards the Sun, the Northern Hemisphere has summer.-True
- 4) When the Northern Hemisphere has day, the Southern Hemisphere has night.-False

E) Answer the following question.

- 1) How many different types of motion does the Earth have?

A) The Earth has two types of motion-rotation and revolution.

- 2) What is meant by 'rotation' of the Earth? What is the effect of the rotation?

A) The spinning motion of the Earth around its own axis is called rotation. The rotation of the Earth around its axis causes day and night. The portion of the Earth facing the Sun has day. The portion facing away from the Sun has night. As the Earth rotates, day and night follow each other.

- 3) Why are one day and one night on the Earth of 24 hours?

A) The Earth completes one rotation around its axis in 24 hours. That is why one day and one night are of 24 hours.

- 4) In the month of June it is summer in the Northern Hemisphere and winter in the Southern Hemisphere. Why?

A) While revolving around the Sun, the Earth is tilted to one side. The half of the Earth that is tilted towards the Sun gets longer hours of sunlight and has summer. The half that is tilted away from the Sun has lesser hours of sunlight and has winter, in the month of June, the North Pole is tilted towards the Sun, and the South Pole is tilted away from the Sun. So in June, the Northern Hemisphere has summer and the Southern Hemisphere has winter.

5) Why do the seasons repeat year after year?

A) Seasons are caused by two factors-the revolution of the Earth and the tilted axis of the Earth. Both these factors are fixed. The Earth revolves around the Sun in a fixed path called orbit and a fixed time of one year or 365 days. The angle of its inclined axis also never changes. Therefore , the Earth experiences the same seasons year after year.

The Earth rotates or spins from the west to east. So, we see the Sun rising in the east and setting in the west.

F) Multiple choice questions.

1) We see the Sun rising in the east and setting in the west. This happens because

- a) The Earth revolves around the Sun
- b) the Sun revolves around the Earth
- c) The Earth spins on its axis**
- d) the Sun spins on its axis

2) When the North Pole is tilted towards the Sun,

a) The Northern hemisphere has summer and the Southern hemisphere has winter

- b) The Northern hemisphere has winter and Southern hemisphere has summer
- c) Both hemispheres have summer
- d) Both hemispheres have winter

3) The seasons are caused by the

- a) rotation of the Earth
- b) revolution of the Earth around the Sun**

- c) rotation of the Sun
- d) revolution of the Sun around the Earth

4) You are 10 years old today. You will be 11 after

- a) the Earth completes one rotation on its axis
- b) the Earth completes one revolution around the Sun**

- c) the Sun completes one revolution around the Earth
- d) one year – which is not related to the movement of the Earth

G) Hots : think and answer

1) Suppose the axis of the Earth was not tilted. What difference would this have had on the seasons on the Earth?

a) If the Earth was not tilted there would have been no seasons.

2) The Sun rises in the east and sets in the west. This happens because of the rotation of the Earth. What does this tell us about the direction in which the Earth rotates?

a) The Earth rotated or spins from the west to east. So, we see the Sun rising the east and setting in the west.

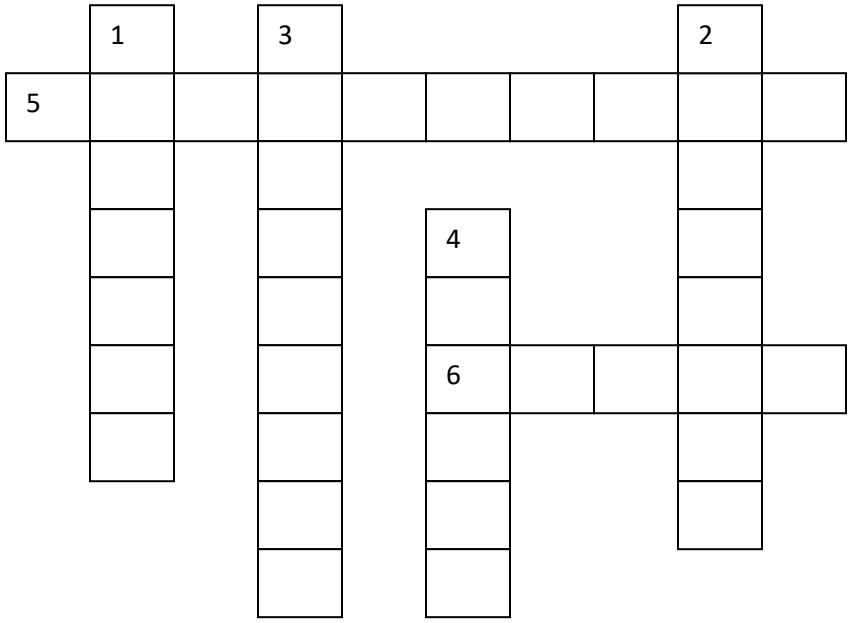
H) Puzzle time: Solve the puzzle using the given clues.

Down:

1. It is caused by the revolution of the Earth on a tilted axis
2. Spinning around the axis
3. The imaginary line joining the North and South poles of the Earth
4. A model of the Earth

Across:

5. Movement of the Earth around the Sun
6. The path on which the Earth moves around



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