

Lesson 5: Rotation and Revolution

II. Fill in the Blanks. (Extra)

1. Rotation
2. Revolution
3. 365 days 6 hours
4. February
5. Northern, Southern

III. Answer the following in one sentence. (Extra)

1. Meridian runs through the North Pole to the South Pole.
2. Earth rotates from West to East
3. Revolution takes a year.
4. Day and Night are caused by the earth's rotation.
5. The elliptical orbit and the tilted axis of the earth are the reasons for the seasons.

IV. Answer the following.

1. Why do we have day and night?
 - Earth's rotation causes day and night. The movement of earth on its own axis is called rotation.
 - As it rotates, the parts of the earth facing the sun experience light, so for these areas it is day, and the opposite side where there is darkness it is night.
2. What do you understand by the earth's orbit?
 - The earth revolves around the sun in a fixed elliptical path called orbit.
3. How long does the earth take to revolve around the sun once?
 - The earth takes 365 days and 6 hours to revolve around the sun once.
4. Why do we have leap years?
 - The earth takes 365 days and 6 hours to revolve round the sun. An extra day is added to the calendar every fourth year due to the addition of 6 hours per year [$6 \times 4 = 24 \text{ hours} = 1 \text{ day}$]. Such a year which has 366 days in it is known as a leap year.

- In a leap year, February has 29 days instead of 28.
5. What are the two factors due to which we have seasons on earth?
- The elliptical orbit and the tilted axis of the earth are the two factors due to which we have seasons on earth.

Lesson 6:

Domains of the earth

II. Fill in the blanks. (Extra)

1. Iron
2. Water Cycle
3. Atmosphere
4. Atmosphere
5. Biosphere

III. Answer in one sentence. (Extra)

1. Hydrosphere forms most of the volume of the earth.
2. Rain occurs in the condensation stage of the water cycle.
3. Ozone Layer contains a 'filter' to block harmful ultraviolet rays.
4. The atmosphere is the layer of oxygen and other gases that surrounds the earth.
5. The biosphere is the part of the environment where living things can survive.

IV. Answer the following.

1. What are the four domains of the earth?
 - The Lithosphere, Hydrosphere, Atmosphere and the Biosphere are the four domains of the earth.
2. In which layer of the earth do we find minerals such as coal and petroleum?
 - We find minerals such as coal and petroleum in the Lithosphere.
3. How many stages are there in the water cycle? Name them.
 - The water cycle has three stages. They are,
 - ❖ Evaporation: - process of converting water into water vapour.

- ❖ Condensation: - process of converting water vapour into water droplets.
 - ❖ Precipitation: the water droplets that form clouds become heavier to hold together and drop down in the form of rain/ hail/ snow.
4. Which gas forms the largest part of the air around us?
 - Nitrogen gas forms the largest part of the air around us.
 5. What is an ecosystem?
 - An ecosystem is made up of all the living and nonliving components of an area. These components interact with and depend on each other for existence.

Lesson 8:

Understanding Maps.

II. Fill in the blanks. (Extra)

1. Locate the places
2. Globe
3. Cartographer
4. Colors
5. Map scale

II. Answer in one sentence. (Extra)

1. Physical map shows the features on the surface of the earth.
2. Blue indicates all the waterbodies.
3. Magnetic compass is used in navigation, to determine the direction on the surface of the earth.
4. The top of the map usually indicates North direction
5. Boundaries between different states are shown in Political Maps.

IV. Answer the following.

1. What is a map?

- A map is a drawing of the whole earth or a part of it on a flat surface such as a sheet of paper.

2. Why do we need maps?

- Maps helps us to get an idea about the shape and size of an area, its physical features, and the distance between two places.

3. What does a physical map tell us?

- Physical maps show both natural and man-made features on the surface of the earth.

These include Natural features like mountains, plains, forests and water bodies or man-made features such as canals, artificial lakes, dams, bridges and parks.

4. What do you understand by the scale of a map?

- The scale of a map is the ratio of distance of two places on a map to the distance of same two places on the ground.

5. Why do we need the legend of a map?

- The legend of a map explains the meaning of the colours and symbols used in a map, which helps us to study the map. It is usually included in a box in one corner of the map.

6. Explain the important colours used on a map.

Some standard colours used in maps are:

- Brown: mountains and hills.
- Green: plains.
- Blue: water bodies
- Yellow: deserts.
- Light brown: plateaus.

Lesson 9: States of India

II. Fill in the blanks. (Extra)

1. President
2. Kerala
3. Chennai
4. 22
5. Bengaluru

III. Answer in one sentence. (Extra)

1. There are 28 states in India.
2. There are 9 union territories in India.
3. Uttar Pradesh is the most populous state in India.
4. The largest state in terms of area is Rajasthan
5. Hindi and English are the two official languages of India.

IV. Answer the following.

1. Why have we divided India into states?
 - To govern a vast area and a large population from one centre – the government in Delhi, the country has been divided into states and union territories.
2. How many union territories are there in India?
 - There are nine union territories in India.
3. What is the main difference between states and union territories?
 - Each state has a government of its own. The union territories are controlled by Central Government.
4. What do you understand by the capital of a state or country?
 - A city that is the centre of administration of a country or state is known as its capital.
5. Which city is the capital of two states?
 - Chandigarh is the shared capital city of both Punjab and Haryana.