ODM EDUCATIONAL GROUP
Changing your Tomorrow

MOTIONS OF THE EARTH

SUBJECT : (GEOGRAPHY)
CHAPTER NUMBER: 3 PERIOD-2
CHAPTER NAME : MOTIONS OF THE EARTH

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MOTIONS OF THE EARTH

LEARNING OBJECTIVES

- Rotation
- Effects of the earth's Rotation
- Revolution
- Earth's Orbit
- Seasons
- Solstice- Summer and Winter Solstice
- Equinoxes- Spring and Autumn Equinox

MOTIONS OF THE EARTH

REVOLUTION OF THE EARTH

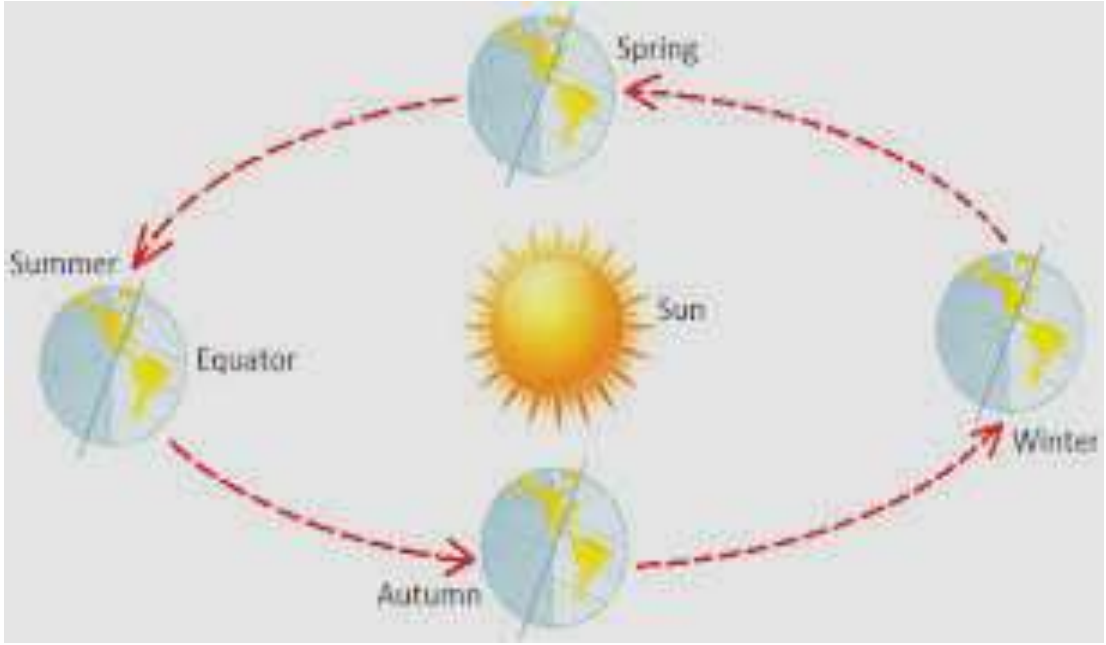
- While the Earth spins on its axis, it also goes around the Sun. This movement of the Earth around the Sun is called revolution.
- It takes 365 days or one year to complete the revolution. It follows a path called the orbit. The orbit is not circular but oval or elliptical in shape.
- When the distance between the Earth and the Sun varies from a minimum of roughly 147 million km in January, is called the **Perihelion**.
- When the distance varies to a maximum of roughly 152 million km in early July, called the **Aphelion.**
- The plane in which the Earth goes around the Sun is called the ecliptic.

MOTIONS OF THE EARTH

EFFECTS OF THE EARTH'S REVOLUTION

Revolution of the Earth, along with the tilt in the Earth's axis, causes:-

1. Varying lengths of day and night
2. Changing seasons.



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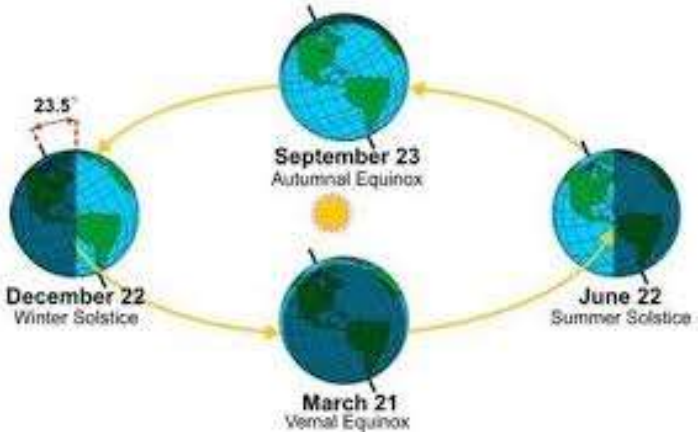
VARYING LENGTHS OF DAY AND NIGHT

- The Earth is tilted on its axis, due to this tilt the pattern of light falling on the Earth is different.
- For the half year, the Northern Hemisphere faces the Sun, while for the next six months, the Southern Hemisphere faces the Sun.
- A larger part of the hemisphere that faces the Sun gets sunlight. This means that the hemisphere facing the Sun gets longer days and shorter nights.
- At the equator, the days and nights are of equal length.

MOTIONS OF THE EARTH

THE CHANGING SEASONS

- The movement of the Earth along its position which changes the amount of the sunlight falling on it.
- When the Northern Hemisphere is closer towards the Sun it is summer there. The Southern Hemisphere enjoys the winter season at the same time.
- When the Northern Hemisphere is further from the Sun as compared to the Southern Hemisphere, then it is winter in the Northern Hemisphere and summer in the Southern Hemisphere.
- In between the season of summer and winter, when the Earth's position is changing we have the spring and the autumn season.



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