

Chapter - 15

Our Planet Earth

New words

- 1) Crust
- 2) Mantle
- 3) Inner Core
- 4) Outer core
- 5) Volcano
- 6) Equator
- 7) hemisphere
- 8) Pole
- 9) lava
- 10) Solar Year

Define the following

- 1) Equator - An imaginary line around the middle of the Earth is called equator.
- 2) Hemisphere - Half of ^a the sphere, like the Earth is called hemisphere.
- 3) Volcano - A volcano is a mountain that erupts with hot lava, ash and gases from inside the Earth.
- 4) Solar Year - The Earth complete one revolution around the sun in 365 $\frac{1}{4}$ days. This period is called solar year.

Answer the following Questions in brief-

Q1. How long does the Earth take to complete one revolution? What is this time called?

Ans- The Earth takes $365\frac{1}{4}$ days to complete one revolution around the sun.
This time period is called a solar year.

Q2. What are the factors which cause season?

Ans- The factors that cause seasons are-

- 1) Tilt of the Earth's axis
- 2) Earth's revolution around the sun.

Q3. Why do the parts near the equator have the same season throughout the year?

Ans- The parts near the equator receive the same amount of sunlight throughout the year. So they have equal nights and days. It remains hot all the time. So they have same season throughout the year.

Q4. How is volcano formed?

Ans. A volcano is formed when hot liquid rock shoots out from the centre of the Earth.

Q5. Why are the days longer in summer?

Ans. Days are longer in summer because the pole that tilts towards the sun, gets straight sunlight. This results in longer days and shorter nights in summers.

Q6. What would happen if the Earth were not tilted on its axis? Give reason for your answer. (Think and Answer)

Ans. If the Earth were not tilted on its axis, there would be no seasons. The same part of the Earth would always get the same amount of sunlight, causing constant (same) weather patterns all the year.

Answer the following in detail

Q.1 Describe the structure of the Earth?

Ans The Earth is made up of three layers - Crust, mantle and core.

- 1) Crust - The outer layer is crust. It is the solid hard rock on which we live.
- 2) Mantle - The layer below the crust is called the mantle. It is a sea of hot semi-liquid rocks.
- 3) Core - The centre is the hottest part of the Earth. It is called the core. It is so hot that the rocks and metals are in molten form.

Q.2 Why is the season in the northern hemisphere always opposite to that in the southern hemisphere?

Ans- The seasons are opposite in the northern and southern hemisphere because of the tilt in the Earth's axis. When one hemisphere is tilted towards the sun it experiences summer while the other hemisphere away from the sun experiences winter.

Mind Map

Movement of Earth

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Rotation

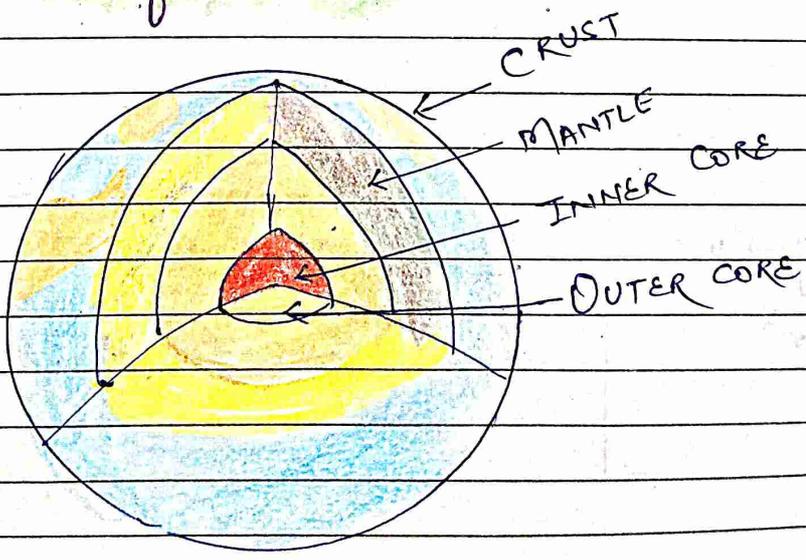
- On its axis
- takes 24 hours to complete one rotation
- causes day and night

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Revolution

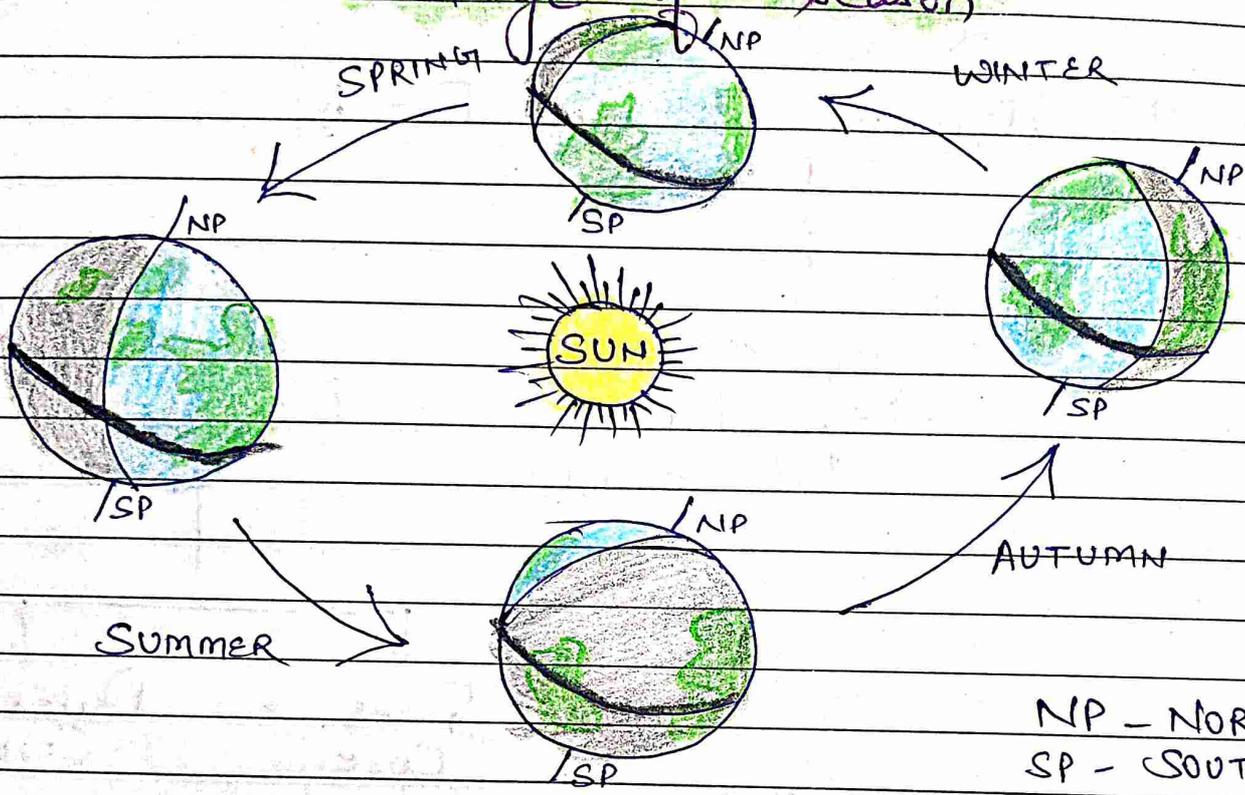
- around the sun
- takes $365\frac{1}{4}$ days to complete one revolution
- causes change in season.

Diagrams

Structure of Earth



Change of Season



NP - NORTH POLE
SP - SOUTH POLE