

Ncert Solutions Class 6 Geography Chapter 3

Ncert Solutions For Class 6 Geography Chapter 3 Motions of the Earth

1. Answer the following questions briefly.

(a) What is the angle of inclination of the earth's axis with its orbital plane?

Answer

The angle of inclination of the earth's axis with its orbital plane is $66\frac{1}{2}^{\circ}$.

(b) Define rotation and revolution.

Answer

Rotation is the movement of the earth on its axis.

Revolution is the movement of the earth around the sun in a fixed path or orbit.

(c) What is a leap year?

Answer

Earth takes 365 days and 6 hours to complete a revolution. But, for the sake of convenience, we consider that a year consists of 365 days. The six hours that are ignored make one day (24 hours) over a period of four years. This one day is added to that year in the month of February. Therefore, after every four years February has 29 days and that year is known as leap year.

(d) Differentiate between the Summer and Winter Solstice.

Answer

Summer Solstice	Winter Solstice
It is the position of the Earth when the rays of the sun fall directly on the tropic of cancer.	It is the position of the Earth when the rays of the sun fall directly on the tropic of Capricorn.
In this position, the North pole is tilted towards the sun.	In this position, the North pole is tilted away from the sun.
Due to large portion of the Northern hemisphere gets light from sun, it is summer in Northern Hemisphere.	Due to large portion of the Southern hemisphere gets light from sun, it is winter in Northern Hemisphere.
During this period in Northern hemisphere, days are longer than nights	During this period in Northern hemisphere, nights are longer than days

(e) What is an equinox?

Answer

Equinox is the position of the earth when direct rays of the sun fall on the equator. At this position, neither of the poles is tilted towards the sun so, the whole earth experiences equal days and equal nights.

(f) Why does the Southern Hemisphere experience Winter and Summer Solstice in different times than that of the Northern Hemisphere?

Answer

The Southern Hemisphere experience Winter and Summer Solstice in different times than that of the Northern Hemisphere because:

- When the North Pole is tilted towards the Sun, the Northern Hemisphere experiences Summer Solstice. At this time, since the South Pole is tilted away from the Sun, the Southern Hemisphere experiences Winter Solstice.
- When the North Pole is tilted away from the Sun, the Northern Hemisphere experiences Winter Solstice. At this time, since the South Pole is tilted towards the Sun, the Southern Hemisphere experiences Summer Solstice.

(g) Why do the poles experience about six months day and six months night?

Answer

The Poles experience about six months of day and six months of night because of the tilt of the Earth on its axis. When the Northern hemisphere is tilted towards the Sun, the North Pole is

inclined towards the sun, it experiences continuous daylight for six months. These conditions are reversed when the South hemisphere is tilted towards the Sun.

2. Tick the correct answers.

(a) The movement of the earth around the sun is known as

(i) Rotation

(ii) Revolution

(iii) Inclination

▶ (ii) Revolution

(b) Direct rays of the sun fall on the equator on

(i) 21 March

(ii) 21 June

(iii) 22 December

▶ (i) 21 March

(c) Christmas is celebrated in summer in

(i) Japan

(ii) India

(iii) Australia

▶ (iii) Australia

(d) Cycle of the seasons is caused due to

(i) Rotation

(ii) Revolution

(iii) Gravitation

▶ (ii) Revolution

3. Fill in the blanks.

(a) A leap year has _____ number of days.

▶ 366

(b) The daily motion of the earth is _____.

▶ rotational

(c) The earth travels around the sun in _____ orbit.

▶ elliptical

(d) The sun's rays fall vertically on the Tropic of _____ on 21st June.

▶ Cancer

(e) Days are shorter during _____ season.

▶ winter