

Chapter 2: Motions of the earth

Q. 1. Fill in the blanks:

- (1) The motion of the earth around itself is called rotation
- (2) The motion of the earth around the sun is called revolution.
- (3) The rotation of the earth gives rise to day and night
- (4) The axis of the earth is inclined
- (5) The earth takes 365. days and 6 hours to complete one revolution around the sun.
- (6) From the new moon to the full moon the moon is seen to become bigger and bigger
- (7) The inclination of the axis of earth gives rise to the cycle of the seasons.

Q. 2. Write whether the following statements are True or False. If false, rewrite them after correcting:

- (1) The earth rotates from east to west.
- (2) In a leap year, there are 28 days in the month of February.
- (3) We do not see the moon in the sky on a new moon day.
- (4) The lighted part of the moon decreases in size and seems smaller and smaller in Shukla Paksha.

Ans. (1) False. The earth rotates from west to east.
(2) False. In a leap year there are 29 days in the month of February.
(3) True.
(4) False. The lighted part of the moon decreases in size and seems smaller and smaller in Krishna Paksha.

Q. 3. What is meant by each of the following terms?

- (1) Full moon: When the Complete and round Moon is seen in the sky it is known as full moon
- (2) New moon: When the Moon is visible in the sky it is known as a new moon
- (3) Lunar month: A period of 28 to 30 days from one new Moon day to the next new Moon day is called a Lunar Month.
- (4) Tithi: Every day of a lunar month is called
- (5) A leap year: The year in which there are 366 days with February having 29 days is called a leap year.

Q. 4. Answer the following questions:

- (1) What is the equator?

Ans. The Imaginary circle present between the north and south pole is called equator.

- (2) What are the two parts of the earth made by the equator?

Ans. Northern Hemisphere and southern Hemisphere are the two parts of the earth made by the equator

(3) What are the poles of the earth?

Ans. The one end of the axis of the earth is called south pole (S) while the opposite point is called north pole.

(4) What is the name given to the changing shapes of the moon that we see?

Ans. The changing shapes of the moon that we see are called the Phases of the Moon

(5) What are the names of the days on which we see a round moon and on which we see no moon at all?

Ans. The day on which we see a complete round moon is called full moon day. The day on which we see no moon at all is called new Moon day

Q. 5. Use your brain power! (Textbook page 10)

(1) How many rotations does the earth complete during one revolution around the sun?

Ans. The earth takes one day to complete one rotation. It takes 365 days and 6 hrs to complete one revolution around the sun, this means that in one revolution earth takes 365 and $\frac{1}{4}$ rotations

(2) It is the sunrise at Itanagar in Arunachal Pradesh. Write the names of the cities in the order in which the sun will rise there.

Mumbai (Maharashtra). Kolkata (West Bengal), Bhopal (Madhya Pradesh). Nagpur (Maharashtra)

Ans. (1) Itanagar (Arunachal Pradesh)

(2) Kolkata (West Bengal)

(3) Bhopal (Madhya Pradesh)

(4) Nagpur (Maharashtra)

(5) Mumbai (Maharashtra)

Q. What's the solution? (Textbook page 10)

Amit wants to take his granny to Australia which is in the Southern hemisphere. But she cannot bear very cold weather. When should they make this trip?

Ans. During 23rd September to 22nd March, there is summer in Australia. So Amit's granny could be taken to Australia during this period. There is winter from 22nd March to 23rd September. As there is winter, she shouldn't visit during this period.