

ত্রিদিন



CLASS: IV

Subject: Social Studies

Date:08/06/2020

Topic: The Motions of the Earth

Time Limit:30 Mins

Worksheet No. :10

[Copy the questions following the notes and solve them on a sheet of paper date wise. Keep the worksheets ready in a file to be submitted on the opening day.]

To us, the Earth appears to stand motionless in space, with the stars and the sun moving around it. But the Earth is, in fact, moving all the time. It has two main types of motion, **rotation** and **revolution**. These movements influence life on the Earth in different ways.

Rotation of the Earth

Spin a bangle on the floor and observe the movement. Does it seem as if an imaginary line is passing through its centre? The Earth too spins around an imaginary line. This imaginary line is known as its **axis**. The axis of the Earth is slightly tilted and passes through the centre of the Earth. The two end points of the axis are called the **North Pole** and **South Pole**.

The Earth is constantly spinning on its axis. It spins from the West to the East. This movement of the Earth is called rotation. The Earth completes one rotation in 24 hours or one day.

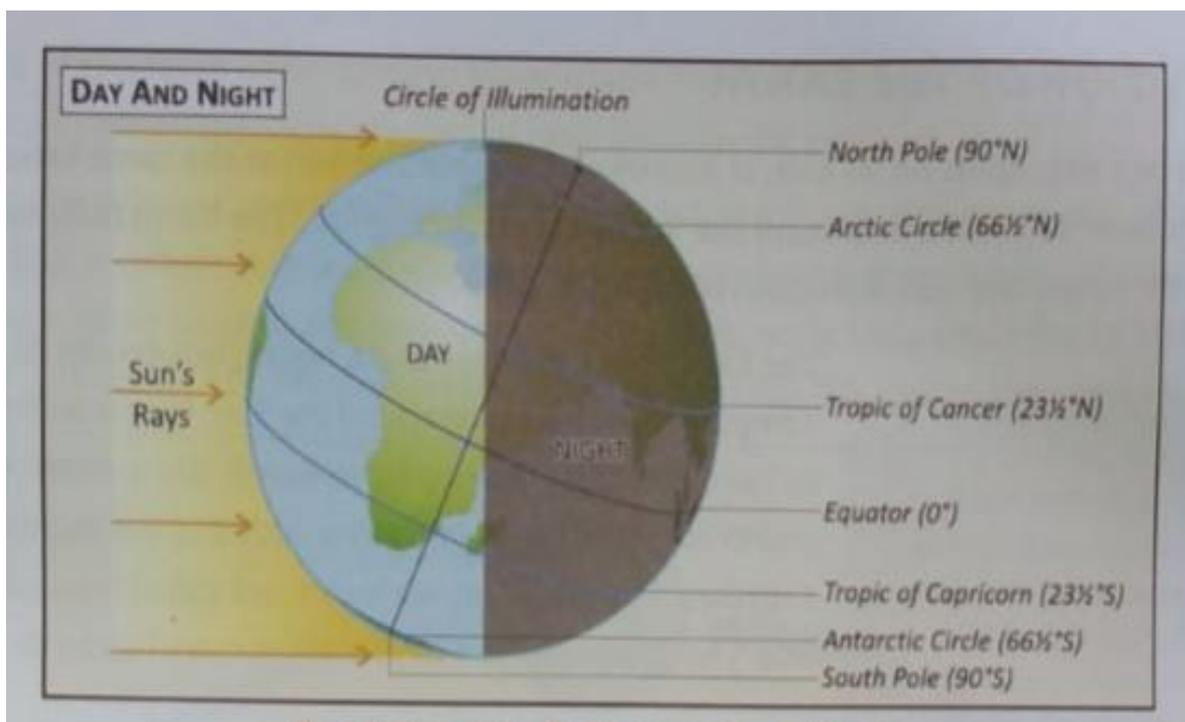
Effects of Rotation

Day and Night

The rotation of the Earth causes day and night. It also makes the Sun, Moon and other heavenly bodies appear to rise in the east and set in the west each day.

At any given time, only half the Earth faces the Sun. This side receives sunlight and it is day there. At the same time, the other half of the Earth faces away from the Sun and it is night there. As the Earth takes 24 hours to complete one rotation, each place on the Earth's surface has day and night in turn during those 24 hours.

Example:- when it is night-time in India, it is daytime in the United States of America (USA), which is located on the other side of the Earth. As the Earth continuously spins, USA slowly moves into darkness and India moves into the Sun's light. Japan is one of the first countries to spin into the Sun's light every morning; it is therefore called the **"Land of the Rising Sun"**. The imaginary line that separates the lighted portion of the Earth from the portion which is in darkness is known as the **Circle of Illumination**.



The time just before sunrise, when there is a faint light in the sky, is called dawn, and the time just after sunset is called dusk. This soft light in the sky at dawn and dusk is called **twilight**.

Shape of the Earth

The spinning of the Earth also affects its shape. It causes the Earth to look like a flattened orange—flat at the top and bottom, and bulging around the middle. This shape is called a **geoid**.

ASSIGNMENT

Fill in the blanks:-

- 1.The Earth takes ----- hours to complete one rotation.
- 2.The shape of the Earth is known as -----.
- 3.The imaginary line that separates the lighted portion of the Earth from the portion which is in darkness is known as the -----.
4. The soft light in the sky at dawn and dusk is called -----.

Answer the following:-

- 1.What is rotation?
- 2.What are the effects of rotation?
3. Why is Japan known as the “Land of the Rising Sun”?