

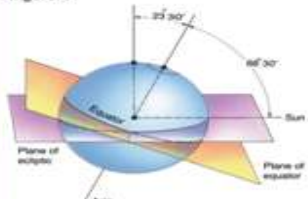
MOTIONS OF THE EARTH

SUBJECT : (GEOGRAPHY)
CHAPTER NUMBER: 3 PERIOD-1
CHAPTER NAME : MOTIONS OF THE EARTH

CHANGING YOUR TOMORROW

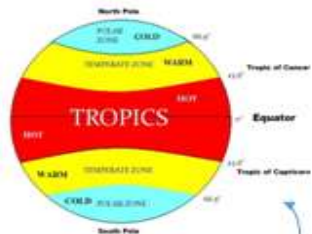
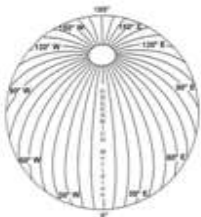
RECAPITULATION OF CH-2

Figure 2



REFERENCE POINTS ON THE GLOBE

- **AXIS**, imaginary line on which Earth spins.
- **NORTH POLE**
- **SOUTH POLE**



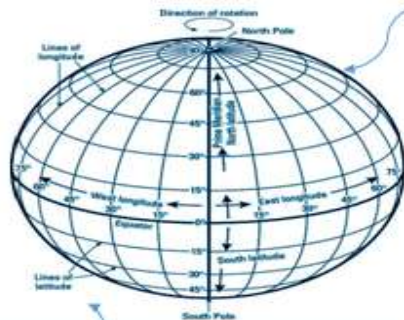
Due to the tilted nature of the Earth's axis, there is an unequal distribution of heat or solar energy on the surface of the earth. Based on amount of heat energy received by any place hemisphere is divided into temperature zones.

LONGITUDES are imaginary lines that run vertically across the surface of the Earth from the North Pole to the South Pole.

They are also called meridians.

The prime meridian is the 0 degree longitude.

The distance between longitudes decreases pole-ward from the equator.



The lines of latitude and longitude intersect at right angles. The grid formed by these crisscrossing line is called the **EARTH GRID**.

It helps to locate a place easily.

LATITUDES are imaginary line that run horizontally across the surface of the Earth. They are also called parallels.

They run parallel to the equator.

They are equidistant from each other.

The equator is the longest parallel.

There are 181 degree of latitude on the whole.

Important Lines of Latitude



Arctic Circle 66.3° N

Tropic of Cancer 23.5° N

Equator 0°

Tropic of Capricorn 23.5° S

Antarctic Circle 66.3° S

MIND MAP GEOGRAPHY

CH-2 LATITUDES AND LONGITUDES

MOTIONS OF THE EARTH

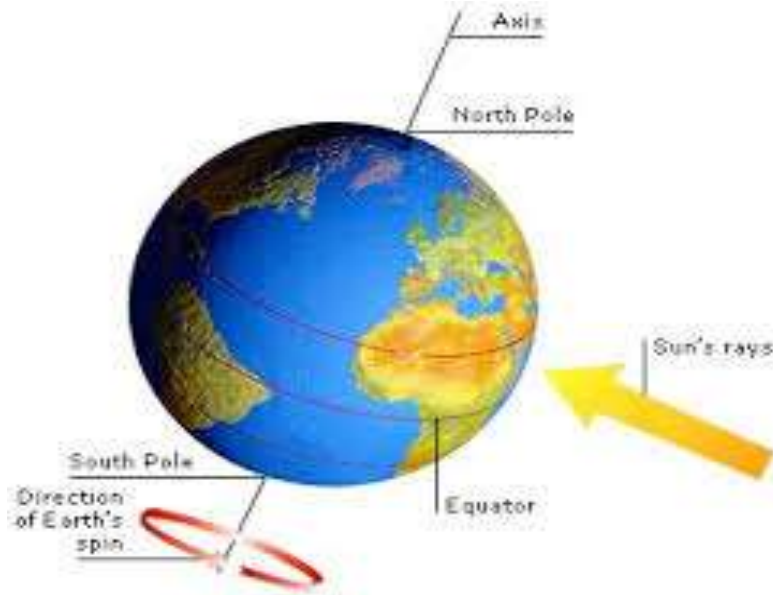
LEARNING OBJECTIVES

- 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

ROTATION OF THE EARTH

- The Earth rotates on its axis from west to east. This spinning of the earth around its own axis is known as rotation.
- The Earth takes about 24 hours to complete one rotation. One rotation makes an Earth day or Solar day.



MOTIONS OF THE EARTH

EFFECTS OF THE EARTH'S ROTATION

- The rotation of earth causes:
- Day and Night
- Bulging of the earth at the equator, and flattening at the poles.
- The deflection (pushing away from the straight path) of winds and ocean currents.
- Tides(the alternate rise and fall of the oceans due to the gravity of the moon and the sun, and the rotation of the earth)
- The apparent movement of all the heavenly bodies from the east to west.

MOTIONS OF THE EARTH

ROTATION

- Day and night caused by the rotation of the Earth.
- The line separates the lighted half from the darker half of the earth is called the circle of illumination.
- Stages of the Earth's rotation:- Dawn, sunrise, mid-day, sunset, dusk and mid night and then dawn again.
- Dawn:- it is that time of day just before sunrise, when the eastern horizon starts getting lighter.
- Dusk or twilight:- It is just after the Sun sets in the west.

<https://www.youtube.com/watch?v=hWkKSkl3gkU>



THANKING YOU
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