

IMPORTANT GEOGRAPHICAL FACTS

INDIAN RIVERS & OTHER NAMES:

Name of the River	Other Name
Indus	Sindhu
Brahmaputra	Dihang
Chenab	Asikini, Chandrabhagha
Jhelum	Vitasta, Hydaspes
Luni	Sagarmati
Beas	Vipasa, Hyphasis
Ravi	Parusni, Airavati
Krishna	Kanhapenna
Kosi	Kausika
Narmada	Namade
Ghaghara	Karnali

MOUTHS OF RIVERS OF THE WORLD

Name of the river	Origin of the river
Nile	Mediterranean Sea
Congo	Atlantic Ocean
Amazon	Atlantic Ocean
Volga	Caspian Sea
Irrawaddy	Andaman Sea
Thames	North Sea
Mekong	South China sea
Indus	Arabian Sea
Danube	Black sea
Rhine	North sea

NAMES OF CYCLONES IN DIFFERENT COUNTRIES:

Origin of Cyclones	Name
North Atlantic (including Caribbean and Gulf of Mexico)	Hurricanes

Important Geographical Facts

Eastern and Central North Pacific	Hurricanes
Western Northern Pacific	Typhoons
Arabian Sea/Northern Indian Ocean	Tropical Cyclones
South Indian Ocean	Tropical Cyclones
Australia	Willy-Willy

MAJOR PLATES IN THE WORLD:

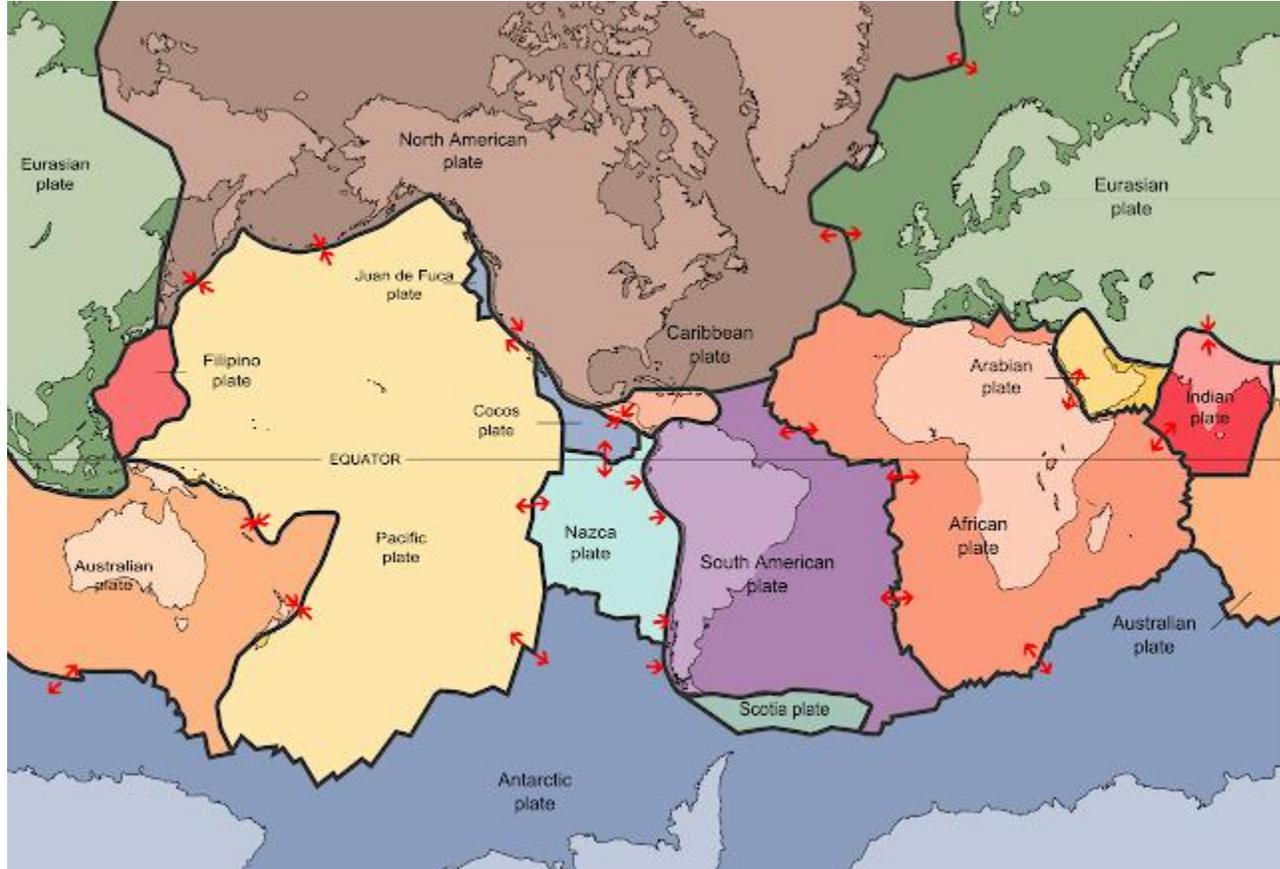
Name of the plates
North American (with western Atlantic floor separated from the South American plate along the Caribbean islands) plate
South American (with western Atlantic floor separated from the North American plate along the Caribbean islands) plate
Pacific plate
India-Australia-New Zealand plate
Africa with the eastern Atlantic floor plate
Eurasia and the adjacent oceanic plate.

MINOR PLATES:

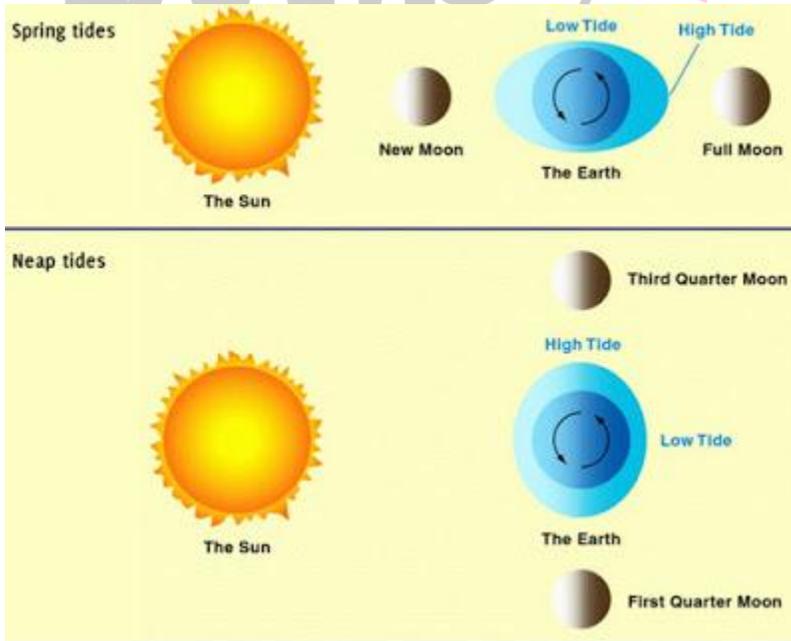
Name of the plate	Located in
Cocos plate	Between Central America and Pacific plate
Nazca plate	Between South America and Pacific plate
Arabian plate	Mostly the Saudi Arabian landmass
Philippine plate	Between the Asiatic and Pacific plate
Caroline plate	Between the Philippine and Indian plate (North of New Guinea)
Fuji plate	North-east of Australia

TIDES:

- Rise and fall of the ocean water at a particular place due to gravitational pull of moon and sun on earth are called tides.
- Interval between two high tides or low tides is 12 hours 25 minutes.
- Bay of Fundy in Nova Scotia, Canada is the place where highest tides occur about the 15-16m high tidal bulge.
- Anchorage, Alaska, with tidal ranges up to 40 feet.



TYPES OF TIDES



SPRING TIDES:

Important Geographical Facts

- When the sun, the moon and the earth are in a straight line, the height of the tide will be higher.
- Occur twice in a month, first on full moon day and second on new moon day.

NEAP TIDES

- the sun and moon are at 90° to each other
- the forces of the sun and moon are acting opposite to one another.
- occur two times in a month.
- *time interval between neap and spring tides is 7 days

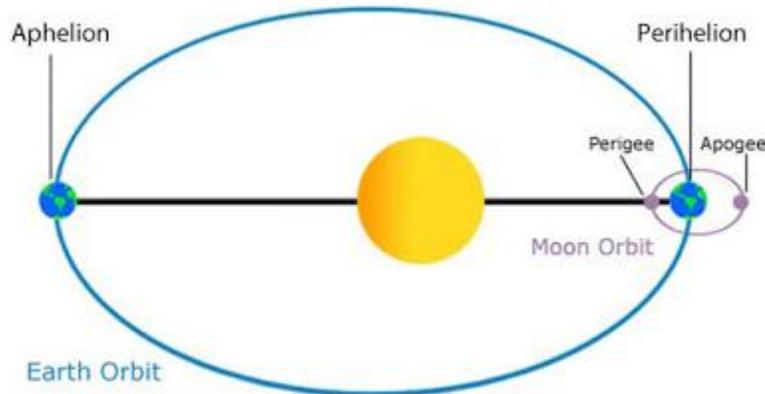
EBB:

- Time between the high tide and low tide.
- Tide falls high to low.

FLOW OR FLOOD:

- Time between the low tide and high tide
- Tide is rises low to high.

MAGNITUDE OF TIDES:



PERIGEE:

- When moon's orbit is closest to earth.

APOGEE:

Important Geographical Facts

- When the moon's orbit is farthest from the earth.

PERIHELION:

- Position of the earth is closest to the sun.

APHELION:

- Position of earth is farthest from the sun.

LUNAR DAY:

- The period of one rotation of the earth on its axis with respect to moon
- About 24 hours 50 minutes.

SOLAR DAY

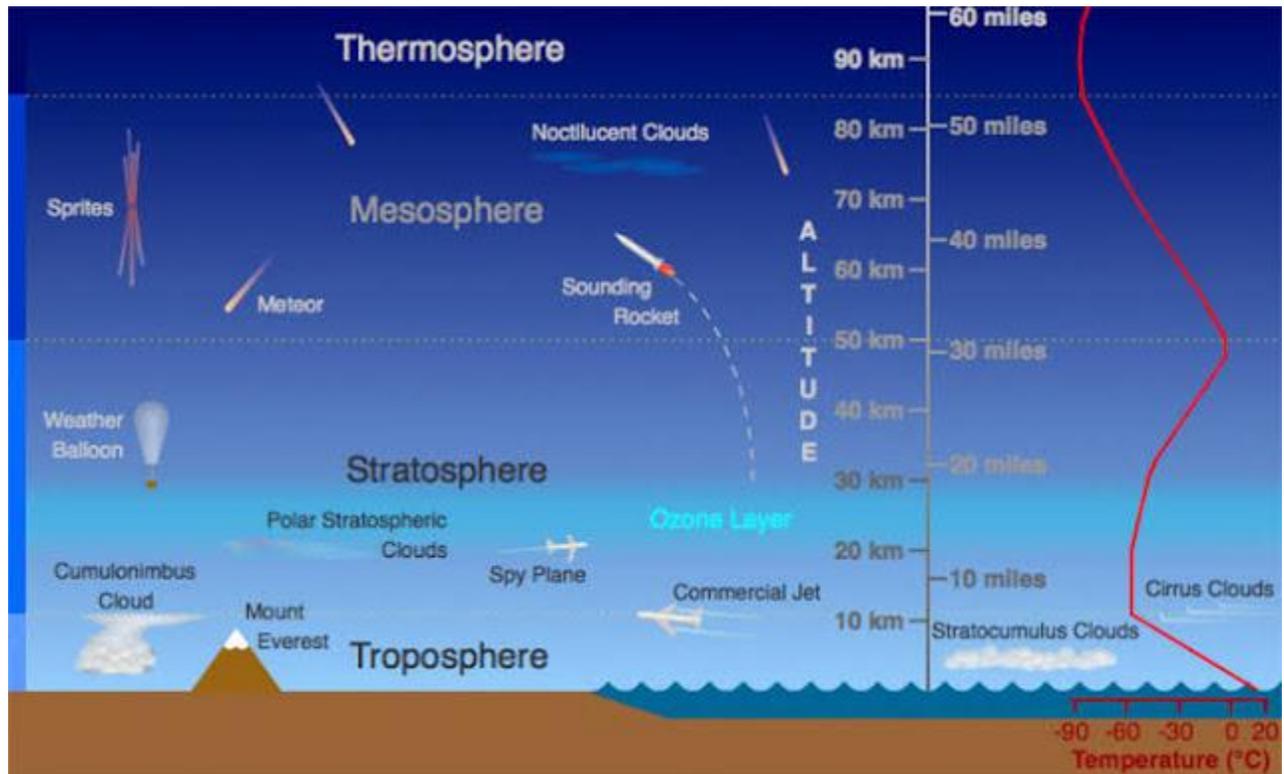
- Time it takes for the Earth to rotate about its axis so that the Sun appears in the same position in the sky.

SIDEREAL DAY

- Time it takes for the Earth to rotate about its axis so that the distant stars appear in the same position in the sky.
- The solar day is approximately 4 min longer than the sidereal day.

ATMOSPHERIC LAYERS

The atmosphere can be divided into layers as follows:-



TROPOSPHERE

- It is the atmospheric layer above earth's surface.
- An altitude of 8 km at poles and 18 km at equator.
- Thickness of troposphere is greater at equator as the heated air rises to greater heights.
- Layer between troposphere and stratosphere is called tropopause.

STRATOSPHERE

- It lies beyond troposphere and spread up to an altitude of 50 km from the earth's surface.
- The temperature remains constant for some distance but then rises to reach the level of 0°C at 50 km altitude due to the presence of ozone layer
- Harmful ultraviolet radiation is absorbed by ozone gases.
- Aeroplanes fly in lower stratosphere, sometimes in upper troposphere due calm weather.
- Cirrus clouds are present at lower stratospheric level.

OZONOSPHERE

- It lies at an altitude between 30 km and 60 km from the earth's surface.
- Found between stratosphere and lower mesosphere.
- Because of the presence of ozone molecules, harmful ultraviolet rays get reflected into space which are coming from Sun.
- It is also called chemosphere due to occurrence of lot of chemical reactions.
- Here, the temperature rises at a rate of 5°C/km.

MESOSPHERE

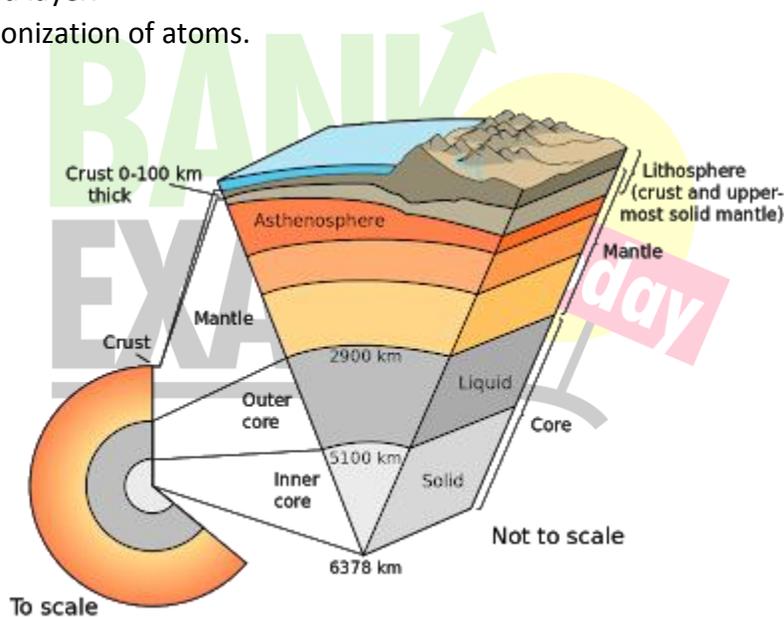
- The layer beyond the ozone layer and continues upto an altitude of 80 km from the surface of earth.
- The temperature declines up to -100°C at 80 km height.
- Meteorites burnt in this layer which are coming from the space.

THERMOSPHERE

- Temperature rises very rapidly with increasing height.
- Ionosphere is a part of this layer. It extends between 80-400 km.
- This layer helps in radio transmission.
- Extremely low pressure.

IONOSPHERE

- Located between 80 km and 400 km.
- Electrically charged layer.
- Characterized by ionization of atoms.



- Radio waves transmitted from the earth surface and then reflected back to the earth by this layer.
- Temperature starts increasing with height due to radiation from the sun.

EXOSPHERE

- Uppermost layer of the atmosphere.
- Found beyond the ionosphere.
- Above height of about 400 km.
- Air is extremely rarefied.
- The temperature gradually increases.
- Light gases like helium and hydrogen are found here

- Temperature increases through the layer due to sunlight exposure.

EARTH'S STRUCTURE

LITHOSPHERE:

- Outermost layer of earth
- Solid in nature.
- It consists Sial, the Sima, and the upper Mantle.
- Underneath, the softer layer found, called as the Asthenosphere.
- The shape of the earth is oblate spheroid.

CRUST

- Crust is the outermost layer of the Earth.
- It is made up of solid rocks.
- It is made of the lighter elements like silicon, oxygen, aluminium and it is known as sial (silicon = Si; aluminium = Al) or felsic.
- It is 133km thick.
- Density varies from 2.8 to 3.2.
- Boundary between crust and mantle is known as Mohorovicic discontinuity.

MANTLE

- The mantle is the layer below the crust.
- It is made up of oxygen, silicon and magnesium.
- It is known as sima (Si for silicon + ma for magnesium) or mafic.
- Boundary between mantle and core is called Gutenberg-Weichert discontinuity.
- Density varies from 4 to 8.
- Thickness is about 2900 km.
- It is made up of the heavy rock peridotite.

CORE

- The Earth's core is made up of iron and nickel.
- Temperature is about 5000–6000°C.
- Outer core is a liquid layer
- Inner core, is center of the Earth.
- It is very hot.
- Density varies from 8 to 10.
- Thickness is about 5270 km.