BAL BHARATI PUBLIC SCHOOL, PITAMPURA, DELHI – 110034
CLASS IX: GEOGRAPHY

CHAPTER 2: PHYSICAL FEATURES OF INDIA

Read the E lesson and the unit :"Physical feature of India" from the textbook (Students may refer to the link given below) . Thereafter, follow the instructions and do the given assignment in a notebook. Please mention date, index and topic.

Text book link : http://ncert.nic.in/textbook/textbook.htm

As discussed in the last module the theory of continental drift followed by theory of plate tectonics attempts to explain the formation of physical features across the globe.
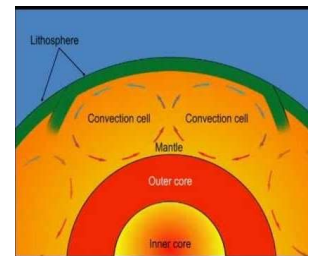
THEORY OF PLATE TECTONICS:

According to theory of plate tectonics:

- The lithosphere is broken into sections called plates.

- There are seven major and a few minor plates.
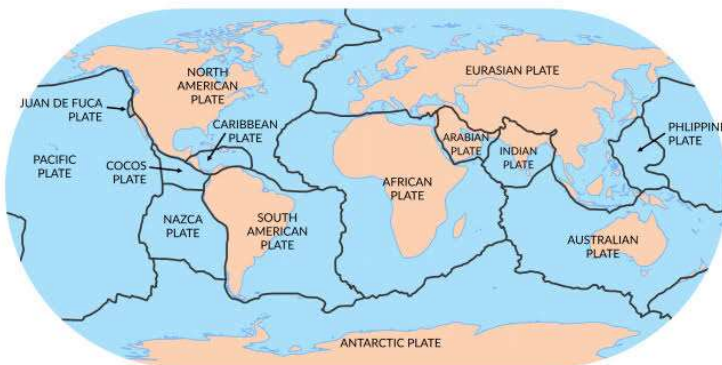
- These plates are in a constant movement due to convection current in the mantel.

- Each plate movement affects the other plates. As the plates move, they change the earth's surface creating new physical features (Mountains, faults, etc)

PLATE MOVEMENT : The above-mentioned plate movements can be classified into three major types:
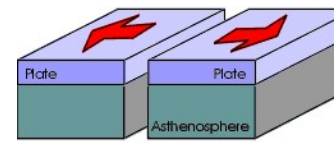
i. **CONVERGENT:**
- Direction of plate movement: The plates move <u>towards each other</u>

- Resultant features: Folded Mountains

- Example: Himalayas
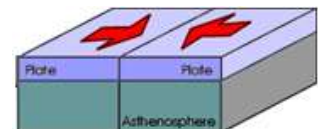
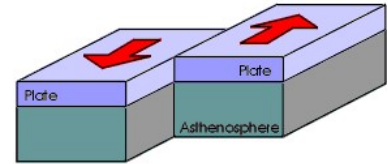Convergent

ii. DIVERGENT:

- Direction of plate movement: The plates move <u>away from each other</u>

- Resultant features: Oceanic ridges or rift valleys

- Example: Mid Atlantic ridge

iii. TRANSFORM:

- Direction of plate movement: The plates <u>slide pass each other</u>

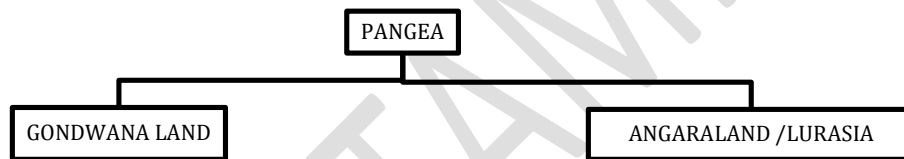- Resultant features: Faults

- Example: San Andres fault in California

The movement of these plates has changed the position and size of the continents over millions of years and has influenced the evolution of the present relief features of the world.

Let us take example of Himalayas to understand how these plate movements helped in its formation.
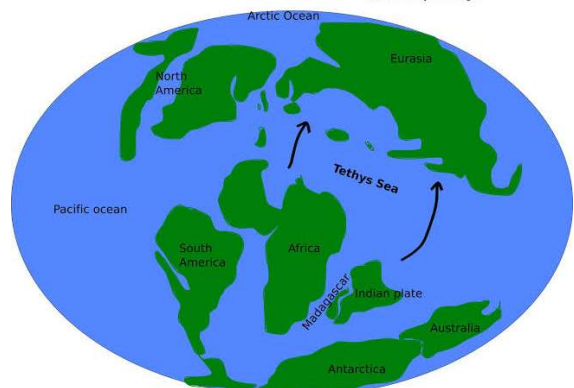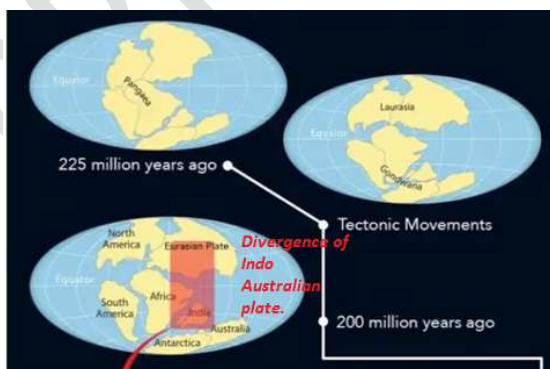
- ❖ After the division of Pangaea into two parts:

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                    ┌──────────┐
                    │  PANGEA  │
                    └────┬─────┘
          ┌──────────────┴──────────────┐
  ┌───────────────┐            ┌──────────────────────┐
  │ GONDWANA LAND │            │ ANGARALAND /LURASIA  │
  └───────────────┘            └──────────────────────┘
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Gondwana land went under further transformation due to the plate movement.

FORMATION OF HIMALAYAS :

- Indo - Australian plate **diverged** from Gondwana land and moved towards Eurasian plate in the north.

• The Indo- Australian plate then **Converged** with Eurasian plate .

• Between the Indo- Australian plate and Eurasian plate lay Tethys sea, which got folded during this convergence.

• This folding of sediments accumulated in the bed of Tethys sea resulted   in the formation of folded mountains called Himalayas.
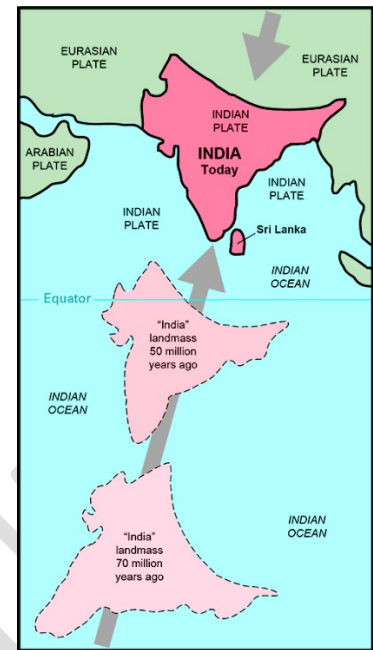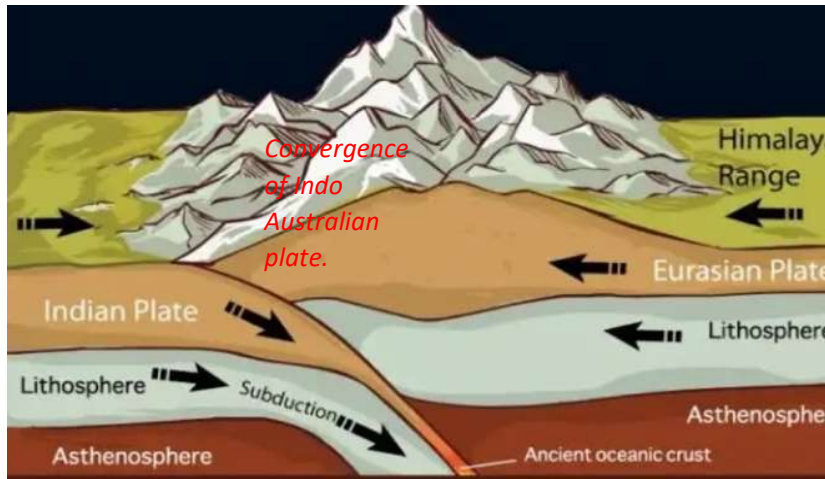
• The marine fossils found in Himalayas also prove this marine origin of the mountain.

ASSIGNMENT:

Q1) Explain the term lithospheric plate .

Q2) Name the seven major plates as per the theory of plate tectonics.

Q3) Differentiate between the three plate movements.

Q4) Explain the formation of the Himalayas.