

## 9. PLATE TECTONICS

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- Plate word was first used by Wilson.
- This theory was proposed by Herry Hess.
- Mainly six plates are there on earth-
  - American Plate
  - African Plate
  - Indo-Australian Plate
  - Pacific Plate
  - Antartica Plate
  - Eurasian Plate.
- There are two types of plates - continental plates are made of Granite where oceanic plates are Basaltic.
- The biggest plate is Pacific plate
- The plates have their boundaries there can be classified into three types of margins -
  - Constructive plate Margins
  - Destructive plate Margins
  - Conservative plate Margins
- **Constructive Margins** : When two plates are moving in opposite direction and a fault gap occurs between these. Through this gap the magma material of atmosphere comes out and a new landform part surface is made. This Margin is also known as divergent boundary. Eg - Mid Atlantic ridge.
- **Destructive Margins** :- When two plates converge towards each other, during this three types of phenomenon occurs:-
  - Continental & continental plate.
  - Oceanic - Oceanic plate.
  - Continental - Oceanic plate.
- **Continental - continental plate** : Oceanic plate is heavier to continental plate. Hence this subducts under continental plate and makes a trench also sediments are folded over the surface and make new folded mountains. eg. - Andis & Rocky
- **Oceanic - Oceanic plate** : When both plates come together then the plate which is heavier subducts under the lighter one and it makes oceanic trench and volcanic islands eg:- Japan or Philippines sea has subduction of Pacific plate.
- **Continental - continental plate** : Volcanic activity doesn't occur here but folded mountain is developed eg: When Indian plate is subducted into Eurasian plate it caused - Himalaya as a result.
- **Conservative Margins** : When two plates move parallel to each other then it may not cause any interaction, this is also known as transform fault. eg: San - Andreas Fault near California.