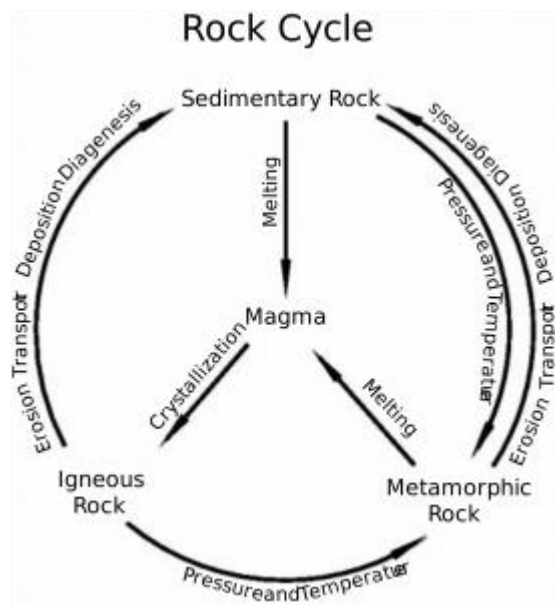


## UPSC Civil Services Examination

### UPSC Notes [GS-I]

#### Topic: Rock Cycle [Geography Notes for UPSC]

##### Rock cycle



- The rock cycle is a basic concept in geology that defines the laborious transitions through geologic time among the three main rock types:
  - Igneous rocks
  - Sedimentary rocks
  - Metamorphic rocks
- Rocks do not remain in their original form for a long period as they undergo a transformation.
- This cycle is an uninterrupted process through which old rocks are converted into new ones.
- Igneous rocks are primary rocks.
- These rocks can be changed into metamorphic rocks.
- Sedimentary and metamorphic rocks form from these primary rocks.
- The fragments evolved out of metamorphic rocks and igneous again form into sedimentary rocks.
- Sedimentary rocks themselves can develop into fragments.
- The crustal rocks -igneous, metamorphic and sedimentary-once formed may be carried down into the interior of the earth through subduction.
- In this process, parts or entire crustal plates subduct under another plate and the same melt at high temperature in the interior.

- This results in the formation of molten magma, the unique source for igneous rocks.

## The Processes of the Rock Cycle

- The rock cycle encompasses several processes.
- The key processes of the rock cycle are:
  - Crystallization
  - Erosion and sedimentation
  - Metamorphism

## Forces that drive the rock cycle

- Plate tectonics
- Spreading ridges
- Subduction zones
- Continental collision
- Accelerated erosion
- Water