Rocks

Introduction

- Rock are the most common material on the Earth.
- The earth's crust is composed of Rock.
- A rock is an aggregate of one or more minerals that have been fused together into a solid.
- Three different types - Igneous, Sedimentary, Metamorphic.

Igneous rock

- Igneous rock are called as primary rock as they are formed out of magma and lava.
- Igneous rock do not contain fossils as their forming material are super hot magnetic materials.
- Depending on the location of cooling of lava Igneous rock classified into two type -
  - 1- Volcanic rock - cooling at the surface like Pumice & basalt
  - 2- Plutonic rock - cooling in the crust like Gabbro & granite

Sedimentary rock

- Sedimentary rocks are those that are formed through deposition and lithification of sediment particle of earth surface.
- They are non-crystalline and often contain fossils.
- Depending upon the mode of formation, it categorized into three group
  - 1- Mechanically formed like sandstone, conglomerate, limestone, shale
  - 2- Chemically formed like chert, halite, potash
  - 3- Organically formed like Chalk, limestone, coal

Metamorphic rock

- Metamorphic rock are formed due to formation of pre-existing rock.
- They are sedimentary or igneous rock that have undergone physical and chemical change under the action of extreme heat and pressure.
- Metamorphic rocks are classified into two major group-
  - 1- Foliated rock - are formed where pressure squeeze the crystals due to different stress, have clear preferential alignment. Like slate which is originated from shale
  - 2 - Non-foliated rock are formed where the crystals have no p preferential alignment. such as limestone become marbel.