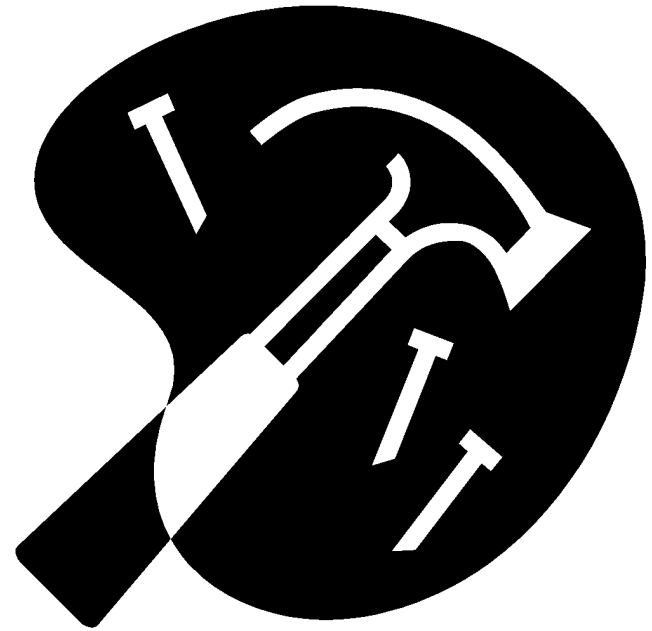
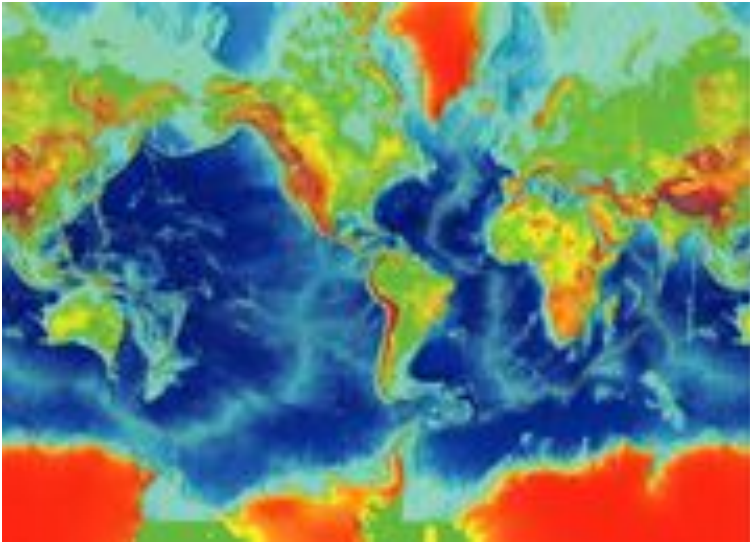


# GEOLOGY

- **Greek word – Combination of two words**

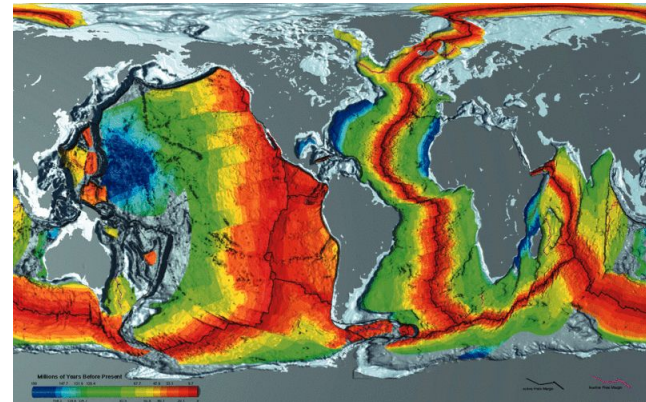
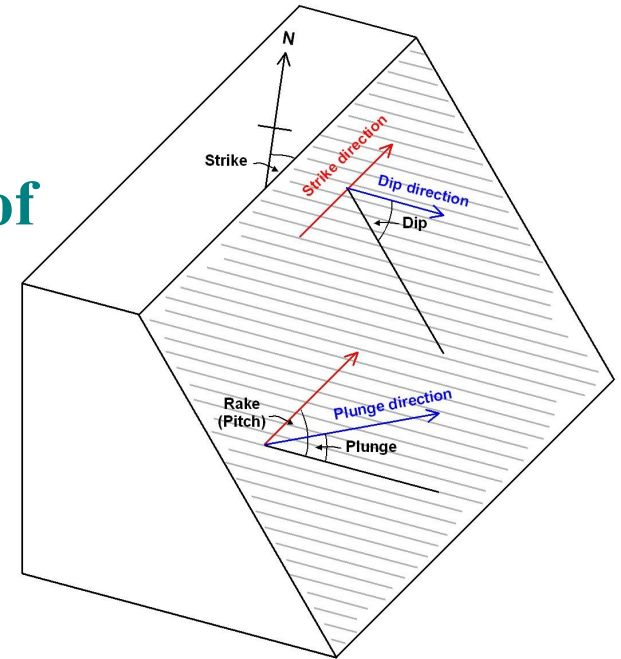
**Geo – Earth and Logy – Science**

- **Branch of science which deals with the study of earth, with regards to its origin, history, structure and composition**



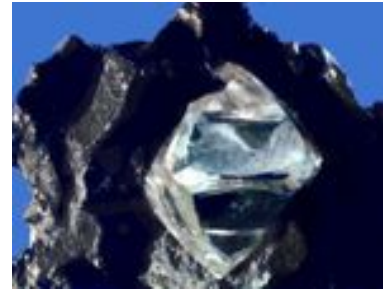
# Branches of Geology

- **Physical Geology** – Deals with the physical forces and processes that bring change in the crust on account of their prolonged existence and action
- **Structural Geology** – Deals with the study of Arrangement of rocks on the earth
- **Geomorphology** – Deals with the Description, explanation and Classification of the relief features of landforms of the earth



Earth seafloor crust

• **Mineralogy** – Deals with the study of Minerals which include the processes of mineral origin and formation, classification of minerals, their geographical distribution, as well as their utilization



Octohedral shape of Diamond



Muscovite

• **Petrology** – Deals with Study of rocks with Regards to its origin, Mode of occurrence, Composition and Classification



Granite



Basalt



Gabbro



Limestone



Shale



Sedimentary formation



Quartzite



Marble

- **Stratigraphy** – Deals with the study of rocks to understand various events of geological history



Layered structure



Identifying stratas based on fossils

- **Paleontology** - Deals with remains of animals and plants of past ages preserved in rocks

- **Economic Geology** – Deals with minerals having economic importance



Extracting fossils from rocks



Open pit copper mine in the world

- **Engineering Geology** – Study of properties of soil building conditions in a given geological environment for different engineering projects
- **Geophysics** – Application of physics and mathematics
- **Geochemistry** – Application of chemistry
- **Environmental Geology** -Like hydrogeologyike hydrogeology, is a multidisciplinary field of applied science and is closely related to engineering geologyike hydrogeology, is a multidisciplinary field of applied science and is closely related to engineering geology and somewhat related to environmental geographyike hydrogeology, is a multidisciplinary field of applied science and is closely related to engineering geology and somewhat related to environmental geography. They all involve the study of the interaction of humans with the geologicike hydrogeology, is a multidisciplinary field of applied science and is closely related to engineering geology and somewhat related to environmental geography. They all involve the study of the interaction of humans with the geologic environment including the biosphereike hydrogeology, is a multidisciplinary field of applied science and is closely related to engineering geology and somewhat related to environmental geography. They all involve the study of the interaction of humans with the geologic environment including the biosphere, the lithosphereike hydrogeology, is a multidisciplinary field of applied science and is closely related to engineering geology and somewhat related to environmental geography. They all involve the study of the interaction of humans

## Relationship To Other Sciences

- **Related to Chemistry, Physics, Botany and Zoology**
- **Botany and Zoology** – Tells us about plants and animals found on the earth - **Geology** tells whether they existed always or earth has supported animals or plants
- **Physics** – Forces now at work on earth (climate, tides, currents, rivers etc.) - **Geology** tells us whether any change in these forces in the past
- **Chemistry** – Indicates chemical composition of various rocks and minerals