

Rocks

1. The solid parts of the earth's crust are called rocks. Most of the rocks are made up of two or more minerals.
2. In the same type of rocks, the proportions of minerals may be different in different areas.
3. Rocks may not always necessarily be hard.
4. Minerals are obtained from rocks.
5. Rocks are classified in three main types depending on the process of their formation : (a) Igneous, (b) Sedimentary, (c) Metamorphic.

Igneous rocks

1. Hot lava pours out at the time of volcanic eruptions and cools down later on, forming rocks.
2. The molten materials known as magma, sometimes cool down beneath the earth's crust, again forming rocks.
3. Both these types of rocks are known as Igneous rocks.
4. When the earth's surface first became solid after it cooled down from its hot liquid state, the original rocks of the earth's crust were formed. They are the Primary Igneous rocks, which are usually not found today.
5. Igneous rocks are generally harder and granular.
6. There are no layers in Igneous rocks.
7. Fossils are not found in Igneous rocks.
8. The formation of Igneous rocks takes place beneath and above the surface of the earth.
9. Rocks formed by the cooling of molten matter beneath the earth's surface are called intrusive igneous rocks. 'Granite' and 'Gabbro' are the main examples of these rocks.
10. The intrusive rocks are thus crystalline rocks.

11. Sometimes, the molten matter oozes out through cracks in the earth's crust and spreads on the surface, forming extrusive igneous rocks.
12. Gabbro, Obsidian, Basalt etc. are examples of extrusive igneous rocks.
13. A very large area of the Deccan Plateau consists of basalt rocks.
14. These rocks contain silica from 40 to 80%, others are felspar, magnesium and iron etc.
15. Other examples of Igneous rocks are-Granite, Pumic stone, Basalt and Gabbro.

Sedimentary rocks

1. They are formed by the deposition, sedimentation and lithification of sediments over a long period of time.
2. As layers over layers get deposited, over a period of time, unified sedimentary rocks are formed on account of the tremendous pressure exerted by the layers above.
3. Sometimes the remains of plants, dead animals etc. are found in the deposited material. Such fossil containing sedimentary rocks are useful for studying life on earth.
4. Sandstone, limestone, shale are some examples of sedimentary rocks.
5. Limestone is white as well as black.
6. Sandstone is dull white, pink, bright red or sometimes black.

Metamorphic rocks

The nature of igneous and sedimentary rocks changes due to the effects of tremendous heat or pressure, and new, transformed rocks, called metamorphic rocks, are formed. Minerals in the rocks get restructured on account of heat and pressure. This brings about a change in the original formation of the rocks.