

Distinguish, differentiate, compare and explain what is the Difference between Metallic and Non-metallic minerals. Comparison and Differences.

## **Types of Minerals**

There are over three thousand different minerals. On the basis of composition, minerals are classified mainly as metallic and non-metallic minerals.

Metallic minerals contain metal in raw form. Metals are hard substances that conduct heat and electricity and have a characteristic lustre or shine. Iron ore, bauxite, manganese ore are some examples. Metallic minerals may be ferrous or non-ferrous. Ferrous minerals like iron ore, manganese and chromites contain iron. A non-ferrous mineral does not contain iron but may contain some other metal such as gold, silver, copper or lead.

Non-metallic minerals do not contain metals. Limestone, mica and gypsum are examples of such minerals. The mineral fuels like coal and petroleum are also non-metallic minerals.

Minerals can be extracted by mining, drilling or quarrying.

## **Difference between Metallic and Non-metallic minerals**

1. Minerals from which metals are extracted are called metallic minerals. Minerals consisting of non-metals are called non-metallic minerals.
2. Metallic minerals are malleable and ductile. Non-metallic minerals are neither malleable nor ductile.
3. Metallic minerals are associated with igneous and metamorphic rocks. Non-metallic minerals are associated with sedimentary rocks.
4. Metallic minerals are usually hard and have shine or luster of their own. Non-metallic minerals are not so hard and have no shine or luster of their own.
5. Examples of Metallic Minerals are: iron, copper, bauxite, tin, manganese etc. Examples of Non-metallic minerals are: coal, salt, clay etc.