

Hematite Fe_2O_3



This mineral comes in many forms, both metallic and non metallic. But, regardless of its form, it can always be identified by its characteristic red streak. It is widely distributed and forms the most abundant and important ore of iron. The name is derived from a Greek word meaning "blood", in allusion to the color of the powdered mineral.

Chromite FeCr_2O_4



The only ore of chromium, chromite is a major constituent in stainless steel. It is one of the first minerals to separate from a cooling magma, and large chromite deposits are thought to have been derived by such magmatic differentiation.

Quartz SiO_2



The most common and abundant of all the minerals, quartz is a significant component of many igneous, metamorphic, and sedimentary rocks. It is found in an impressive range of varieties and colors (purple - amethyst; yellow - citrine; dark - smoky).

Wolframite $(\text{Fe},\text{Mn})\text{WO}_4$



Its dark color, one direction of perfect cleavage, and high specific gravity distinguish this mineral from others. It is comparatively rare. It is a chief ore of tungsten, used as a hardening metal in high-speed tools such as carbides.

Copper Cu



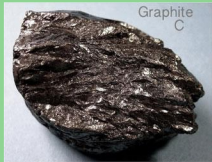
Copper was one of the first metals to be worked into tools and the first metal to be smelted from ores. Its excellent ductility and high conductivity make it very useful in modern society, particularly in electrical devices.

Silver Ag



This mineral is used in jewelry, tableware, coins, scientific equipment and for photography. It was named after the Old English word "seolfor", and is formed in hydrothermal veins and, unlike gold, it tarnishes.

Graphite C



Graphite was named from the Greek "graphein" meaning 'to write'. It is used as a lubricant, to make refractory crucibles and pencils. It feels greasy and leaves dark marks on hands.

Sphalerite ZnS



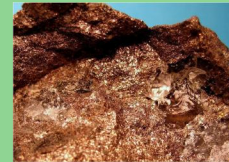
This mineral can be recognized by its resinous luster and perfect cleavage. It is the most important ore of zinc, which is used in galvanizing iron, making brass paint, wood preservative, dyes and medicines.

Sulfur S



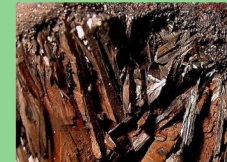
Sulfur can be easily identified by its yellow color and its "rotten egg" smell when burned. It is used in the manufacture of paper, sulfuric acid as fertilizers, insecticides and explosives.

Pentlandite $(\text{Fe},\text{Ni})_9\text{S}_8$



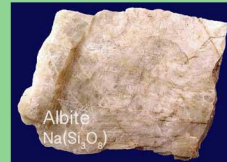
Pentlandite is the main ore of nickel, which is used chiefly in steel. Nickel is also an essential component of stainless steel. The mineral is non-magnetic.

Pyrolusite MnO_2



One of the most common manganese ore minerals, pyrolusite is used in making steel. It was named in 1827 from the Greek word for "fire" and "to wash" because it was used to remove brown and green tints in the making of glass.

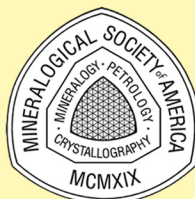
Feldspar



Feldspar is the name of a group of aluminum silicate minerals and is collectively the most common mineral group found on the surface of Earth.



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