

Color: Color is an extremely diagnostic property of a mineral. But, for some minerals it is not at all diagnostic because minerals can take on a variety of colors. These minerals are said to be allochromatic. For example quartz can be clear, white, black, pink, blue, or purple. Read pages 234-241 from Mineral Science, by Klein and Dutrow 23rd edition to learn about what causes minerals to have color.

Streak: Streak is the color produced by a fine powder of the mineral when scratched on a streak plate. It is often different than the color of the mineral in non- powdered form

Luster: Luster refers to the general appearance of a mineral surface to reflected light. Two general types of luster are designated as follows, Metallic and Non- metallic.

Metallic - looks shiny like a metal. Usually opaque and gives black or dark colored streak.

Non-metallic - Non metallic lusters are referred can be...

 vitreous - looks glassy - examples: clear quartz, tourmaline

 resinous - looks resinous - examples: sphalerite, sulfur.

 pearly - iridescent pearl-like - example: apophyllite.

 greasy - appears to be covered with a thin layer of oil - example: nepheline.

 silky - looks fibrous. - examples - some gypsum, serpentine, malachite.

 adamantine - brilliant luster like diamond.

Play of Colors: Interference of light reflected from the surface or from within a mineral may cause the color of the mineral to change as the angle of incident light changes. This sometimes gives the mineral an iridescent quality.

Minerals that show this include:

 labradorite (plagioclase)

 bornite (Cu_5FeS_4)

 hematite (Fe_2O_3)

 sphalerite (ZnS),