

Minerals

A **mineral** is a naturally occurring chemical compound. Rocks, on the other hand, are made up of pieces of minerals. We can classify minerals based on a series of tests we complete.

Luster

Luster is the quantity and quality of light that is reflected from the surface of the mineral. Minerals can be classified into metallic and non-metallic. **Metallic** means that the mineral looks like a metal. Metallic minerals are commonly shiny and opaque. **Non-metallic** minerals do not look like metal, and they are relatively dull.

Colour

Colour is one of the first things you might notice about a mineral. Some minerals have very unique colours such as the brassy golden colour of pyrite or the yellow colour of sulfur. Colour is not always the best way to identify a mineral. There are some minerals, though, that are colourless or white. Other minerals can be found in more than one colour.

Streak

Streak refers to the colour of the powdered form of a mineral. Completing a streak test involves scraping a mineral sample across an unglazed, white tile known as a streak plate. The streak produced by a mineral is not always the same as the color of the mineral itself. To the left you see an example of what a streak test looks like.

Transparency

The amount of light that is able to pass through a mineral determines its transparency. Transparent minerals let light pass

through. Translucent minerals partially let light pass through. Opaque minerals do not let any light through.

Hardness

The hardness of a mineral refers to its ability to resist scratching. Over 100 years ago a German mineralogist (someone who studies minerals) developed a hardness scale. The Mohs Scale of Hardness ranks the order of hardness of minerals and some common objects that have the same level of hardness.

Level of Hardness	Mineral	Common Objects
1	Talc	
2	Gypsum	Fingernail
3	Calcite	Copper Penny
4	Fluorite	Iron Nail
5	Apatite	Glass
6	Feldspar	Steel File
7	Quartz	Streak Plate
8	Topaz	
9	Corundum	
10	Diamond	