

Objective: Know the properties of minerals and how they are used to identify a mineral.

A mineral's luster helps identify it

If you've seen a diamond you remember how sparkly and reflective it was. If you've seen sulfur, you should remember that it has a slightly reflective surface. How light interacts with a mineral is known as its luster. Luster is the way _____ reflects from a mineral's _____.

There are two categories of luster: _____ and _____. Metallic minerals look like metal. Nonmetallic minerals have a variety of looks. Therefore, nonmetallic luster is described in several other ways.

1. _____: the surface of the mineral has the appearance of being coated with an oil or grease.
2. _____: the mineral has a white appearance.
3. _____: it appears to have fibers running through it; it looks like silk
4. _____: rock-like. There is very little reflection of light. It is dull. (Think of a piece of dirt or a rock)
5. _____: transparent or translucent, appears to be coated with glass. Looks like a crystal.

Like a mineral's color, the luster of a mineral can _____ from sample to sample. For example, hematite can be metallic or earthy. Why? For the same reasons color can change. If a mineral has been exposed to the _____ or _____, its surface luster can change. Also, the _____ affects a mineral's luster. However, if the surface luster looks unusual, the mineral can be broken. This will reveal a fresh surface and the actual luster can be seen.