**MINERALOGY**

**This is a mineral identification assignment. There are 15 minerals from my private collection on the window side counter tops. Take a good look at each mineral with a magnifying glass, or my hand lense. For each mineral note:**

1. **Color**
2. **Luster -** Determine using the information in this handout
3. **Specific gravity -** Read the information on this handout - *Internet research*
4. **Hardness -** Read the information on this handout - *Internet research*
5. **Uses/Value: Gemstone/Jewelry, Mined for elements (eg: lead, vandium, silver), Rare/Collectable (***Internet research***)**
6. **Notable locations where found (***Internet research***)**
7. **Interesting Fact/Historical Information(***Internet research***)**

**Below is the list of mineral.**

1. **Stibnite**
2. **Stilbite**
3. **Apatite**
4. **Galena**
5. **Azurite**
6. **Malchite**
7. **Fluorite**
8. **Wavellite**
9. **Erythrite**
10. **Tourmaline**
11. **Native Sulfur**
12. **Vanadinite**
13. **Mesolite**
14. **Borate**
15. **Cuprite**

**Hardness**

Hardness is one of the better properties of minerals to use for identifying a mineral. Hardness is a measure of the mineral’s resistance to scratching. The Mohs scale is a set of 10 minerals whose hardness is known. The softest mineral, talc, has a Mohs scale rating of one. Diamond is the hardest mineral and has a rating of ten. Softer minerals can be scratched by harder minerals because the forces that hold the crystals together are weaker and can be broken by the harder mineral.

The following is a listing of the minerals of the Mohs scale and their rating:

1. Talc
2. Gypsum
3. Calcite
4. Fluorite
5. Apatite
6. Orthoclase Feldspar
7. Quartz
8. Topaz
9. Corundum
10. Diamond

**Luster**

Luster is the property of minerals that indicates how much the surface of a mineral reflects light.

**Metallic** The mineral is opaque and reflects light as a metal would.

**Submetalic** The mineral is opaque and dull. The mineral is dark colored.

**Nonmetalic** The mineral does not reflect light like a metal.

**Waxy** The mineral looks like paraffin or wax.

**Vitreous** The mineral looks like broken glass.

**Pearly** The mineral appears iridescent, like a pearl.

**Silky** The mineral looks fibrous, like silk.

**Greasy** The mineral looks like oil on water.

**Resinous** The mineral looks like hardened tree sap (resin).

**Adamantine** The mineral looks brilliant, like a diamond.

**Specific Gravity**

Specific Gravity of a mineral is a comparison or ratio of the weight of the mineral to the weight of an equal amount of water. The weight of the equal amount of water is found by finding the difference between the weight of the mineral in air and the weight of the mineral in water.