**Mineral Identification Notes**

**Identifying Minerals**

* Each \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ has its own specific properties used to identify it.

**Color**

* The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ mineral can come in a variety of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Ex. Quartz
* Impurities & other factors can \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ mineral appearance
* Color is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ the best way to identify minerals

**Luster**

* Describes how a surface reflects \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Ex. shiny/dull
* Metallic- minerals containing metals are often \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Nonmetallic
  + Vitreous- glassy, brilliant
  + Silky-fibrous
  + Resinous-plastic
  + Waxy- greasy, oily
  + Pearly- creamy
  + Earthy- rough, dull

**Streak**

* Color of mineral in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ form
* Observed by rubbing a mineral against a piece of unglazed porcelain called a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ plate
* Streak doesn’t vary like color & is often \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ than a mineral’s color
* More \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ than color

**Cleavage and Fracture**

* Way a mineral breaks apart determined by arrangement of atoms
* Cleavage- breaks along \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ surfaces
* Fracture- mineral breaks in an irregular way

**Hardness**

* Minerals resistance to being scratched
* Ranks minerals from softest to hardest
* Talc- softest known mineral
* Diamond- hardest known mineral

**Density**

* Mass in a given space/ mass per unit volume
* D= M/V
* Density remains same regardless of sample size
* Mass determined using \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Volume determined using water displacement method
* Comparisons can be made by hefting
* Specific Gravity- ratio of an object’s density to the density of water

**Special Properties**

* Fluorescence- minerals glow under ultraviolet light, ex. fluorite & calcite
* Magnetism- ex. Magnetite
* Radioactive- ex. contain radium or uranium
* Effervescence- mineral fizzes (releases carbon dioxide) when in contact with hydrochloric acid, ex. calcite