

Cornell Notes 10/28/16

Topic: Physical Properties of Minerals

E.Q.: How do I Test physical Properties of Minerals?

I. Mineral Appearance

Least
Reliable $\leftarrow$

- a. mineral properties can help you recognize & distinguish Minerals
- b. Color is a property that MUST be used carefully
- c. Many Minerals have a variety of colors Naturally

II Specific Gravity

*None of
The Best to
use.

- a. Same as Density - using H_2O
- b. Calculate S.G. or ~~Density~~
Density: $\frac{Mass}{Volume}$ (Divide)
- c. you must use Water Displacement for Volume

III Streak

- a. Rub across a Black or White Streak Plate
- *b. Streak Powder is very reliable when identifying Minerals
- c. Graphite is a Mineral used in pencils.

IV Cleavage OR Fracture

a. The Way a Mineral breaks.
Natural Break, also the
way found in Nature

b. Minerals can be observed
to demonstrate
ONE - Cleavage OR Fracture
Not both.

c. Cleavage Observation	Fracture Observation
Look like Stacked up Paper.	Looks like Jagged, Sharp edges
- You observe/see <u>Flat Layering</u>	- You observe uneven, Rough, Not smooth Edges
- Breaking along Flat pieces.	- Not Flat