CHAPTER 3: MINERALS

LUSTER

"HOW A MINERAL REFLECTS LIGHT"

→ METALLIC LUSTER

or

→ NON-METALLIC LUSTER

EX: Waxy

EX: Vitreous (Glassy)

EX: Silky

EX: Pearly

EX: Earthy

EX: Dull

EX: Resinous (Plastic-Like)

EX: Greasy

EX: Chalky

EX: Adamantine (Shines and Sparkles Like a Diamond)

NOTE: "SHINY" AND "CLEAR" ARE **NOT** TYPES OF LUSTER!

MINERAL IDENTIFICATION TESTS

- a. Hardness
 - **RATE** mineral from 1-10.
 - Refer to the Hardness Scale on page 69 in the textbook.
 - fingernail (2.5) penny (3.0) nail (4.5) glass (5.5) streak plate (7.0)
- b. Luster
 - Determine if the mineral is **METALLIC** or **NON-METALLIC**.
 - Use a second term if the mineral is non-metallic.
- c. Streak Test
 - Use the streak plate to determine the color of the mineral's *POWDER*.
- d. Break Pattern
 - Determine if the mineral has <u>CLEAVAGE</u> or <u>FRACTURE</u>.
- e. Crystal System
 - Determine the shape of the mineral's crystals.
 - Choose from *CUBIC*, *HEXAGONAL*, *MONOCLINC*, etc...
 - Refer to the pictures on page 64 in the textbook.
- f. Optical
 - Determine how you can (or can't) see through the mineral.
 - Choose from *OPAQUE*, *TRANSPARENT*, *TRANSLUCENT*, *FIBER OPTIC*, *DOUBLE REFRACTION*, or *PRISM*.
- g. Density
 - Determine if the mineral is *LIGHT*, *MEDIUM*, or *HEAVY*.
- h. Other
 - Determine if the mineral is <u>MAGNETIC</u>, <u>FIZZES IN ACID</u>, <u>TASTES SALTY</u>, or has any other unusual properties not yet mentioned.