Mineral Properties Notes Key

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How can I identify minerals? I can identify minerals by their properties.

How to test mineral properties

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| Property | Important facts | How to test this property |
| Color | * Easiest property to observe * Only useful for a few minerals that are always the same color. | Look at the mineral and identify the color |
| Luster | * How a mineral reflects light   3 types of luster:   1. Metallic (looks like metal) 2. Submetallic (looks like dull metal) 3. Non-Metallic (does not look like metal) | Look at the mineral under light and see how it reflects the light |
| Streak | - The color of a minerals powder  \* The streak does not change even if the color of the mineral does.  Ex. Quartz can be many different colors but its streak is always white. | 1. Hold the mineral firmly and scratch the mineral on the streak plate. 2. Record the color of the minerals powder that is left behind. |
| Cleavage  or  Fracture | * Mineral splits evenly along flat surfaces   ======================   * Mineral breaks apart in a jagged pattern | Observe the mineral.  Cleavage looks like smooth flat surfaces.  ========================  Fracture looks like ugly rough pieces |
| Hardness | * Mohs’ hardness scale ranks minerals from 1 to 10 in order of hardness (Talc is softest, Diamond is hardest) * A mineral can scratch any mineral softer than itself |  |
| Density | - The measure of how much mass is in a given amount of space.  - always the same for each mineral | 1. Find the mass on a scale. 2. Find the volume using graduated cylinder. 3. Use the formula below to calculate the density. |
| Other  Special  Properties | * Fluorescence – glows in the dark * Magnetic * Chemical reactions * Taste * Smell |  |