**Minerals 101 – Student Worksheet**

1. Rocks are made of different combinations of Minerals ?
2. Minerals are made of elements.
	1. Define an element: Any substance that cannot be broken down into simpler substances.
3. Outline the properties of minerals with an explanation for each:
	1. **S** – Solid
		1. Not a liquid or gas
	2. **N** – Naturally Occurring
		1. Found in nature not man made
	3. **I** – Inorganic
		1. Not living, not formed by living processes
	4. **F** – Fixed Composition
		1. Has a chemical formula
	5. **C** – Crystal Form
		1. A structure where atoms are in an orderly and repeated pattern.
4. What are the 5 steps for mineral identification?
	1. Luster
	2. Hardness
	3. Color
	4. Cleavage
	5. Streak
5. Define: Luster
	1. Luster refers to how light is reflected from the surface of a mineral.
6. Define: Hardness
	1. Hardness of a mineral is its ability to resist scratching.
7. Who developed the hardness scale, and what mineral has a hardness of 10?
	1. Friedrich Mohs, and the diamond
8. Define: Color
	1. Caused by the absorption of wavelengths of light by the mineral and their combination of wavelengths reaching the eye.

1. Define: Cleavage
	1. The ability of a mineral to break along preferred planes.
2. Define: Streak
	1. The color of the powder left on a streak plate when the mineral is scraped across it.

****

**Fun Fact:** The mineral pictured above is Obsidian!

* Its name comes from the name of a man, Obsius, who was supposed to have found this rock in Ethiopia thousands of years ago. Obsidian is ancient volcanic glass and was once widely used for arrowheads.