**Geology 3**

**Rocks and Minerals**

1. **What is a mineral?**
	1. Inorganic means:
		1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	2. How do minerals form then?
		1. Minerals are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ occurring.
		2. Solid with a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ structure.
			1. Atoms are arranged in a specific pattern that is unique to each mineral.
		3. They are inorganic.
		4. Have a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ composition.
			1. What is NaCl??? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. **What are Atoms?**
	1. The \_\_\_\_\_\_\_\_\_\_\_\_\_ unit of a chemical element, or the \_\_\_\_\_\_\_\_\_\_\_\_ unit of matter.
3. **Examples of minerals:**
	* 1. Ore: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
		2. Gems: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
		3. Rock
4. **Formation of Minerals**
	1. As \_\_\_\_\_\_\_\_\_\_\_ cools, atoms are arranged in a specific order.
	2. Formed from melted \_\_\_\_\_\_\_\_\_\_\_\_ that reaches Earth’s surface.
		1. What is this melted rock called? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
	3. Evaporation
	4. Precipitation
5. **Identifying Minerals**
	1.
	2.
	3. Specific gravity = \_\_\_\_\_\_\_\_\_\_\_\_\_\_
	4. Other properties:
		1.
		2.
6. **Are Rocks Minerals?**
	1. Yes!! Why?
		1.
		2.
7. **ROCKS!**
	1. \_\_\_\_\_\_\_\_\_\_ different types:
		1. Igneous
		2. Sedimentary
		3. Metamorphic
	2. \_\_\_\_\_\_\_\_\_\_\_ Rock
		1. Formed by the \_\_\_\_\_\_\_\_\_\_\_\_\_ of magma and lava.
		2. Most abundant of all rock types.
		3. The original rock found on \_\_\_\_\_\_\_\_\_\_\_.
	3. \_\_\_\_\_\_\_\_\_\_\_\_ Rock
		1. formed at the Earth’s \_\_\_\_\_\_\_\_\_\_\_ from the \_\_\_\_\_\_\_\_\_\_\_\_ pieces of pre-existing rocks.
		2. Types of weathering:
			1. Mechanical (physical)
				1. Breaks \_\_\_\_\_\_\_\_\_\_\_ into pieces. No \_\_\_\_\_\_\_\_\_\_\_ change.
			2. Chemical
				1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ properties that make up the rock change.
				2. Acid rain causes chemical weathering.
			3. Erosion
				1. Movement of \_\_\_\_\_\_\_\_\_\_\_\_ from place to place by \_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_, and \_\_\_\_\_\_\_\_\_.
	4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Rock
		1. Formed by the \_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_ alteration of pre-existing rocks by the application of \_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_.
8. **The Rock Cycle**
	1. Any rock can change into any other rock at any time in any order!!
	2. Melting, \_\_\_\_\_\_\_\_\_\_\_\_ and rising.
	3. \_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_.
	4. Burial and \_\_\_\_\_\_\_\_\_\_\_\_\_.
	5. \_\_\_\_\_\_\_\_\_\_ and pressure.