**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**


   3. Specific gravity = \_\_\_\_\_\_\_\_\_\_\_\_\_\_
   4. Other properties:
6. **Are Rocks Minerals?**
   1. Yes!! Why?
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.