**Mineral Makeup**

This activity is designed to help you learn about the mineral composition of various rocks.

**Materials:**

* Small piece of white paper
* Sample of Granite (coarse-grained)
* Crushed Granite
* Sample or picture of mica
* Sample or picture of feldspar
* Sample of Sandstone
* Sample of Rose Quartz
* Hand lens
* Toothpick

**Procedure:**

1. Carefully examine the samples of quartz, mica, and feldspar using the hand lens.
   1. Describe the appearance of each.

* Quartz - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Mica - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Feldspar - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Examine the sample of granite with the hand lens.
   1. How many different kinds of particles appear to make up a piece of granite?
   2. List the colors OR appearances of each of the particles.
2. Now, look at the appearances of quartz, mica, and feldspar that you listed above.
   1. Are there any similarities between those minerals and the sample of granite? (yes or no)
   2. What can you infer are some of the minerals that makeup granite?
3. Now, take a small sample of crushed granite and spread it on a sheet of white paper. With your toothpick, separate the different kinds of particles into individual piles.
4. Carefully examine the particles in each pile with the hand lens.
   1. How does the color or appearance of these particles compare with those observed in the solid granite rock?
   2. Why is it better to examine the crushed rock, rather than the solid rock, to determine the characteristics of its minerals?
5. Examine the piece of sandstone rock with the hand lens.
   1. How does sandstone differ from granite in appearance?
   2. Of how many different minerals does sandstone seem to be composed?