 List the characteristics that classify minerals from other substances:

(1)

(2)

(3)

(4)

(5)

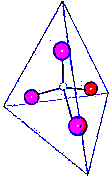
* Almost 4000 have been identified
* A few are *\_\_\_\_\_\_\_\_\_\_\_\_\_* -- made of only one element that exists by itself, (such as gold or copper) and also rock-forming elements.
* Most are *\_\_\_\_\_\_\_\_\_\_\_\_\_*
* Sometimes, compounds are only mineral \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(ice, diamonds) but not in others.
* A \_\_\_\_\_\_\_\_ is a very valuable mineral that is prized for it’s appearance.

minerals have a chemical group in their formula which gives them distinct

characteristics. Here is a summary of the top 3 mineral families/groups. . .

***MINERAL CHEMISTRY***

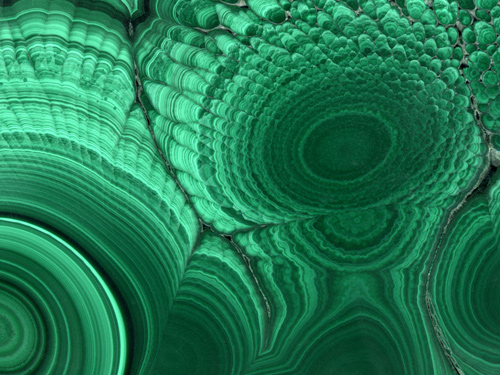
Most



1. Silicates ( - SiO4)



1. Carbonates: ( - CO3)
2. Oxides / Hydroxides: ( - OH / -O3)



***MINERAL IDENTIFICATION:***

There are many tests and observations that scientists use to find the identity of 4000+ minerals! However, here are some of the common ones:

|  |  |
| --- | --- |
| TEST/OBSERVATION | DESCRIBE OR DEFINE: |
| Hardness (Moh’s Hardness scale) |  |
| Crystal shape/form | ***WHAT 4 THINGS ARE NEEDED TO GROW A CRYSTAL?***  ***1)***  ***2)***  ***3)***  ***4)*** |
| Luster  http://www.visionlearning.com/img/library/modules/mid130/Image/VLObject-3365-050502120515.jpg |  |
| Color / Streak: |  |

|  |  |
| --- | --- |
| Cleavage vs. Fracture:  http://depthome.brooklyn.cuny.edu/geology/core332/images/cleavage.jpg |  |
| Misc. tests:   * Specific Gravity – * Acid – * Flourescence – * Taste – * Magnetism – |  |

What is an ore?