

# Mineralogy 4 Kids- Notes

**Mineral Groups:** Use the website to complete these notes.

Minerals are classified according to \_\_\_\_\_. There are \_\_\_\_\_ major chemical groups.

## Non-Silicates (Groups 1-6):

- Native Elements:** are composed of \_\_\_\_\_ of a \_\_\_\_\_ element.
  - Three example of native elements are: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
- Halides:** These contain the elements: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ that combine with one or more \_\_\_\_\_.
  - Minerals of the halide group have:
    - \_\_\_\_\_ hardness
    - \_\_\_\_\_ to \_\_\_\_\_ melting points
    - \_\_\_\_\_ conductors of \_\_\_\_\_ and \_\_\_\_\_
  - Three example of halide minerals are:
    - \_\_\_\_\_ formula = \_\_\_\_\_
    - \_\_\_\_\_ formula = \_\_\_\_\_
    - \_\_\_\_\_ formula = \_\_\_\_\_
- Sulfides:** These are made up of metal \_\_\_\_\_ (+2) combined with \_\_\_\_\_.
  - Most of these minerals transmit light, or are \_\_\_\_\_.
  - They have distinctive colors and colored \_\_\_\_\_.
  - Three example of sulfide minerals are:
    - \_\_\_\_\_ formula = \_\_\_\_\_
    - \_\_\_\_\_ formula = \_\_\_\_\_
    - \_\_\_\_\_ formula = \_\_\_\_\_
- Carbonates:** These are composed of the \_\_\_\_\_ ion  $\text{CO}_3$  and \_\_\_\_\_ cations.
  - There are three main groups: \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_
  - Three example of carbonate minerals are:
    - \_\_\_\_\_ formula = \_\_\_\_\_
    - \_\_\_\_\_ formula = \_\_\_\_\_
    - \_\_\_\_\_ formula = \_\_\_\_\_

5. **Sulfates:** The basic unit is the \_\_\_\_\_ group. These combine with \_\_\_\_\_.
- There are two main groups: \_\_\_\_\_ and \_\_\_\_\_.
  - Three example of sulfate minerals are:
    - \_\_\_\_\_ formula = \_\_\_\_\_
    - \_\_\_\_\_ formula = \_\_\_\_\_
    - \_\_\_\_\_ formula = \_\_\_\_\_

6. **Oxides:** these minerals consist of \_\_\_\_\_ combined with one or more \_\_\_\_\_.
- Three example of oxide minerals are:
    - \_\_\_\_\_ formula = \_\_\_\_\_
    - \_\_\_\_\_ formula = \_\_\_\_\_
    - \_\_\_\_\_ formula = \_\_\_\_\_

7. **Silicates:** these are considers the \_\_\_\_\_ of all the mineral classes.
- List any 5 facts about silicates:
    - \_\_\_\_\_
    - \_\_\_\_\_
    - \_\_\_\_\_
    - \_\_\_\_\_
    - \_\_\_\_\_

- There are 6 classes of silicates, list each plus one mineral with the formula:
  - \_\_\_\_\_ ex: \_\_\_\_\_
  - \_\_\_\_\_ ex: \_\_\_\_\_
  - \_\_\_\_\_ ex: \_\_\_\_\_
  - \_\_\_\_\_ ex: \_\_\_\_\_
  - \_\_\_\_\_ ex: \_\_\_\_\_
  - \_\_\_\_\_ ex: \_\_\_\_\_