

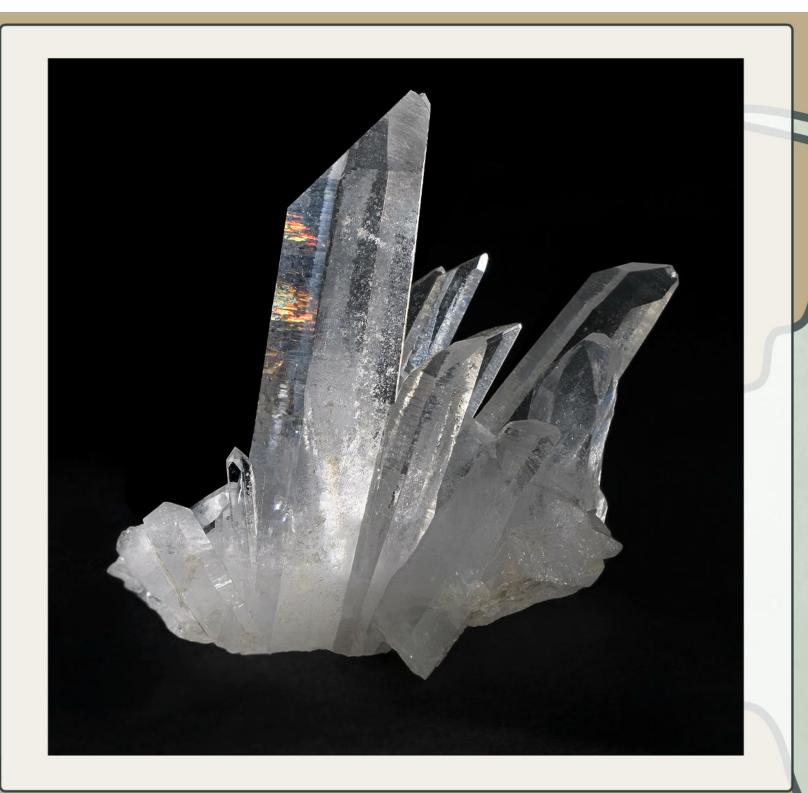




Minerals and Rocks

Minerals are the building blocks of the earth. A mineral is a combination of elements that forms an inorganic, naturally occuring solid of a definite chemical structure. For example: SiO2 is always the mineral quartz. A rock is a solid material that is composed of various minerals.





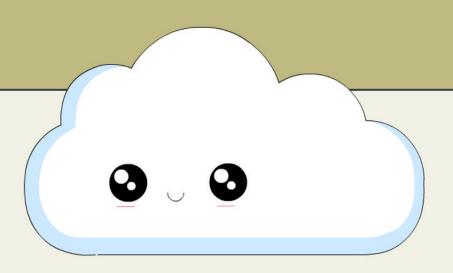












Minerals can have a variety of crystalline shapes. The shape of the crystal is dependent on the sizes of the atoms of the elements, the chemical bonds that hold the elements together to form the mineral, and the pressure and temperature at which the mineral formed.











Only several hundred of the thousands of known minerals are important rock-forming minerals. As one might guess, their chemical compositions contain mostly the eight most common elements in the crust-oxygen, silicon, aluminum, iron, calcium, sodium, potassium, and magnesium. The important rock forming mineral groups are quartz, feldspars, amphiboles, pyroxenes, clays, micas, and carbonates.



rock forming minerals

- quartz
- feldspar
- amphibole
- pyroxene









- mica
- clay
- calcite
- gypsum

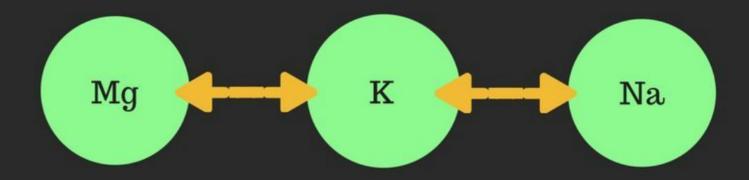








Balancing 3 of the Main Minerals:



Magnesium, Sodium, and Potassium



A rock's color is determined by its mineral components: quartz, feldsper, carbonates and some micas are generally light-colored, tan, or pinkish, pyroxenes, amphiboles, and some micas are dark green to blacklish because of their high iron and magnesium content.







igneous Rock – Intrusive with large crystals. Composed mainly of quarts and feldspar.

Granite



Igneous Rock -Dark Coloredi. Extrusive with fine grain-crystals. Forms from cooled lava.

Basalt



Igneous Rock -Forms when molten tock material cooled rapidly. The result is a volcanic glass. No crystals (usually)

Obsidian



igneous Rock intrusive, A coarsegrained rock that contains a mixture of feldspar, pyroxene, hombiende and sometimes quarts.

Diorite



Igneous Rock – Extrusive, A lightcolored rock, It forms through very rapid cooling.

Pumice



Igneous Flock -Extrusive, A finegrained tock composed mainly of plaglociose with other minerals such as homblende, pyraxene and biotile.

Andesite



Igneous Rock Intrusive, Coarsegrained, darkcolored. It is usually
black or dark green in
color. It is the most
abundant rock in the
deep oceanic cryst.

Gabbro



Igneous Rock -Edusive, a lightcolored, finegrained rock that typically contains quarts and feldspar minerals.

Rhyolite



Superlative Adjs

english for free



