

General Rock & Mineral

1. This is the mineral in Quartzite
2. This extrusive igneous rock contains phenocrysts of amphibole and other mafic minerals in a fine-grained, pale green/gray groundmass
3. This mineral reacts with dilute hydrochloric acid; it is present in marble
4. This mineral is dense, has a metallic luster, and is a source of lead
5. The parallel alignment of muscovite grains in this rock reflects its origin as a metamorphic rock
6. This Igneous intrusive rock contains plagioclase feldspar, quartz, and potassium feldspar
7. This medium green mineral has conchoidal fracture, and is characteristic of ultramafic rocks
8. This rock is a dark-colored (mafic) extrusive igneous rock
9. This mineral forms chemical sedimentary rocks, and is typical of 'evaporites'

Hardness

1. This common mineral has a hardness of 7
2. This mineral is common in biochemical sedimentary ☐ rocks and has a hardness of 3
3. This soft mineral has a hardness of 1-2.5, & a white streak
4. This mineral (mistaken for corundum by the founders ☐ of 3M) is present in most mafic igneous rocks, and ☐ has a hardness of 6
5. This ore mineral has a hardness of 5.5, but its most ☐ distinctive feature is its brick red streak
6. This mineral has a metallic luster, a hardness of 2.5, ☐ and a distinctive streak
7. This mineral has a metallic luster, a hardness of 6-6.5, ☐ and a distinctive streak
8. This mineral has one perfect cleavage and a hardness ☐ of about 2.5
9. This mineral is found in granites, and has a hardness of 6



Formulas

1. $(\text{Mg}, \text{Fe})_2 \text{SiO}_4$
2. SiO_2
3. $(\text{Mg}, \text{Fe}) \text{SiO}_3$
4. KAlSi_3O_8
5. $(\text{Ca}, \text{Na}) \text{AlSi}_3\text{O}_8$
6. $\text{K}(\text{Mg}, \text{Fe})_3 \text{AlSi}_3\text{O}_{10}(\text{OH})_2$
7. FeS_2
8. CaCO_3
9. PbS

Fracture, Cleavage & Crystal Form

1. This mineral contains magnesium and iron, and has one perfect cleavage
2. This mineral has conchoidal fracture, and will form terminated hexagonal crystals ☐ when it grows in open space
3. This mineral has two good cleavage planes at 56° and 124°
4. This mineral has 3 oblique cleavage planes, and forms rhombohedral cleavage pieces
5. This mineral has two good cleavages at 90° , and the cleavage faces are typically striated
6. This mineral has two good cleavages at 90° , and ranges from whitish to grayish or ☐ greenish in color, depending on the proportion of Na (sodium) and Ca (calcium)
7. This mineral has 3 perfect cleavage planes at 90°
8. This mineral has conchoidal fracture, and is the first mineral to crystallize ☐ in Bowen's Reaction Series
9. This sulfide mineral often forms granular masses, but when well-formed ☐ crystals are present they are often cubic or octahedral, and display striations ☐ on crystal faces