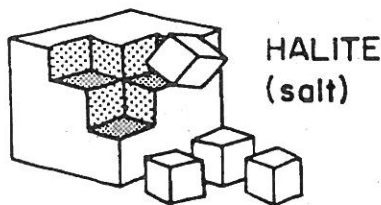


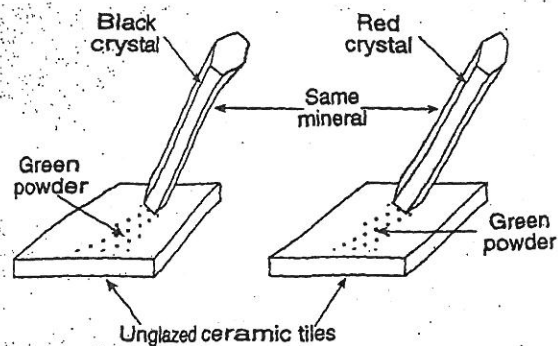
Rock & Mineral Test Review

- Which two mineral grains would most likely be found in soil formed from granite?
 - olivine and pyroxene
 - potassium feldspar and quartz
 - plagioclase and pyroxene
 - olivine and nepheline
- Which property would be most useful for identifying igneous rocks?
 - kind of cement
 - mineral composition
 - number of minerals present
 - types of fossils present
- Rhyolite and granite are alike in that they both are
 - fine-grained
 - dark-colored
 - mafic
 - felsic
- What causes the characteristic crystal shape and cleavage (breaking along flat surfaces) of the mineral halite as shown in the diagram below?



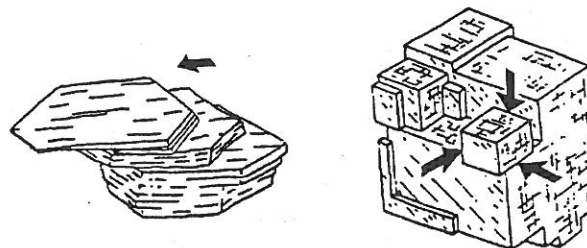
- metamorphism of the halite
 - the internal arrangement of the atoms in halite
 - the amount of erosion the halite has undergone
 - the shape of other minerals located where the halite formed
- Minerals are identified on the basis of
 - the method by which they were formed
 - the type of rock in which they are found
 - the size of their crystals
 - their physical and chemical properties
 - Scratching a mineral against a glass plate is a method used for determining the mineral's
 - color
 - hardness
 - luster
 - cleavage
 - Which mineral property is illustrated by the peeling of muscovite mica into thin, flat sheets?
 - luster
 - streak
 - hardness
 - cleavage
 - The most abundant element in the Earth's crust is
 - nitrogen
 - oxygen
 - silicon
 - hydrogen
 - Which type of sedimentary rock contains the greatest range of particle sizes?
 - conglomerate
 - sandstone
 - sandstone
 - siltstone
 - Which property best describes a rock which has formed from sediments?
 - crystalline structure
 - distorted structure
 - banding or zoning of minerals
 - fragmental particles arranged in layers
- Limestone is a sedimentary rock which may form as a result of
- melting
 - recrystallization
 - metamorphism
 - biologic processes

- The diagram below shows the results of one test for mineral identification.



Which mineral property is being tested?

- density
 - fracture
 - streak
 - luster
- The diagrams below illustrate a specific property of certain minerals.



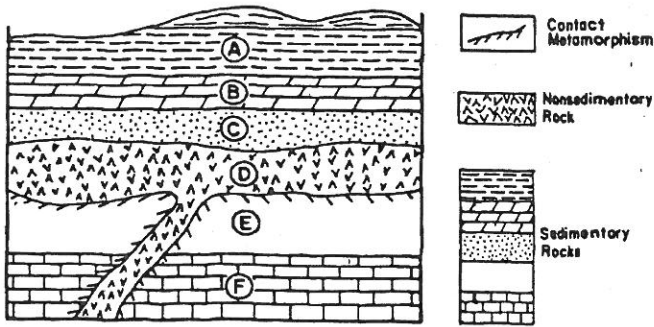
This property is most closely related to the

- arrangement of atoms in the mineral
 - impurities found in the mineral
 - softness of the mineral
 - density of the mineral
- Which sedimentary rock would be composed of particles ranging in size from 0.0004 centimeter to 0.006 centimeter?
 - conglomerate
 - dolostone
 - siltstone
 - shale
 - A coarse-grained igneous rock contains plagioclase feldspars and pyroxenes, but no quartz. This rock is most likely
 - basalt
 - rhyolite
 - granite
 - gabbro
 - What is the main difference between metamorphic rocks and most other rocks?
 - Many metamorphic rocks contain only one mineral.
 - Many metamorphic rocks have an organic composition.
 - Many metamorphic rocks exhibit banding and distortion of structure.
 - Many metamorphic rocks contain a high amount of oxygen-silicon tetrahedra.

- Metamorphic rocks form as the direct result of

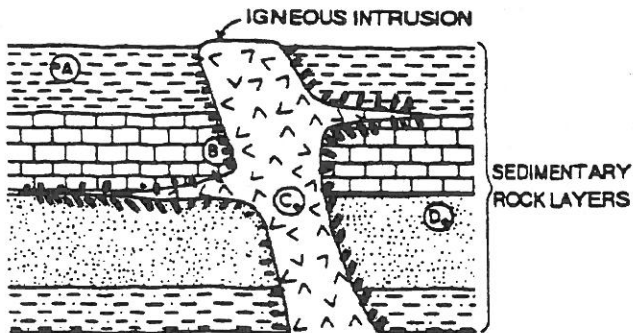
- precipitation from evaporating water
- melting and solidification in magma
- erosion and deposition of soil particles
- heat and pressure causing changes in existing rock

18. Base your answer to the following question on your knowledge of Earth science and the diagram below. The diagram represents a geologic cross section consisting of various sedimentary and nonsedimentary rocks which have not been overturned.



Rock layer D is classified as nonsedimentary because it was formed by

- (1) the compression and cementing of particles
 - (2) the evaporation of seawater
 - (3) biologic processes
 - (4) the cooling of molten material
19. Which rock is of felsic composition, low in density, light in color, and coarse grained?
- (1) rhyolite
 - (2) basalt
 - (3) granite
 - (4) gabbro
20. Which rocks form relatively thin layers, compared to the thickness of the continent, over large areas of the continents?
- (1) granite and gabbro
 - (2) sandstone and shale
 - (3) metamorphic rocks
 - (4) intrusive igneous rocks
21. The diagram below shows an igneous rock intrusion in sedimentary rock layers.



At which point would metamorphic rock most likely be found?

- (1) A
 - (2) B
 - (3) C
 - (4) D
22. Which type(s) of rock can be the source of deposited sediments?
- (1) igneous and metamorphic rocks, only
 - (2) metamorphic and sedimentary rocks, only
 - (3) sedimentary rocks, only
 - (4) igneous, metamorphic, and sedimentary rocks
23. The end product of the weathering of gabbro or basalt rocks is a solution of dissolved material that most likely would contain high amounts of
- (1) iron and magnesium
 - (2) magnesium and potassium
 - (3) aluminum and iron
 - (4) aluminum and potassium

24. Which statement about the formation of a rock is best supported by the rock cycle?

- (1) Magma must be weathered before it can change to metamorphic rock.
- (2) Sediment must be compacted and cemented before it can change to sedimentary rock.
- (3) Sedimentary rock must melt before it can change to metamorphic rock.
- (4) Metamorphic rock must melt before it can change to sedimentary rock.

25. A fine-grained rock has the following mineral composition:

50 percent potassium feldspar, 26 percent quartz, 13 percent plagioclase, 8 percent biotite, and 3 percent hornblende.

The rock would most likely be

- (1) granite
- (2) rhyolite
- (3) gabbro
- (4) basalt