

Geology of Table Rock

Common Rocks and Minerals of the Blue Ridge

Physical Properties of Common Minerals

Sample	Color	Hardness	Cleavage	Heft	Crystals	Name
(1)						
(2)						
(3)						
(4)						
(5)						
(6)						
(7)						
(8)						
(9)						

Questions

1. Is color very useful for telling quartz from feldspar?
2. Does the presence of iron automatically make a mineral harder than glass?
3. Cleavage is related to internal structure. Why do you think some minerals have it and some don't?
4. List two reasons that might cause a mineral to have a high specific gravity (heft)?
5. What do the lighter colored minerals have in common?
6. Which pair of light colored minerals do you think might be very similar chemically?
7. Garnets are found most often in metamorphic rocks and calcite is most often found in sedimentary rocks. Which one do you think you might see around the Table Rock area?

Physical Properties of Common Rock Forming Minerals

Mineral Name	Typical Color	Hardness	Cleavage Planes	Relative Heft	Crystals (shape)	Key Element
amphibole	black/green	6	2 not 90°	medium	(elongate)	iron
biotite	black	2.5	1 (flat)	medium	not visible	iron
calcite	white/clear	3	3 not 90°	medium	rhombs	calcium
hematite	red/brown	5.5	none	high	not visible	iron
feldspar	white/pink	6	2 at 90°	low	varies	silicon
garnet	deep red	7-7.5	none	high	(12 sided)	iron
muscovite	white/clear	2-2.5	1 (flat)	medium	not visible	silicon
olivine	olive green	6.5	none	med/high	not visible	iron
pyroxene	green/black	6	2 at 90°	medium	(8 sided)	iron
quartz	varies	7	none	low	(6 sided)	silicon