

Geology of Table Rock

*Common Rocks and Minerals of the Blue Ridge*

*Physical Properties of Common Rock Forming Minerals*

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

*Physical Properties of Several Minerals from the Table Rock Area*

Sample	Color	Hardness	Cleavage	Heft	Crystals	Name
(1)						
(2)						
(3)						
(4)						

1. Is color useful for telling quartz from feldspar?
2. Does the presence of iron automatically make a mineral hard?
3. Cleavage is related to internal structure. Why do you think some minerals have it and some don't?
4. What do you think causes a mineral to have a high specific gravity (heft)?