GLY 4310C LAB 3 CLASS:SILICATES

Subclass:Tectosilicates

Silica Group - Crystalline and Amorphous

Mineral Name	H	G	Color Streak Color	Cleavage, Fracture, or Parting	Luster	Other Properties	Notes
QUARTZ, VAR. ROCK CRYSTAL	7	2.7	clear/none	conchoidal fracture	vitreous	transparent	
QUARTZ, VAR. ROSE	7	2.7	pink/none	subconchoidal fracture	vitreous	translucent	
QUARTZ, VAR. SMOKY	7	2.7	gray-brown/none	even to subconchoidal fracture	vitreous	translucent	
QUARTZ, VAR. AMETHYST	7	2.7	lilac/none	poor conchoidal fracture	vitreous	transparent to translucent	parallel striations on crystal faces
QUARTZ, VAR. CITRINE	7	2.7	golden brown/none	even fracture	vitreous	translucent	
QUARTZ, VAR. MILKY	7	2.7	milky/none	even to subconchoidal fracture	vitreous		
QUARTZ, VAR. CHRYSOPRASE	7	2.7	green with blue streaks/none	even fracture	dull	translucent on thin edges	
CRISTOBALITE	4.5	nd	gray/white	uneven fracture	dull		in obsidian
OPAL	6.5	2.3	yellow-white/none	conchoidal fracture	resinous		
DIATOMACEOUS EARTH	<1.0	<2.0	white/white	uneven fracture	dull		absorbs liquid

Subclass:Tectosilicates

Silica - cryptocrystalline

Mineral Name	H	G	Color Streak Color	Cleavage, Fracture, or Parting	Luster	Other Properties	Notes
QUARTZ, VAR. CHALCEDONY	7.0	2.7	white to gray-black bands/none	conchoidal fracture	waxy	SW-green	
QUARTZ, VAR. JASPER	7.0	2.7	brick red, mustard,or black/none	conchoidal fracture	greasy to dull		
QUARTZ, VAR. FLINT	7.0	2.7	tan-gray to dark-gray/none	conchoidal fracture	dull	LW-pale yellow	
QUARTZ, VAR. CHERT	7.0	2.9	milky to gray/none	conchoidal fracture	dull		edges are very sharp
QUARTZ, VAR. NOVACULITE	(7.0)	2.7	tan/(none)	conchoidal fracture	waxy		

Zeolite Group

Mineral Name	H	G	Color Streak Color	Cleavage, Fracture, or Parting	Luster	Other Properties	Notes
STILBITE	3.5	2.0	milky-pink,orange/white	subconchoidal fracture	pearly		globular to reticulated habit
NATROLITE	3.5	2.4	white/white	subconchoidal fracture	silky		radiating habit

Subclass:Tectosilicates
Feldspar Group

Mineral Name	H	G	Color Streak Color	Cleavage, Fracture, or Parting	Luster	Other Properties	Notes
MICROCLINE	6	2.4	mottled orange and white/white	good 2-dir @ 90°	vitreous		
MICROCLINE, VAR. AMAZONITE	5.5	2.5	turquoise/white	good 2-dir @ 90°	vitreous		
ORTHOCLASE	6	2.6	tan/white	2-dir @ 90° not always visible	vitreous to dull	No twin striations	often formless in rocks; may show distinct crystal shape (see fig. 13.131, p. 540)
ANORTHOCLASE	5.5	3	blue/black/white	good 2-dir near 90°	vitreous on cleavage	play of colors	
ALBITE	5.5	2.6	milk to pale green/white	good 2-dir, ≠ 90°	vitreous		twinning striations visible on cleavage planes
OLIGOCLASE	5.5	2.9	milk to pale green/white	good 2-dir, ≠ 90°	vitreous		twinning striations visible on cleavage planes
LABRADORITE	5.5	2.9	gray-black, blue/white	2-dir near 90°	vitreous	play of colors	twinning striations visible on cleavage planes
BYTOWNITE	-5.5	2.7	clear to milky, pink/(white)	good 2-dir, near 90°	vitreous		
ANORTHITE	-5.5	nd	light green to jade	good 2-dir, near 90°	dull with vitreous flecks		
DANBURITE	5.5	2	clear/white	conchoidal fracture	vitreous	transparent	twinning striations

Subclass:Tectosilicates

Feldspathoid Group

Mineral Name	H	G	Color Streak Color	Cleavage, Fracture, or Parting	Luster	Other Properties	Notes
LEUCITE	4.5	2.9	white to tan/white	conchoidal fracture	Dull to vitreous		trapezohedral crystals
NEPHELINE	5.0	2.6	gray to pink/white	poor 1-dir/subconchoidal fracture	greasy		may associate with sodalite
SODALITE	5.5	2.4	royal to dark blue/white	subconchoidal to uneven fracture	vitreous		
PETALITE	5.0	3.5	white/white	uneven fracture	dull to vitreous		associated with muscovite and lepidolite
ANALCIME	3.5	2.3	black, white/tan, white	jagged fracture	vitreous to dull		bladed crystals reticulated habit; may be trapezohedral
SCAPOLITE	4.5	2.6	yellow-brown/white	good 2-dir ≠90°	silky		