

Lab 3: MINERALS

Purpose: To learn what makes a mineral a mineral and to familiarize yourself with some of the basic techniques geologists use to identify minerals.

Instructions: MAKE YOUR OWN COPY of this doc. Submit it to the appropriate assignment link on Canvas. *Accepted file formats: PDF, Word Doc, PNG, JPG. No HEIC files or Pages documents will be accepted*

Sample #	Mineral	Chemical Formula	Mohs Hardness	Luster	Streak	Cleavage/fracture	Other properties or interesting facts (e.g. magnetic, reacts to HCl, etc.)
1	Quartz		7		White/none		
2	Feldspar	$KAlSi_3O_8$ $NaAlSi_3O_8$ $CaAl_2Si_2O_8$				2 @ 90°, blocky	
3	Magnetite	$Fe^{2+}Fe^{3+}_2O_4$				None/fracture	
4	Calcite		3	Vitreous			
5	Pyrite						Commonly known as "fool's gold"
6	Hematite		5-6	Dull/earthy			
7	Muscovite	$KAl_2(AlSi_3O_{10})(F,OH)_2$			White/none		
8	Pyroxene	$XY(Si,Al)_2O_6$	5-6				
9	Talc	$Mg_3Si_4O_{10}(OH)_2$			White		
Pick your own!							

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Insert a photo of your sketch or physical model of a silica tetrahedra: