

Rock forming Mineral questions

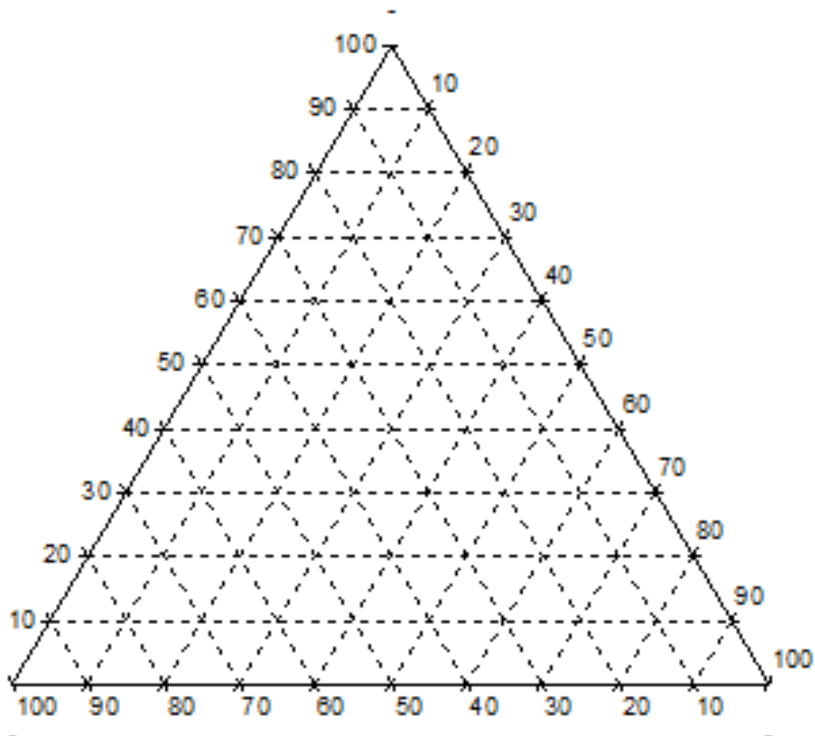
The chemical analysis results for feldspar listed below:

(no. of oxygen atoms in formula is 8).

oxide	Wt%	Molecular weight	
SiO ₂	54.28	60.09	
Al ₂ O ₃	28.28	101.96	
CaO	11.57	56.08	
Na ₂ O	4.85	61.98	
K ₂ O	0.59	94.19	

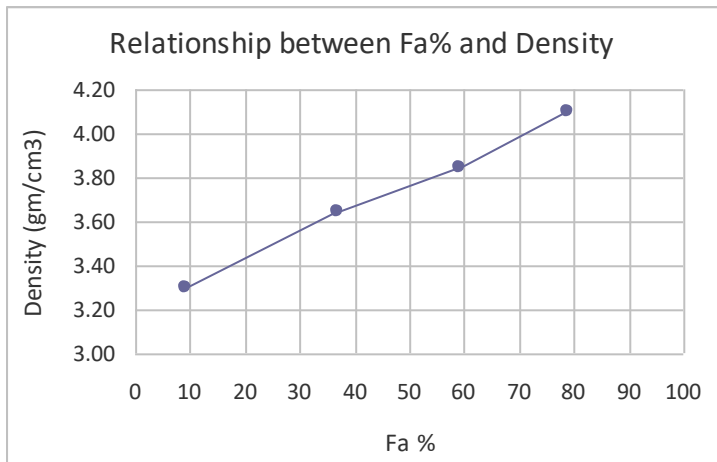
-write chemical formula for the mineral:

-Find out name the mineral name in feldspar triangle



-find out the oxide's weight % theoretically of an olivine sample if you know density of the sample is 3.70gm/cm^3

Note: molecular weight of $\text{MgO} = 70.93$, $\text{FeO} = 71.85$, $\text{SiO}_2 = 60.09$.



-Find out chemical formula from chemical analysis listed below of chalcopyrite mineral:

elements	Wt%	Atomic Weight
Cu	34.62	65.54
Fe	30.43	55.85
S	34.94	32.06

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-write Bown reaction series

-write subclass of silicate

- define **solidsolution**

- write types of **solidsolution**

-define atomic weight

-write subclasses of silicate mineral

-The chemical analysis result for sphalerite sample listed below:

Find the chemical formula and substitution ratio

element	Wt%	At.Wt	
Fe	11.05	55.85	
Cd	0.30	112.40	
Zn	55.89	65.37	
S	32.99	32.06	
Total	99.59	-----	

