

KEY

GLY 4200  
Homework Exercise 8

### Ternary Phase Diagrams

Assume you have some experimental data for the system sphene-anorthite-wollastonite (Sp = sphene =  $\text{CaTiSiO}_5$ , An = anorthite =  $\text{CaAl}_2\text{Si}_2\text{O}_8$ , and Wo = wollastonite =  $\text{CaSiO}_3$ ).

Label a ternary diagram with sphene at the top, anorthite in the lower right hand corner, and wollastonite in the lower left hand corner.

Plot the following points.

A)	Sp 5%	An 20%	Wo 75%
B)	Sp 25%	An 50%	Wo 25%
C)	Sp 10%	An 5%	Wo 85%
D)	Sp 0%	An 15%	Wo 85%
E)	Sp 10%	An 20%	Wo 70%
F)	Sp 35%	An 65%	Wo 0%
G)	Sp 10%	An 30%	Wo 60%
H)	Sp 55%	An 25%	Wo 20%
I)	Sp 85%	An 0%	Wo 15%
J)	Sp 35%	An 30%	Wo 35%

