Igneous RocksQ1. Use the following unknown samples and fill in the following table:

Sample Number	Grain Size Fine Course Mix	Description in your own words	Color			Comp	osition			Origin	
			Dark Or Light	Other Colours I See	Visible Minerals	Colors Of Minerals	% Of Each	Felsic, Intermediate, Mafic	Rock Name	How did the rock form? (rate & where)	Volcanic or Plutonic
I1											
12											
I 3											
I4											
15											
I 6											
17											
18											

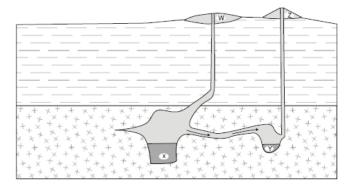
19						
I10						
I11						
I12						
I13						
I14						

Q2. For each rock in the following pairs, state in what way they are similar and in what way they are different (Composition, texture, rate of cooling, mode of occurrence – extrusive vs. intrusive).

a)	gabbro and granite	b)	basalt and gabbro
c)	rhyolite and granite	d)	rhyolite and obsidian

- Q3. Refer to Figure 1 below.
- b) In what textural way would you expect the igneous rock at point Y to differ from the igneous rock at point Z? Why?
- c) Where would you most likely find obsidian: at point X, Y, Z or W? Why?

Given the following rock types...gabbro, basalt, diorite and rhyolite, indicate (insert arrows) where they are likely to form on the diagram...X, Y, W and Z.



gabbro basalt diorite rhyolite

Figure 1: Partial crystallization at X, subsequent migration (arrows), and later crystallization at Y can result in different mineral composition.