Ch 5 Classification of Igneous Rocks: Section 2 Guided Reading

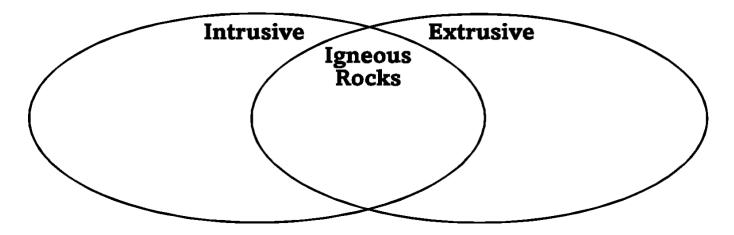
Preview what you will be learning in Section 2. Read the title of the section and the first paragraph on page 118. Describe

two ways that geologists use to classify igneous rocks. *Use your text to define the following terms* 3. fractional crystallization_____ 4. intrusive rock 5. extrusive rock____ basaltic rock___ 7. granitic rock_____ 8. texture____ 9. porphyritic texture_____ 10. vesicular texture 11. pegmatite_____ 12. kinberlite

Types of Igneous Rocks

Summarize information about intrusive and extrusive igneous rocks by writing each statement in the correct area of the Venn diagram.

- Coarse-grained
- Form above the surface
- Form beneath the surface
- Granite is an example
- Fine-grained
- Formed by crystallization of magma
- Cool quickly
- Rhyolite is an example
- Cool slowly



Interpret the diagram to list the approximate percent of the minerals found in the following rocks.

basalt:	
diorite:	
pegmatite:	

		Ta	ble 5-2 Classific	ation of Igneous	Rocks	
EXTRUSIVE		GRANITIC	INTERMEDIATE	BASALTIC	ULTRAMAFIC	TEXTURE
		Obsidian		Basaltic glass] 	Glassy (non-crystalline)
		Rhyolite	Andesite	Basalt		Fine-grained
JSIVE		Granite	 Diorite	l Gabbro	 	Coarse-grained
INTRUSIVE		Pegmatite			i I	Very coarse-grained
Mineral composition as percent of volume	100 80 60 40 20	Quartz Potassium feldspar (K-spar) *** Biotite*	Plagioclase feldspar	Pyroxene	Olivine	

Grain Size		
Describe the conditions that cause igne	eous rocks to form large grains or	no visible grains.
Ore Deposits		
·		
Organize the steps in the formation of a	leposits in veins.	
The fluid from which magma crystallizes contains high levels	The fluid	7
of	fills	The fluid solidifies to formcontaining
		Metallic elements such as
		,,
		And rare elements such as
		and
Igneous Rocks as Resources		
List two characteristics of igneous re	ocks that make them good buil	ding materials
1		
2		
Synthesize: 1) Identify the characteristics or intrusive. 2) E		ou could use to quickly determine whether a
2		