Use with Chapter 5 Section 5.2

Classification of Igneous Rocks

		Clas	sification of Ig	neous Rocks		
		Felsic	Intermediate	Mafic	Ultramafic	Texture
Extrusive		Obsidian		Scor/a	E	Glassy (non-crystalline)
M M		Rhyolite	Andesite	Basalt		Fine-grained
ive		Granite	Diorite	Gabbro	Peri- Dun- dotite ite	Coarse-grained
Intrusive		Pegmatite				Very coarse-grained
<u> </u>	100%			i Ca		
osition volume)	75%-	Potassium feldspar (pink to white) Quartz (clear to white)	Plagioclase felds (white to gray			
Mineral composition (percentage by volume)	50%-					
Min (perce	25%		Biotite (black) & XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Pyroxene (green)	Olivine (green)	
	0%		<`_`xx`_(błáck)x`_ x'`xx`^		ra subba	

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Classification of Igneous Rocks

1.	What four types of igneous rocks are represented in the table and graphs
2,	Use the table to compare and contrast the textures of the extrusive rocks and intrusive rocks.
3.	How do basaltic glass and gabbro differ? How are they similar?
4.	Which types of igneous rocks are composed of at least 50 percent olivine?
	Use the graph to explain why felsic rocks are usually light-colored and mafic rocks are usually dark-colored.
6.	How would you classify a fine-grained, igneous rock that contains approximately 25 percent amphibole, 15 percent biotite, and 60 percent plagioclase feldspar?
7.	Approximately how much biotite is a sample of gabbro likely to contain?
8.	Which contains a greater percentage of quartz—granite or diorite?