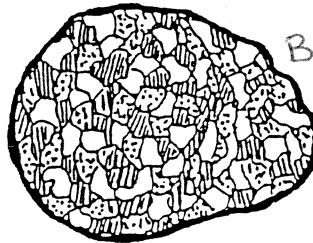
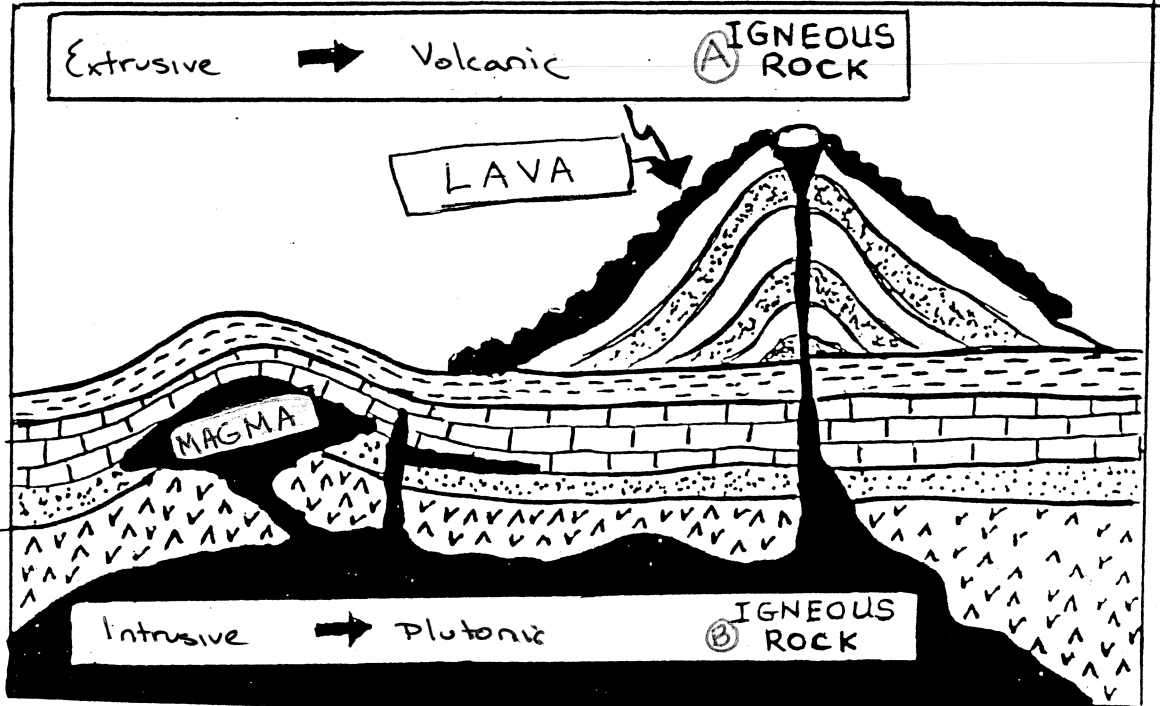
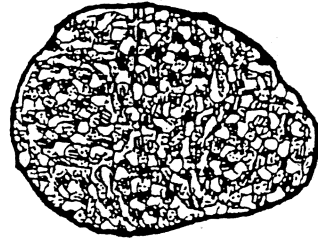


Igneous Rock Formation



A



B



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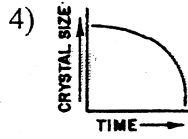
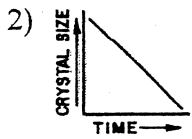
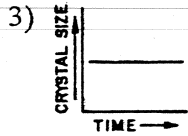
ENVIRONMENT OF FORMATION			
EXTRUSIVE (volcanic)		INTRUSIVE (plutonic)	
RATE OF COOLING	Very Fast ^{Rapid}	Fast	SLOW
CRYSTAL SIZE	glassy non-crystalline	Vesicular Fine	1mm-10mm Coarse - very coarse
TEXTURE	Glassy	Vesicular	Coarse / Very Coarse
EXAMPLES	Pumice obsidian	Rhyolite Basalt	Granite Gabbro

Name _____

Igneous Rocks

Earth Science

1. A coarse-grained igneous rock contains plagioclase feldspars and pyroxenes, but no quartz. This rock is most likely
 - 1) basalt
 - 2) rhyolite
 - 3) granite
 - 4) gabbro
2. Which graph best shows the relationship between the size of the crystals in an igneous rock and the length of time it has taken the rock to solidify?



3. Which rock is of felsic composition, low in density, light in color, and coarse grained?
 - 1) rhyolite
 - 2) basalt
 - 3) granite
 - 4) gabbro
4. Most igneous rocks form by which processes?
 - 1) melting and solidification
 - 2) heat and pressure
 - 3) erosion and deposition
 - 4) compaction and cementation
5. Compared to basalt, granite is coarse felsic.
 - 1) lighter in color
 - 2) greater in density
 - 3) more mafic in composition
 - 4) more fine grained in texture
6. Which property would be most useful for identifying igneous rocks?
 - 1) kind of cement
 - 2) mineral composition
 - 3) number of minerals present
 - 4) types of fossils present

7. Large crystals in an igneous rock most likely form as a result of the slow cooling

- 1) mineral composition of the magma
- 2) cooling rate of the magma
- 3) fossil content of the rock
- 4) color of the rock

8. A mafic igneous rock is most likely to be relatively high density, dark

- 1) high in density and dark in color
- 2) high in density and light in color
- 3) low in density and dark in color
- 4) low in density and light in color

9. The four igneous rocks below are classified into two groups.

Group A	Group B
Granite	Rhyolite
Gabbro	Basalt
<u>coarse</u>	<u>FINE</u>

What is the basis for this classification?

- 1) density
- 2) color
- 3) crystal grain size
- 4) mineral content

10. Which granite sample most likely formed from magma that cooled and solidified at the slowest rate?

