

Video 9A: Volcanoes throughout history

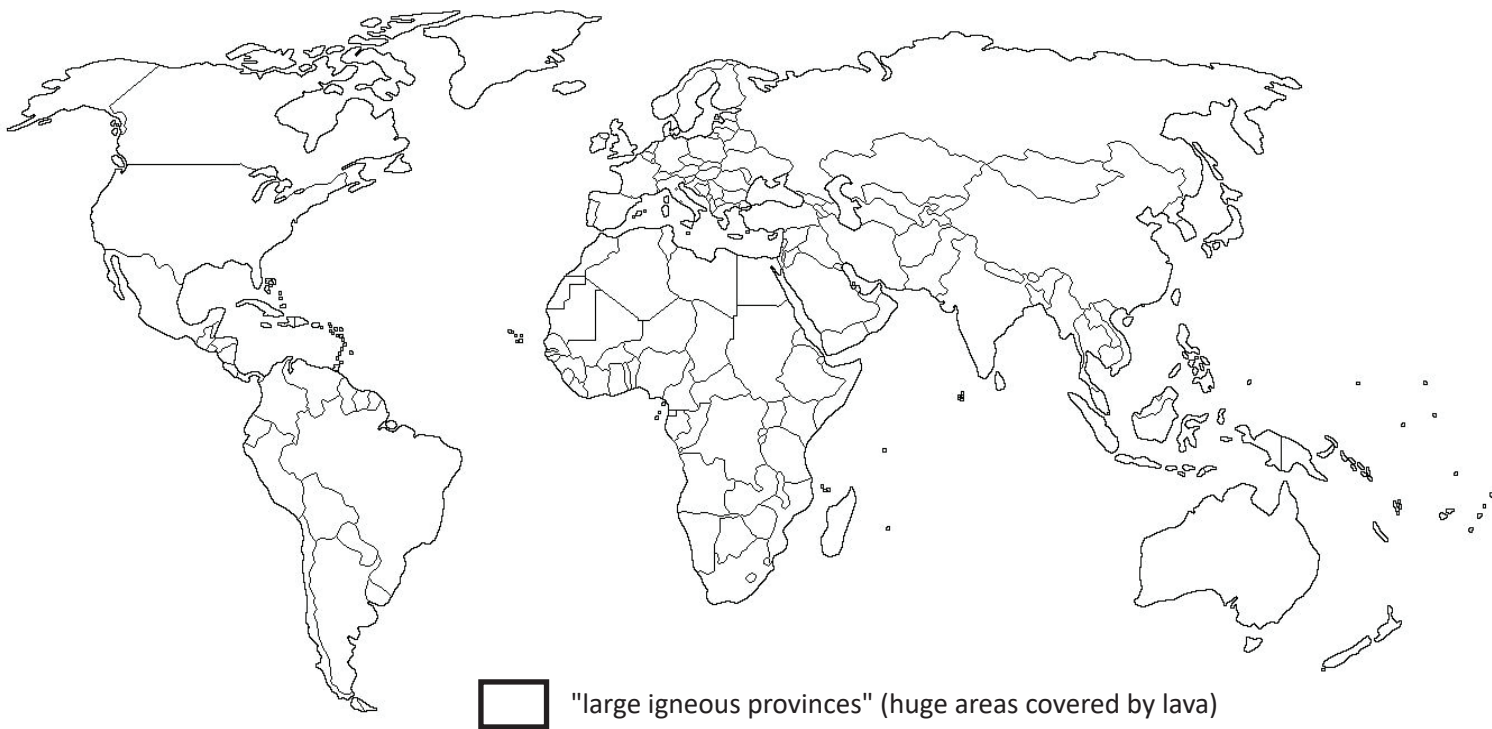
1) What percentage of volcanoes are found in the Ring of Fire? _____

2) Where are the largest "igneous provinces" (Color them on your map.)

3) Put these historic eruptions on your map:

#	official date	name	volume (km ³)
1		Kilauea, Hawaii	
2		Mt Pinatubo, Philip.	
3		Mt St Helens (WA)	
4		Novarupta (AK)	
5		Krakatoa, Indonesia	
6		Iceland	
7		Mt. Tambora, Indones.	
8		Hokkaido, Japan	
9		Mt. Fuji, Japan	
10		Tianchi, China/N.Korea	

#	official date	name	volume (km ³)
11		Vesuvius, Italy	
12		Philippines	
13		Kamchatka peninsula	
14		Ethiopian Rift	
15		Lake Toba, Sumatra	
16		Yellowstone (WY)	
17		Andes Central Zone	
18		San Juan mtns, (CO)	
19		Wah Wah Springs (UT)	
20		Deccan Traps, India	



4) How do they decide that lavas are millions of years old? _____

This technique compares ratios of _____ to _____ isotopes in a decay sequence.

These assumptions are made :

- 1) _____
- 2) _____

How accurate is this dating method? Here are just a few examples. Many more could be given.

5) Lava from Mt St Helens, WA, which erupted in 1980, was dated at _____.

(A pyroxene mineral sample from this same lava was dated at _____.)

6) Lava from Mt Lassen, CA, which erupted in 1915, was dated at _____.