

**Ch 14 Review: Volcanism & Plate Tectonics**

Name \_\_\_\_\_

1. What is **magma**?
2. What requirements are needed for magma to form?
3. Where are two locations that rocks can melt?
4. What are two other factors that affect the melting point of rocks?
5. What changes occur to rock once it is melted? How does this lead to volcanic activity?
6. What is a **volcano**?
7. What is the importance of silica content in magma?
8. What is the name given to magmas with high silica and low silica?
9. What are the differences between the two types of magma?
  
10. What are the most important gases found in magma?
11. What effect does the amount of gases in a magma have on the kind of eruptions that occur?
  
12. What is **lava**?
13. Why is the composition of lava different from that of its magma?
14. How are **felsic** lavas different from **mafic** lavas? How are their eruptions different?
  
15. What is **tephra**?
16. What are: **ash, lapilli, blocks, bombs**
17. What is a **pyroclastic flow** (like that which destroyed St. Pierre)?
  
18. Where do **rift eruptions** occur?
19. What is the lava like at rift eruptions?
20. What are two locations of rift eruption in the ocean? .... on land?
21. What is a **basalt plateau**? ... **pillow lava**? ... **columnar jointing**?
  
22. How are **subduction** boundary eruptions different from rift eruptions? Why?
23. What type of volcanoes (cone shape) form at subduction boundaries?
24. What are two landform features that develop at subduction boundaries? What are examples of each?
  
25. What are **hot spots** and what is thought to be the cause of them?
26. What are the characteristics of lava at hot spots?
27. What type of volcanoes typically form at hot spots? Examples?
28. How does the **lithosphere** move relative to the hot spot?
29. Be prepared to interpret a diagram (like in the review) of a hot spot -- relative ages ...
  
30. Identify the following volcano types: **fissure** (flood basalt), **shield volcano, cinder cone, composite/stratovolcano, lava dome, caldera**. How do they differ by viscosity of magma, size, cause?
31. What are 7 volcanic hazards? (in journals - from video)
32. Some famous volcanic eruptions (in journals):

Name	Location	Erupt. Date	Volcano Type	Cause of Erupt.	Summary of Eruption
Eldfell					
St. Helens					
Kilauea					
Vesuvius					
Krakatau					
Crater Lake					
Mt. Pinatubo					

33. What are **plutons**?
34. How do the following geologic structures form: **dike, sill, laccolith, volcanic neck**
35. What is a **batholith**?
36. What kind of rock is usually found in batholiths?
37. Be prepared to identify the plutonic features in a diagram (like that on page 264 of the Earth Science textbook)

