

Directed Reading A

Section: Volcanic Eruptions

1. Volcanic eruptions can be _____ times stronger than the explosion produced by the first atomic bomb.
2. What is magma?
3. Magma that flows onto the Earth's surface is called _____.
4. What is a volcano?

NONEXPLOSIVE ERUPTIONS

5. Which of the following can happen during nonexplosive eruptions?
 - a. violent explosions
 - b. tons of rock blasted into the air
 - c. huge lava flows
 - d. fire shooting into the air
6. The most common type of volcanic eruption is _____.
7. Large areas of the Earth are covered with _____ from nonexplosive eruptions.
8. Volcanic eruptions occur on land and on the _____ floor.

EXPLOSIVE ERUPTIONS

9. Which of the following would you expect to see during an explosive volcanic eruption?
 - a. calm lava flows
 - b. hot debris, ash, and gas shooting into the air
 - c. a rainbow
 - d. lava fountains
10. In a volcanic eruption, molten rock is blown into dust-sized particles called _____.
11. How quickly can an explosive eruption demolish a mountainside?
12. During an explosive eruption, where do larger pieces of debris fall?

Directed Reading A continued

WHAT IS INSIDE A VOLCANO?

Match the correct definition with the correct term. Write the letter in the space provided.

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|--|----------|
| _____ 13. hot liquid material below the Earth's surface | a. vent |
| _____ 14. an opening in the Earth's crust | b. magma |
| _____ 15. molten material flowing on the Earth's surface | c. lava |

WHAT MAKES UP MAGMA?

- _____ 16. Silica-rich magma
 - a. has a thin, runny consistency.
 - b. allows gases to escape easily.
 - c. causes explosive eruptions.
 - d. is rarely associated with explosive eruptions.
- _____ 17. The more water contained in the magma, the _____ the chances an explosive eruption will occur.

WHAT ERUPTS FROM A VOLCANO?

- _____ 18. The main product of a nonexplosive eruption is _____.
- _____ 19. The main product of an explosive eruption is _____.
- _____ 20. Pyroclastic material forms when _____ is blasted into the air and hardens.

Match the correct description with the correct term. Write the letter in the space provided.

- | | |
|---|------------------|
| _____ 21. forms underwater in rounded lumps | a. aa lava |
| _____ 22. flows slowly, like dripping wax | b. pillow lava |
| _____ 23. has a brittle, jagged crust | c. pahoehoe lava |
| _____ 24. cool, stiff lava that forms jumbled heaps | d. blocky lava |