Name _____ Class_____Date_____

Skills Worksheet

DR 9-1

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. A vent or fissure in the Earth's surface through which magma and gases are expelled is a_____

NONEXPLOSIVE ERUPTIONS

_____ 5. Which of the following can happen during nonexplosive eruptions?
   a. Violent explosions can occur.
   b. Tons of rock can be blasted into the air.
   c. Huge amounts of lava can be released.
   d. Fire can shoot into the air.

6. The most common type of volcanic eruption is _____
7. Much of the sea floor is covered with_____ from nonexplosive eruptions.

EXPLOSIVE E RUPTIONS

_____ 8. 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

9. In a volcanic eruption, molten rock is blown into dust-sized particles called.

   _____

10. During an explosive eruption, where do larger pieces of debris fall?

    _____

11. How quickly can an explosive eruption demolish a mountainside?

    _____

WHAT IS INSIDE A VOLCANO?

_____ 12. The underground body of molten rock that feeds a volcano is a(n)

a. vent.
c. lava chamber.
b. magma chamber.
d. ash chamber.

_____ 13. An opening in the Earth's surface through which volcanic material passes is a(n)

a. vent.
c. lava chamber.
b. magma chamber.
d. ash chamber.

14. What about magma affects how explosive an eruption will be?

_____

15. Why is magma with high water content more likely to cause an explosive eruption?

_____

_____

_____

_____

16. The solid form of lava that is so frothy with gas when it reaches the surface is called _____.

17. What are two reasons that magma with a high silica content tend to cause explosive eruptions?

_____

_____

_____

_____

18. Why is magma with less silica less likely to cause explosive eruptions?

_____

WHAT ERUPTS FROM A VOLCANO?

19. Liquid magma that flows from a volcanic vent is called _____.

20. Magma that is blasted into the air hardens and forms _____.

21. What type of material is produced by nonexplosive eruptions?

_____

22. What type of material is produced by explosive eruptions?

_____

23. What is the difference between the flow of lava with high viscosity and the flow of lava with low viscosity?

_____

_____

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

_____ 24. pours out quickly and forms a brittle, jagged crust

_____ 25. flows slowly, has a glassy surface and rounded wrinkles

_____ 26. forms underwater in rounded lumps

_____ 27. cool, stiff lava that forms jumbled heals close to the erupting vents

a. pahoehoe lava
b. aa lava
c. pillow lava
d. blocky lava

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

_____ 28. large blobs of magma that harden in the air

_____ 29. solid rock erupted from a volcano

_____ 30. pebblelike bits of magma that harden before they hit the ground

_____ 31. gases in stiff magma expand rapidly, forming glasslike slivers

a. volcanic blocks
b. volcanic bombs
c. lapilli
d. volcanic ash

32. When large amounts of hot ash, dust and gases are ejected from a volcano, the result is a dangerous type of volcanic flow called

_____

33. Pyroclastic materials can race downhill at speeds of more than

_____

34. The temperature at the center of a pyroclastic flow can exceed

_____