

Name \_\_\_\_\_

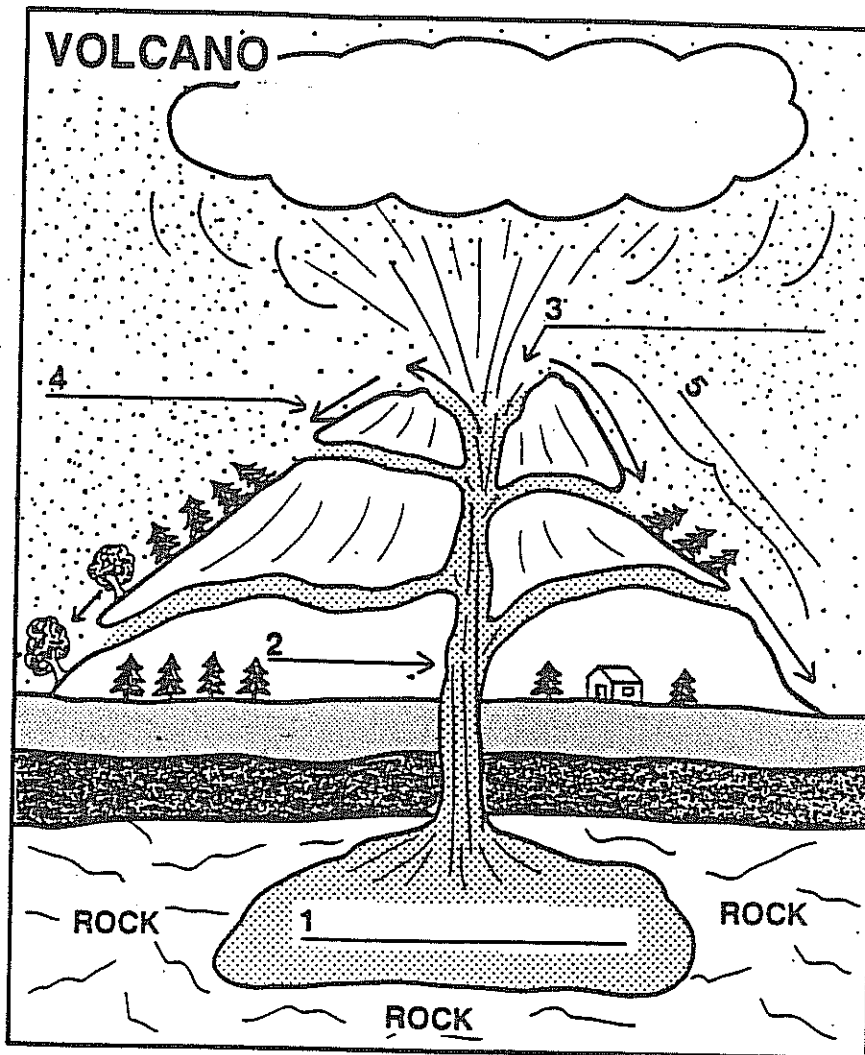
Date \_\_\_\_\_

### THE MAKING OF A VOLCANO

Beneath the outer surface of the earth it is very hot. It is so hot that rock is melted into a thick molasses-like liquid called *magma* (1). As the magma becomes heated, it expands. Gases and steam form. The pressure against the rock surrounding the magma is tremendous. If a weak spot in the earth's crust is found, the gases burst out of the opening. Rocks, ashes, sparks, and fire shoot into the air like giant fireworks. The magma flows out of the opening.

The "pipe" that the materials use to escape to the earth's surface is called a *conduit* (2). The hole at the earth's surface is a *crater* (3).

The magma that flows into the open air takes a new name—*lava* (4). As the lava flows, it cools and hardens into layers. Over a long period of time, perhaps hundreds or thousands of years, the layers may take the shape of a *cone* (5). The cone may reach thousands of feet into the air.



1. In the story in the box above, words that are special for understanding volcanoes are printed in italics. Each word is followed by a number in parentheses. Write on the lines in the diagram the words that identify the parts of the volcano.

2. According to the diagram, magma and gases escape through the volcano crater. What other means of escape is also used?

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\_\_\_\_\_

3. What causes magma to be formed?

\_\_\_\_\_

\_\_\_\_\_

4. What causes the magma to flow out of a weak spot in the earth's surface?

\_\_\_\_\_

\_\_\_\_\_

5. Thought question: What are two ways that trees on the sides of the volcano could be destroyed?

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6. An erupting volcano is spectacular. Bright reds and yellows fly from the crater and dance and flash in the atmosphere. Color the air parts of your diagram as described above, and make the magma a brownish-orange color to show heat.