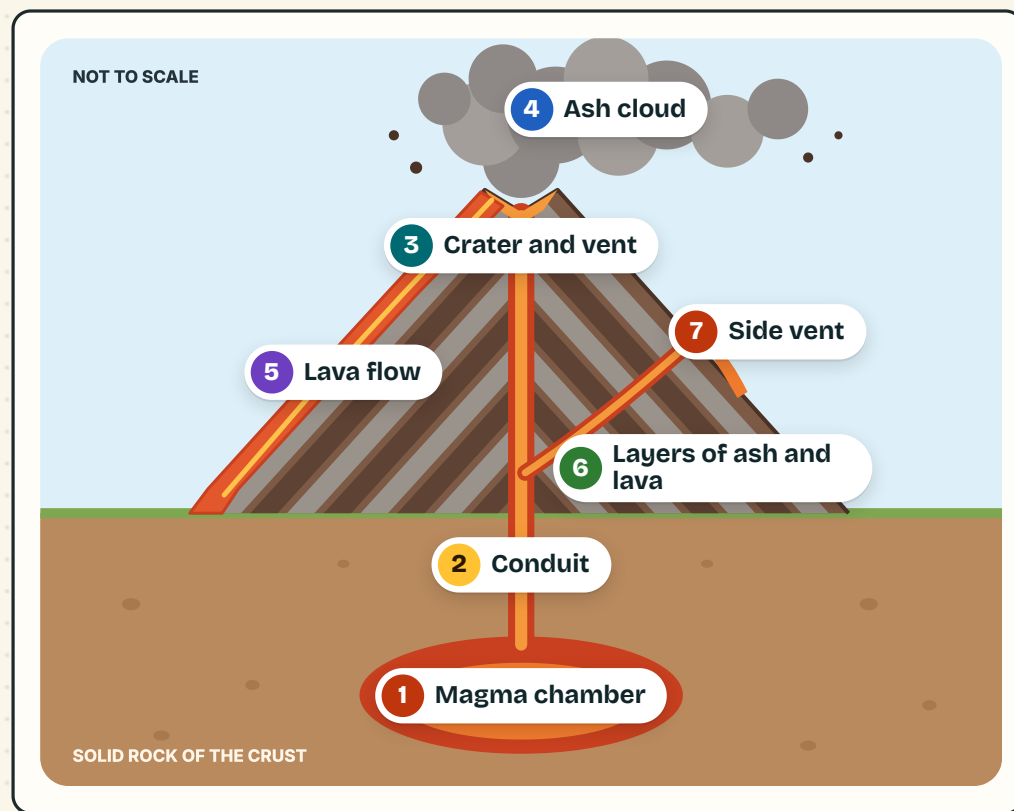


Inside a Volcano

A cross-section of a stratovolcano, the steep cone-shaped kind, from the magma chamber deep in the crust to the ash cloud above.



1 Magma chamber

A store of molten rock in the crust beneath the volcano. Magma rises because it is lighter than the solid rock around it.

2 Conduit

The main pipe that carries magma from the chamber up through the volcano to the surface.

3 Crater and vent

The bowl-shaped hollow at the summit. The vent in its floor is the opening where magma erupts.

4 Ash cloud

Explosions shatter magma into ash and rock fragments. Fine ash can rise miles high and travel far on the wind.

5 Lava flow

Molten rock that pours out of the vent and down the slope. A stratovolcano's sticky lava cools before it flows far.

6 Layers of ash and lava

Each eruption adds a layer of lava or of ash and cinders. The layers build the steep cone that gives the volcano its name.

7 Side vent

A branch off the conduit that lets magma escape through cracks on the volcano's slopes instead of the summit.



Too fast to outrun

A pyroclastic flow is a glowing avalanche of hot gas, ash and rock. It can race downhill at up to about 160 km/h, which is why people are evacuated well before an eruption.

NEXT IN THE SERIES

5. Earthquakes and Volcanoes by the Numbers