

Factsheet: Volcanoes

Key Facts

Volcanoes are openings in the Earth's surface. When they are active they can let ash, gas and hot magma escape in sometimes violent and spectacular eruptions.

Volcanoes can be active (regular activity), dormant (recent historical activity but now quiet) or extinct (no activity in historical times and unlikely to erupt again). While these terms are useful, scientists are more likely to describe volcanoes by characteristics such as how they formed, how they erupt and what their shape is.

While most volcanoes form near tectonic boundaries, they can also form in areas that contain abnormally hot rock inside the Earth. Known as mantle plumes, these hotspots are found at a number of locations around the globe with the most notable being in Hawaii.



The **magma chamber** is a collection of magma inside the Earth, below the volcano. The **main vent** is the main outlet for the magma to escape. **Secondary vents** are smaller outlets through which magma escapes. The **crater** is created after an eruption blows the top off the volcano.

- > It is estimated that more than 80% of the Earth's surface was created by volcanic action.
- > Someone who studies volcanoes is called a Volcanologist.
- > Many Islands were created by Volcanic action.
- > There are more than 1500 active volcanoes on Earth.
- > The largest collection of Volcanoes is called "The Ring of Fire" a series of over 200 volcanoes that encircles the Pacific Ocean.
- > Indonesia is the country with the most volcanoes.
- > The biggest active volcano in the world is Mauna Loa in Hawaii.
- > The oldest volcano in the world is Mount Etna. It is thought to be 350,000 years old.
- > Volcanoes are not always mountain shaped. Some form depressions in the Earth because the loss of magma and materials.
- > There are estimated to be as many as ten thousand volcanoes under the oceans.
- > It is estimated that about 60 volcanoes erupt every year around the world. But the large majority of these are very weak.
- > The largest volcano eruption in the last 600 years was the Tambora Volcano in Indonesia. It erupted in 1815.
- > There are five types of volcano: Shield volcano, Cinder Cone, Dome, Stratovolcano and Caldera.
- > Volcanic eruptions can send ash high into the air, over 30km (17 miles) above the Earth's surface.