

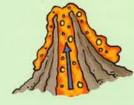
If you thought monster mountains were merely boring blocks of rock, you might want to think again. The freaky peaks you're about to watch are red-hot and bursting with energy. Yep, they're violent volcanoes, but how on Earth do they erupt? That's the burning question.

## **Exploding Earth**

Most vile volcanoes erupt at the edges of the Earth's plates, where the crust is woefully weak and wobbly. Runny, red-hot magma from deep underground bursts or seeps up through cracks in the crust, building up a smouldering mountain. Here's what happens:



2 As it presses and squeezes against the rocks. the pressure mounts ...



4 Now the magma's called lava. At first it's hot and sticky as it runs down the volcano's sides. But it soon it cools and hardens into solid rock. Hope you've got all that.

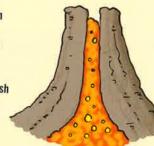
## Volcano villains

As the lava cools and hardens, it builds up a mountain. But not all vile volcanoes are shaped like nice, neat cones. It all depends how thick the lava is and how violently they erupt. To help you pick which villainous volcanoes to avoid, we've lined up three smouldering suspects.



NAME: Composite volcano LAST SEEN: Mount Fuji, Japan Distinguishing features:

- · Tall and cone-shaped, with steep sides. Often found in clusters.
- Built of layers of lava and ash from eruptions reaching back thousands of years.
- Thick, lumpy lava.



NAME: Shield volcano LAST SEEN: Hawaii, USA Distinguishing features:

with gentle slopes.

Low, wide and dome-shaped,

Thin, runny lava. Flows for

miles before hardening,

Lots of side vents.

NAME: Cinder cone LAST SEEN: Mount St Helens,

- Distinguishing features:
- Small, steep-sided cones.
- Built of layers of cinders (ash and dust).
- · Thick, sticky lava.

## WICKED WORLD FACTS

In 1883, Krakatoa erupted with a deafening bang. The noise could be heard in Australia, almost 5,000 km away.

The biggest volcano in the universe is Olympus Mons on Mars. It's three times higher than Mount Everest and has a crater the size of a city.

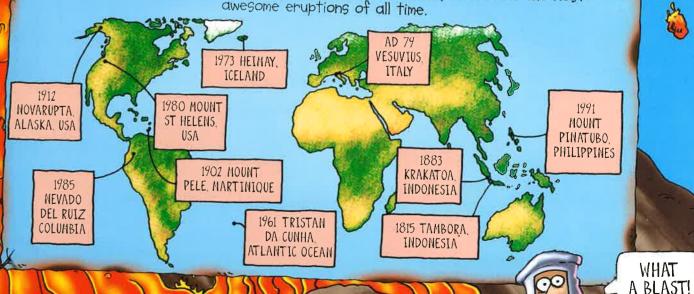
Volcanoes are named after Vulcan, the hot-tempered Roman god of fire.

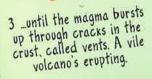
Flaming liquid lava can flow at speeds of up to 100 km/h and reach temperatures of 1,200°C!

WHAT

## Ten awful eruptions

There are about 1,500 active (still erupting) volcanoes on Earth. Only about a third of them sizzle away on land. The rest lie underwater. About 50 of these vile volcanoes blow their tops every year. Here's a map of ten of the most awesome eruptions of all time.





1 Magma rises from deep

underground. It pushes up



