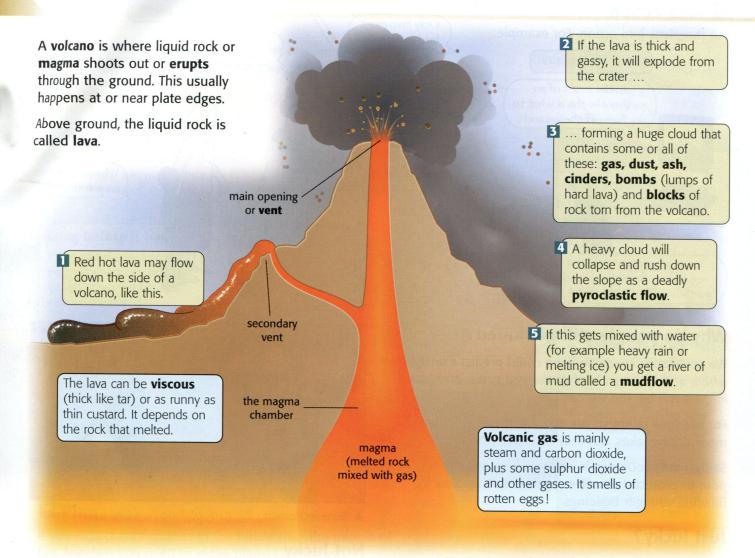
11.7 Volcanoes



Viscous gassy lava is the most dangerous kind. It builds up inside the volcano. Then the gas propels it out in an explosion.



An eruption of runny lava in Hawaii.



▲ A small eruption of steam, gas and ash from Mt St Helens (USA). The hollow around the vent is called a **crater**.

What harm can eruptions do?

The dust may rise into the upper atmosphere and block out the sun. This causes temperatures around the world to fall. It can also clog plane engines and cause planes to crash.

A pyroclastic flow travels at up to 200 km an hour, so you can't escape. It smothers everything.

A thick blanket of ash will ruin crops. So people may starve.

Volcanic gas causes acid rain. This kills trees and vegetation over a wide area.

Mudflows can travel at 100 km an hour. They sweep everything along. You drown in mud. Dust and ash get everywhere — on your clothes, in your hair, in your lungs. You need a dust mask.

They also clog engines, so cars won't start.

Lava flows destroy farms. They bury towns and villages. (But people can walk out of the way.)

Carbon dioxide is heavy and gathers in hollows. It can suffocate people and animals.

Dead or just sleeping?

A volcano is called:

- extinct if it has not erupted for thousands of years, and its shape has been worn away by the wind and rain.
- dormant (sleeping) if it has not erupted for years, or even centuries, but still seeps gas sometimes.
- active if it has erupted recently and is likely to do so again.

Your turn

- 1 What is:
 - a magma?
 - b lava?
- 2 Make a larger copy of this drawing. Colour it and complete the labels.
- 3 In the photo on the right:
 - a what is happening?
 - b what will happen next?
 - c would it be dangerous to be there? Why?
- 4 Which product(s) of an eruption:
 - a can kill people?
 - b can kill trees and crops?
 - c can affect other countries?
 - d are invisible?
 - e can do long-term damage (that may last for years)?

