

LO: To develop vocabulary skills

SC1: I can read an unfamiliar text

SC2: I can skim and scan a text for information

SC3: I can find out the meanings of new words

Here is today's guided reading tutorial. The screenshots and images follow

<https://www.youtube.com/watch?v=bXLsfIVqnKo>

Hot rocks

17 There are places on Earth where hot, liquid rocks shoot up through the surface. These are volcanoes. Beneath a volcano is a huge space filled with molten (liquid) rock. This is the magma chamber. Inside the chamber, pressure builds like the pressure in a fizzy drink's can if you shake it. Ash, steam and molten rock called lava escape from the top of the volcano – this is an eruption.

Lava flowing away from vent

Molten rock spreading out under the volcano and cooling down

Volcanic bomb

► When a volcano erupts, the hot rock from inside the Earth escapes as ash, smoke, lumps of rock called volcanic bombs and rivers of lava.

18 Volcanoes erupt in different ways and form different shapes. Most have a central 'pipe', reaching from the magma chamber up to the vent opening. Some volcanoes have runny lava. It flows from the vent and makes a domed shape called a shield volcano. Other volcanoes have thick lava. When they erupt, gases in the lava make it explode into pieces of ash. The ash settles on the lava to make a cone-shaped volcano. A caldera, or crater volcano, is made when the top of a cone-shaped volcano explodes and sinks into the magma chamber.

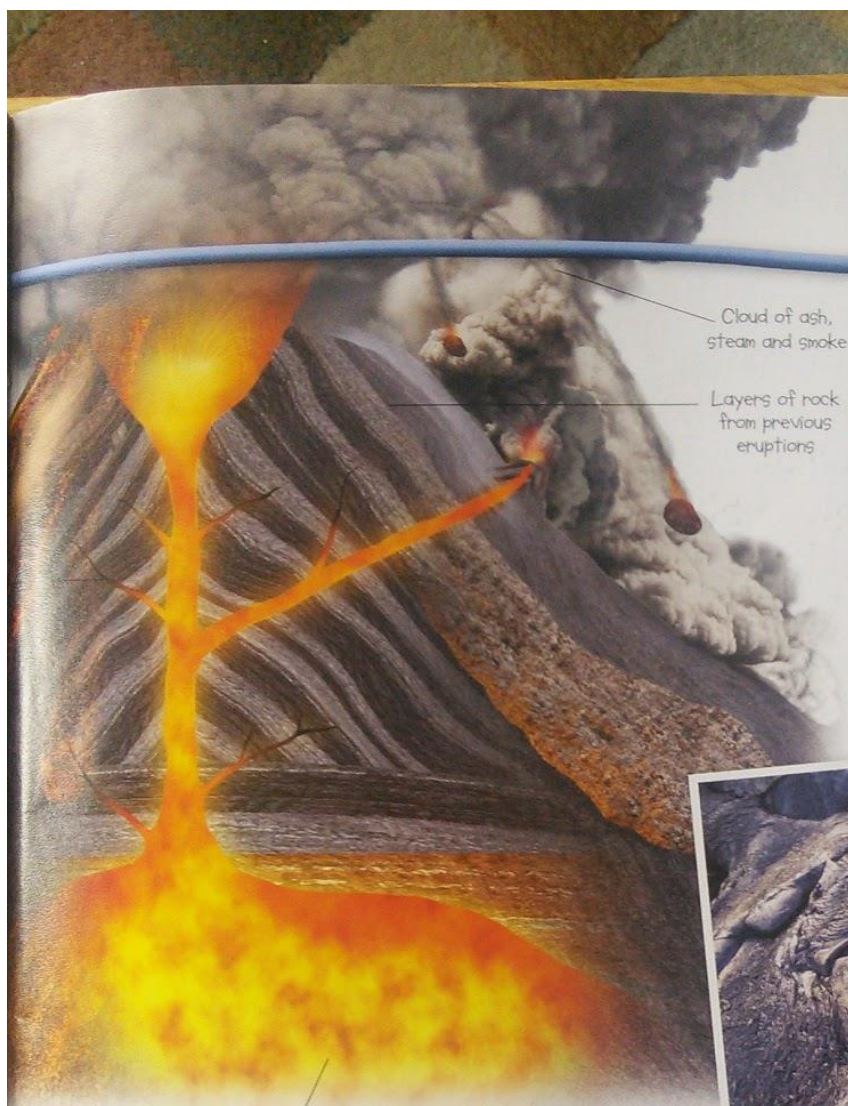
Shield volcano

Crater volcano

Cone-shaped volcano

▲ The three common types of volcano. Most volcanoes erupt along tectonic plate boundaries.





Cloud of ash, steam and smoke

Layers of rock from previous eruptions

Huge chamber of magma (molten rock) beneath the volcano

► Pillow lava piles up on the coast of Hawaii, following an eruption of the Kilauea volcano.

19 There are volcanoes under the sea. Where tectonic plates move apart, lava flows out from rift volcanoes to fill the gap. The hot lava is cooled quickly by the sea and forms pillow-shaped lumps called pillow lava.



MAKE A VOLCANO

You will need:

bicarbonate of soda a plastic bottle
food colouring vinegar sand

Put a tablespoon of bicarbonate of soda in the bottle. Stand it in a tray with a cone of sand around it. Put a few drops of red food colouring in half a cup of vinegar. Pour this into the bottle. In a few moments the volcano should erupt with red, frothy lava.



20 Hot rocks don't always reach the surface. Huge lumps of rock can rise into the crust and become stuck. These are batholiths. The rock cools slowly and large crystals form. When the crystals cool, they form a rock called granite. In time, the surface of the crust may wear away and the top of the batholith appears above ground.

Vocabulary

Find out what the following words mean based on the text. Use each one in a sentence:

Pressure

Eruption

Vent

Surface

Previous