

Students: fill in next to the word answer and return the document for assessment.

Geography

Mountain and volcano

Book: The Mountain Book

Pages 10-13

Everything here is based on our Curriculum Visions book The Mountain Book.

In this segment we are going to think about what happens when a volcano erupts, and what dangers it might bring.

You will need to go to page 10 of the book.

Part 1

What you will see is a page giving a cross section - a side cutaway view - of a simple volcano.

Read page 10 and look for the words magma chamber.

Write down where the magma chamber is. Is it inside the volcanic mountain or deep in the Earth below the volcano?

Answer.....

Below the surface and connected to molten rock below the crust

Part 2

Play the video on page 10. Write a sentence to say what a cinder cone is. Say where the material came from.

Answer.....

A small cone made of coarse lumps of cinders, or volcanic bombs. They are lava lumps that cooled on being ejected from the crater.

Part 3

Now turn to page 11.

Play the video on page 11. Make sure you watch it right through in full screen. It is very exciting. This shows lava coming from a volcano.

Does it come out in a broad sheet, or flow out like a winding river?

Answer.....

It comes out like a winding river. No two flows follow the same paths, so eventually many 'rivers' of lava make a broad cone.

Part 4

Look at the lava in the video. Which colour of lava do you think is hottest, and which colour is coolest?

Answer.....

Yellow is hottest, then red. Black is cold (basalt) lava.

Write down why most volcanic rock we find away from active volcanoes is black not red or yellow.

Answer.....

Because it has cooled and turned into solid rock.

Part 5

Write down the name of the part of the volcano the lava is pouring from.

After one minute twenty seconds of playing, the video shows a side view. How would you describe how the lava is coming out.

Answer.....

As a fountain, also throwing out lumps of lava that will cool into volcanic bombs and make a cinder cone.

Part 6

Now turn to pages 12 and 13.

One use of Geography is to understand how the natural world works, so that we do not put ourselves in danger. Read the story of Mount St Helens eruption and then watch the video on Page 12.

Write a summary of what the eruption was like. Underline three key words.

Answer.....

This was a violent eruption which began when magma pushing up the old vent dislodged a chunk of the mountain top allowing the magma to come out suddenly under tremendous pressure. As it came out into the air it was full of gas, and the lava was burst into tiny particles that cooled into ash and were caught up in the hot gases. Gases and ash rolled down the flanks of the volcano because it is much denser than normal air.

Explain why this kind of volcano is so dangerous.

Answer.....

It is unpredictable

If you are interested in this topic continue to browse the book and watch our amazing videos. They start right on the book cover.

Or you may want to see related books. If so just go to the top of the screen, select geography, and from the page that opens choose Mountain or Volcano.

Remember, too, you can go to our safe search and type in any word about volcanoes, eruptions and mountains.

That volcanic eruption video really was exciting, wasn't it? And watching the video told us so much we couldn't see from still images too, don't you think?