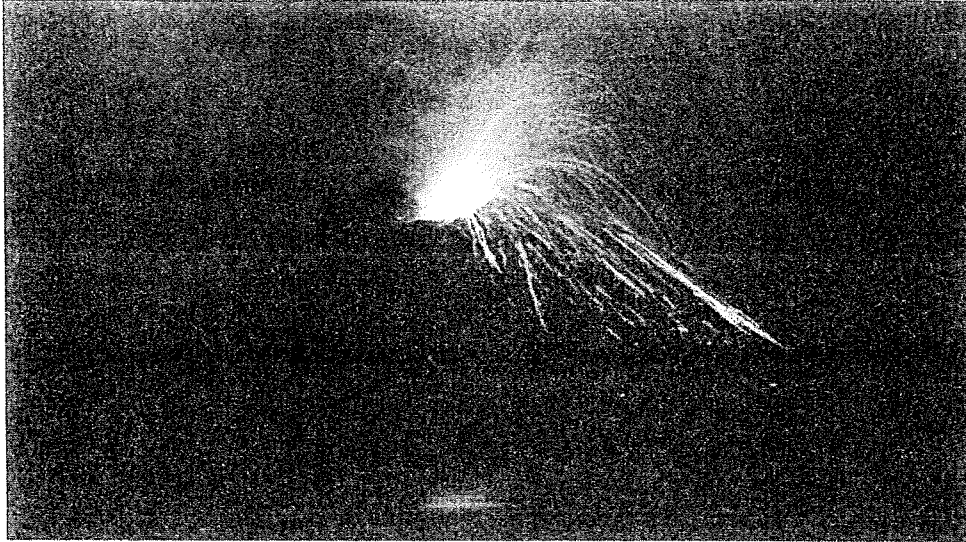


MECD &
BRITISH
COUNCIL
BILINGUAL
PROJECT

NAME

Text 1

Long ago, terrified human beings believed that volcanoes were the work of angry gods or goddesses. In fact, it was not until the 1900s that scientists such as Alfred Wegener began to understand the structure of the Earth's thin outer layer, or crust.



A volcano is an opening in the Earth's crust. Streams of molten rock called lava erupt, or burst out, from the opening. Ashes and rocks may also be hurled into the sky. As the lava cools it hardens and forms new rock. Lava and ash may pile up into a cone, which soon grows into a mountain. Some volcanoes are very violent, while others are more peaceful. Some volcanoes erupt all the time but others only erupt every few hundred or thousand years. Volcanoes which may still erupt are said to be *active*. Those which were exhausted long ago are called *extinct*.

(Texts taken and adapted from *Volcanoes*, snapping-turtle-guides, ticktock Entertainment Ltd. 2004)

Read Text 1. Now use the information in Text 1 to decide if the following sentences are true or false. Circle T if it is true and F if it is false.

1. Today people believe volcanoes erupt because gods or goddesses are angry. T / F
2. Scientists began to understand the cause of volcanoes just over 100 years ago. T / F
3. Active volcanoes are volcanoes which still have the potential to erupt. T / F
4. Most volcanoes have violent, dramatic eruptions. T / F
5. Lava becomes solid when it cools and it forms new rock. T / F
6. All volcanoes erupt every two or three hundred years. T / F

(3 marks)

Find a word in Text 1 that means:

- a) liquid rock _____
- b) the outer layer of the Earth _____

(2 marks)

GO TO NEXT PAGE.

Text 2

Read the texts below and use the information to answer the questions.

VESUVIUS, 1631

DEATH IN DECEMBER

Early in the morning of 16th December 1638, the peasants of the Italian region of Campania were herding up their cattle and the priests were in their churches preparing for Christmas when Vesuvius erupted again. There had already been months of earth tremors and the crater was gradually filling with lava. At midday, however, two fissures burst open unexpectedly on the south-western slopes of the volcano. Hot lava flooded out in great rivers. Later that day there were torrential mudslides and new lava flows. Eyewitnesses reported massive falls of ash in the cities of Naples. Over 4,000 people perished over the next two days, many in the town of Resina, on the site of ancient Herculaneum.

1. What 2 things were happening before Vesuvius erupted in December 1631? (2 marks)

2. What festival were the people of Campania preparing for? (1 mark)

3. How many people died as a result of the volcanic eruption? (1 mark)



MT. PELEE, 1902

BAD ANCHORAGE

On the morning of 8th of May 1902, the steamship, the Roraima was anchored off the Port of St Pierre, Martinique. The crew numbered 47 and there were 21 passengers on board. The chief officer, a man called Ellery Scott, later gave an account of what happened. He saw a great cloud roll over the town and the sky turned black. The ship rocked and the water rose over the deck. The ship caught fire and there were dead bodies everywhere. Ash and water followed, scalding people and covering them in a cement-like coating. Two hours later, a French ship rescued the 20 or so survivors.

1. On what date did Mt. Pelée erupt in 1902? _____ (1 mark)

2. How many people were on the steamship? _____ (1 mark)

3. a) How many people on the ship survived? _____ (1 mark)

b) How were they rescued? _____ (1 mark)

4. What do you think caused the town to be covered in a big, black cloud? _____ (1 mark)



Harry Truman near his home

MOUNT ST. HELENS, 1980

"I AM PART OF THE MOUNTAIN"

Mount St Helens in Washington State, USA was declared an emergency area on 30th April 1980. The most dangerous zone was the "red zone", to which access was forbidden to all except scientists. Property owners in this area were evacuated, but one 84 year old man, named Harry Truman, refused to leave his home by Spirit Lake. On 12th of May, there was an almighty earthquake, but Harry and his 16 cats stayed put. "I am part of the mountain," he told the police. Six days later Harry died as his home was buried beneath a cliff of ash and stone.

1. Which verb means to be made to leave your house for an emergency or other important reason? (1 mark)

- a. to declare
- b. to be evacuated
- c. to stay put

2. Who was allowed to enter the "red zone"? (1 mark)

3. Who died six days after the explosion on 12th May 1980? (1 mark)

4. Why did he die? (1 mark)

5. What do you think Harry Truman meant when he said, "I am part of the mountain"? (1 mark) _____

Text 3

LAVA KAYAKING—KILAUEA VOLCANO, HAWAII

There are many rivers and waterfalls in Hawaii that are exciting enough to thrill even the most experienced kayakers with their surprising twists and challenges. But, for those really looking to try something new the island has another sizzling surprise.

The Kilauea Volcano in Hawaii has continuously erupted since January 1983. Courageous kayakers can explore its lava flows, which cascade down the 200 foot cliff, while braving red-hot water temperatures of 50 degrees Celsius.

But this isn't for the faint-hearted or those new to kayaking. Anything that tips out of the vessel and comes into contact with the lava will instantly catch fire and the ocean itself is hot enough to burn you. However, those willing to paddle just feet from the red-hot liquid flows will witness one of the world's most extraordinarily beautiful sights and have an out of this world experience that includes hearing the hiss of lava as it hits the ocean and walking on recently cooled molten rocks.

Whether you're inspired to take on this challenge or take another Epic Tomato trip, get in touch and we'll help create your epic adventure.

LONDON

No 40-42, 1st Floor, Scrutton St, London, EC2A 4PP
enquiry@epictomato.com
+44 207 426 9899

NEW YORK

221 West 17th Street 4FL, New York, NY 10011
enquiry@epictomato.com
+1 646 558 364

(Taken and adapted from <http://epictomato.com/inspiration/lava-kayaking-kilauea-volcano-hawaii/>)

Read Text 3. Use the information in the text to answer the questions.

1. If you lived in the UK, what telephone number would you call to find out more about reserving an Epic Tomato trip? _____ (1 mark)
2. Can you kayak near the volcano if you have never kayaked before? **Yes / No** Write the phrase from text 4 that helped you come to that decision. _____ (2 marks)

Now read the following sentences from the text and circle a word that means the same as the **underlined word** to create a sentence with the same meaning.

1. The Kilauea Volcano in Hawaii has **continuously** erupted since January 1983.
The Kilauea Volcano in Hawaii has **occasionally / constantly / never** erupted since January 1983.
2. But this isn't for the **faint-hearted** or those new to kayaking.
But this isn't for the **brave / old / timid** or those new to kayaking.
3. Anything that **tips out** of the vessel and comes into contact with the lava will **instantly** catch fire and the ocean itself is hot enough to burn you.
Anything that **falls out / jumps out / looks over the side** of the vessel and comes into contact with the lava will **later / maybe / immediately** catch fire and the ocean itself is hot enough to burn you.

(4 marks)

GO TO NEXT PAGE.

Increasing Violence & Increasing Viscosity (thickness) of lava

Volcano Type	Characteristics	Examples	Diagram
Flood or Plateau Basalt	Very liquid lava; lava flows extensively; lava comes out of fractures or fissures in the land	Columbia River Plateau, USA Deccan Traps, India	<p>Lava Plateau Formation</p> <ol style="list-style-type: none"> 1. Rupture of the crust leads to a fissure. 2. The lava flows from a fissure, building the thickness of the crust, leading to a lava plateau. 3. A more violent eruption, and the lava is forced into the cracks below e.g. Columbia River. <p>http://www.dbprimary.com/</p>
Shield Volcano	Liquid lava is emitted from a central vent; very large; it sometimes has a collapsed caldera	Mauna Loa, Hawaii; La Cumbre, Galapagos Islands; Olympus Mons, Mars	<p>Shield volcano</p>
Cinder Cone	Explosive liquid lava; lava comes out of a central vent; small	Mount Fox, Australia ; Puy de Pariou, France; Craters of the moon	<p>Cinder Cone</p> <p>Formed of pyroclastics only Steep sides - ~30 degrees Relatively small Short duration of activity</p>
Composite or Stratovolcano	Thicker lava; Lava emitted from a central vent; Lots of explosive debris; large	Mount Saint Helens, USA; Mount Kilimanjaro, Tanzania; Teide, Tenerife, Spain;	<p>Main Features of a Volcano</p> <p>http://withfriendship.com/images/c/14147/Stratovolcano-image.jpg</p>
Volcanic Dome	Very viscous lava; can be explosive; relatively small; often near to craters of composite volcanoes	Mount Saint Helen's Lava Dome, USA;	
Caldera	Very large composite volcano collapsed after an explosive period	Mount Pinatubo, Philippines; Lake Toba, Indonesia;	<p>http://reol105naturalhazards.voices.wooster.edu/files/2013/04/caldera.jpg</p>

Main Source: USGS

END OF TEST

Text 4

Read the following questions and use the information in the table -Types of Volcanoes- to answer them.

1. What type of volcano is
 - a. Kilimanjaro _____
 - b. Mauna Loa _____
 - c. Mount Pinatubo _____(1.5 marks)

2. Which type of volcano is often found close to a crater from a stratovolcano?

(1 mark)

3.
 - a. What type of volcano can be found on Mars? _____
 - b. What is its name? _____(2 marks)

4. Put the following volcanoes in order of thickness of lava, starting with the most liquid.
Cinder Cone Volcanic Dome Shield Volcano Composite Volcano
 1. _____
 2. _____
 3. _____
 4. _____(2 marks)

5. a. The lava of one type of volcano spreads over large areas of land. Which volcano type is it?

b. Give reasons for your answer.

(2 marks)

6. Read the following descriptions and use the information in the table to decide which kind of volcano it is referring to.
 - a. *a cauldron-like volcanic feature usually formed by the collapse of land following a volcanic eruption* _____
 - b. *The characteristic dome shape is a result of thick, sticky lava that prevents it from flowing very far.* _____(2 marks)

7. Use the information in the table to find one similarity and two differences between a composite volcano and a cinder cone. (3 marks)
Similarity: _____
Differences: _____

8. What kind of volcano can you see in the picture below? _____ (1 mark)



Find 1 example of this type of volcano in the table. Write its name below. (1 mark)
