



SUPERVOLCANO

Under the quiet, green forests of Yellowstone National Park in the USA is a sleeping monster. Nobody knows its exact size, but it's about 80 kilometres long and 45 kilometres wide, and it looks like a peaceful valley covered in forests. In fact, it's a huge crater full of magma, or molten rock. If it erupted, the explosion would be bigger than 1,000 atomic bombs. Scientists call it a 'supervolcano'.

Volcanoes don't often cause damage over a wide area, but the eruption of a supervolcano would be a global disaster. It would destroy everything within 1,000 kilometres. Lava would cover an area as big as Europe. The explosion would be so strong that it would cause earthquakes, tsunamis and hurricanes. The hot lava would start forest fires all over North America.

People in the rest of the world wouldn't escape the destruction. The supervolcano would pollute the atmosphere with billions of tons of ash and dust. The wind would blow this pollution around the world and we would enter 'a volcanic winter'. When the ordinary volcano Tambora in Indonesia erupted in 1815, it produced 'the year without a summer' of 1816. There was so much dust in the atmosphere that even in Europe people didn't see the sun for several weeks that year.

A supervolcano would be much worse. We wouldn't see the sun for a couple of years. Temperatures would fall by up to 15°C in North America and 3–5°C worldwide. Food production would stop, because plants wouldn't grow and animals would die. Famine and wars would follow.

If the monster under Yellowstone woke up, it would be the end of life as we know it. And it isn't the only one. There are supervolcanoes in California, near Naples in Italy, in Indonesia and in New Zealand. But could it really happen? Scientists at Yellowstone don't think it will happen soon, but it has erupted before. In fact, it usually erupts every 600,000 years, and the last eruption was 640,000 years ago!

Are the statements true or false, or doesn't it say?

- 1 Yellowstone is in the USA.
- 2 The supervolcano there is exactly 80 kilometres long and 45 kilometres wide.
- 3 If it erupted, it would cover Europe in lava.
- 4 The Yellowstone supervolcano produced 'the year without a summer'.
- 5 Tambora was a supervolcano.
- 6 If Yellowstone erupted, it wouldn't affect any other continent.
- 7 The supervolcano in Indonesia is the biggest in the world.
- 8 Yellowstone has never erupted before.

a Read the text again. Tick (✓) the disasters that it mentions.

- | | |
|---------------------------------------|---|
| <input type="checkbox"/> pollution | <input type="checkbox"/> hurricanes |
| <input type="checkbox"/> tsunamis | <input type="checkbox"/> drought |
| <input type="checkbox"/> famine | <input type="checkbox"/> disease |
| <input type="checkbox"/> forest fires | <input type="checkbox"/> wars |
| <input type="checkbox"/> floods | <input type="checkbox"/> earthquakes |
| <input type="checkbox"/> tornadoes | <input type="checkbox"/> climate change |