

risks

Unit 3





crater





magma





Molten rock





destruction






famine



3B A dangerous world

Reading

1  2.17 Read and listen to the text. What are these?

1 a supervolcano

2 a volcanic winter



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.

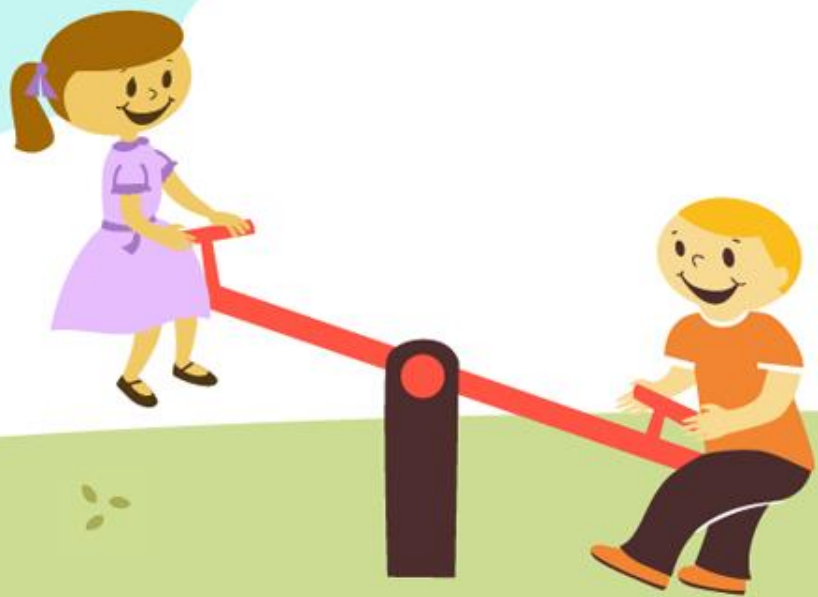
If the monster under Yellowstone woke up, it would be the end of life as we know it. And it isn't the only one. There are supervolcanoes in California, near Naples in Italy, in Indonesia and in New Zealand. But could it really happen? Scientists at Yellowstone don't think it will happen soon, but it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



2 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.





3 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 |

b What would cause each disaster?

pollution – ash and dust

4 Find these numbers in the text. What do they refer to?

1,000 (x2) billions 600,000 45 15 80

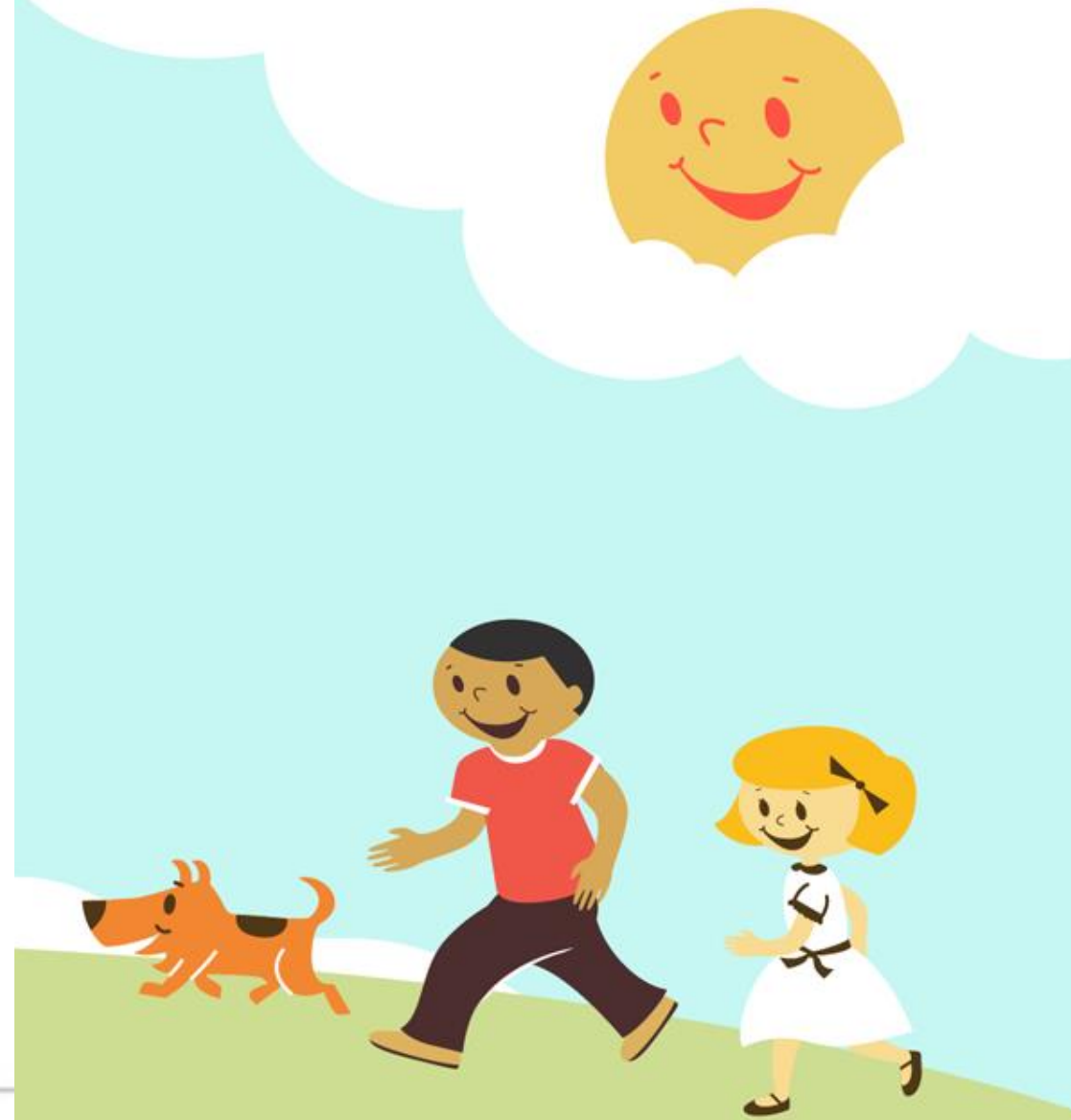
Grammar: so ... that

The explosion would be so strong that it would cause earthquakes.

There was so much dust in the atmosphere that people didn't see the sun for several weeks.

5 Join the sentences. Use *so (much) ... that ...*

- 1 The explosion would be loud. You would hear it hundreds of kilometres away.
- 2 There would be lava. It would cover most of the USA.
- 3 There would be ash. It would block out the sun.
- 4 Temperatures would be low. Nothing would grow.
- 5 1816 was cold. People called it 'the year without a summer'.



Vocabulary

Verbs and nouns

6 Copy and complete the chart with words from the text.

Verb	Noun
erupt	
explode	
pollute	
	production
	destruction

Verb and nouns



Listening and speaking

7 a Work with a partner. Complete the quiz. Ask each other the questions and write down the answers.

b Tell the class your ideas.

1 If there was an earthquake and I was indoors, I would ..., because ...

Are you a survivor?

Dangerous situations are rare, but they sometimes happen. Would you know what to do? Would you survive?

Try this quiz.

- 1** If there was an earthquake and you were indoors, would you ...
- a run outside immediately?
 - b get under a desk or table?
 - c stand next to a wall?



- 2** If you were shipwrecked on a desert island, what would you do first?

- a try to build a boat
- b look for food
- c look for fresh water



- 3** If you were in a car and you saw lightning, would you ...

- a get out of the car and stand a long way away from it?
- b get out of the car and crawl underneath it?
- c stay in the car?



- 4** If you smelt smoke in the middle of the night, would you ...

- a go back to sleep?
- b get up and look for the fire?
- c telephone the fire brigade?



- 5** If a dog bit your leg, would you ...

- a put a bandage on it and forget about it?
- b go to the nearest hospital?
- c try to find the owner of the dog?



- 6** If you were outdoors and there was a tornado coming towards you, would you ...

- a run indoors and go down to the cellar?
- b run indoors and get as close to the centre of the building as possible?
- c get into the nearest car?




- 7** If someone with a knife tried to steal your mobile, would you ...

- a give them the phone?
- b try to grab the knife?
- c run away?



8 a  2.18 Listen. What is the best thing to do in each situation? Why?

b  2.18 Listen again. Note down the scores for each question. Read what your score means below.

survivor?

Dangerous situations are rare, but they sometimes happen. Would you know what to do? Would you survive?

Try this quiz.

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Ac

17-21: In a dangerous situation, you would be cool and calm. You would survive accidents, earthquakes and fires, because you would know what to do.

12-16: You would stay calm in most situations, so you would probably survive. However, you might sometimes put yourself in danger, because you would make the wrong choice.

7-11: You aren't really a survivor. You wouldn't know what to do, so you would probably panic in a dangerous situation. You can't think clearly when you panic.

0-6: You aren't a survivor at all. In most dangerous situations, you would have to think very quickly. You wouldn't know what to do, so you would probably do the wrong thing.