Reading

A **Which of the following natural disasters are the most common in your country? How often do they happen?**

- earthquakes ☐
- wildfires ☐
- floods ☐
- tornadoes ☐
- volcanic eruptions ☐
- tsunamis ☐

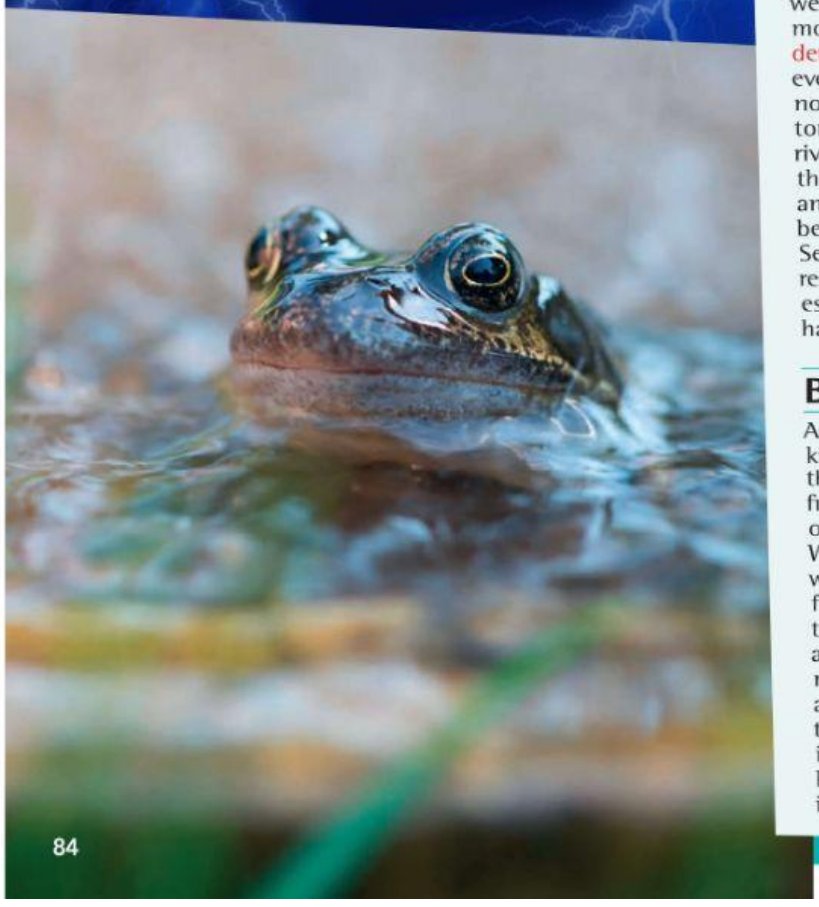
B **Read the text quickly. Which of the natural disasters in A are mentioned?**

Word Focus

classify: to divide things into groups according to their type
derail: to make a train come off the railway tracks
molten: describes rock that has melted because of great heat
pyroclastic: molten rock fragments and gases that move rapidly down the sides of a volcano

Freaky Forces of Nature

The forces of nature can be unbelievably powerful. Severe weather such as hurricanes, blizzards, flash floods and thunderstorms can cause serious damage and the loss of life. Some of Mother Nature's forces, however, are so bizarre and unexpected that they can only be described as freaky. Here are some examples.



A It's raining frogs!

The fastest wind speed ever recorded – 511km an hour – occurred during a tornado in the USA in 1999. Scientists classify tornadoes by the damage they can do. A tornado with wind speeds of 110km an hour can sweep away entire houses and throw cars through the air as if they were rockets. A tornado with wind speeds of more than 480km an hour has the power to derail trains, tear grass from the ground, and even rip pavements from the street. But that's not all tornadoes can do. Scientists believe that tornadoes can suck up the surfaces of lakes, rivers and other bodies of water. When they do, they can take frogs and fish along for the ride, and then drop them far away. This may have been the cause of the 'frog rain' in a town in Serbia. Small frogs rained on the town, sending residents running for cover as they tried to escape. 'I thought maybe a plane carrying frogs had exploded in mid-air,' said one resident.

B Flaming twisters

As if tornadoes aren't dangerous enough, one kind is made of fire! Wildfires are so powerful that they can create their own weather. As these fires burn, they consume huge quantities of oxygen. The intense heat causes the air to rise. When fresh air rushes in to replace it, strong winds are produced. Sometimes this makes the fire spin like a tornado. These fire whirls, or fire tornadoes, can be 15m wide and grow as tall as a 40-storey building. They generally last no more than a few minutes, but some have lasted as long as 20. They are, not surprisingly, one of the most dangerous natural disasters. In 1923 in Japan, a fire whirl killed 38,000 people who had gathered in an open space to escape being injured in an earthquake.

C Read the *Exam Task* and underline the important words.

D Complete the *Exam Task*.

Exam Task

You are going to read an article about four destructive forces of nature. For questions **1 – 8**, choose from paragraphs **A – D**. The paragraphs may be chosen more than once.

Which paragraph mentions

how tall a force of nature can be?	1	☐
something that is made in cold conditions?	2	☐
a well-known historic event?	3	☐
the number of people who died in a specific event?	4	☐
a natural disaster that resulted in a bizarre event?	5	☐
something which happens more frequently in certain seasons?	6	☐
a natural disaster that doesn't last very long?	7	☐
a destructive stream?	8	☐

C Dodge balls

About 1,000 years ago, hundreds of people were mysteriously killed in the Himalayas. A recent investigation concluded that they were caught in a hailstorm and couldn't avoid being hit by chunks of ice the size of tennis balls that fell on their heads at more than 160km an hour. Hailstorms as deadly as this are rare, but hail itself is not uncommon. It is formed in storms when raindrops are carried into extremely cold areas of the atmosphere by powerful winds. The longer the tiny specks of ice bounce around in the wind, the bigger they become. When the pieces of ice grow too big for the wind to hold up, they fall to the ground as hail. Hail is most common during late spring and early summer when severe thunderstorms are more likely to occur.

D Gas attack!

When a volcano erupts, a glowing sea of molten lava often flows down its sides, destroying everything in its path. But a volcano can produce something even deadlier: a pyroclastic flow, which is a cloud of gas and rock that can reach temperatures above 500°C. The flow crashes down the side of a volcano like an avalanche. These flows typically reach speeds of more than 80km an hour. A pyroclastic flow will knock down, destroy, bury or carry away nearly everything it meets. It can destroy buildings, forests and farmland. People who are caught in the path are obviously among the victims too, but even people that are close by can die as the result of breathing in hot ash and gases. It was this kind of flow that famously destroyed the Roman cities of Pompeii and Herculaneum during the eruption of Mount Vesuvius nearly two thousand years ago.

E Now read the *Exam Close-up* and check your answers carefully.

Exam Close-up

Checking your answers

- In multiple-matching tasks, be careful that you haven't accidentally written down the wrong paragraph number!
- After you have completed the multiple-matching task, go back and double-check your answers carefully.

F Complete the definitions with these words.

avalanche blizzard flash flood thunderstorm tornado

1 A(n) _____ is a violent storm with strong winds that move in a circle.
2 A(n) _____ is a severe snow storm with strong winds.
3 A(n) _____ is heavy rain accompanied by thunder and lightning.
4 A(n) _____ is a large amount of water that suddenly covers an area.
5 A(n) _____ is a large amount of ice, snow and rock falling quickly down the side of a mountain.

Giant hailstones

Ideas Focus

- Which of the natural disasters described in the reading text would be the most frightening? Why?