

## Part 3: Exam practice

Using **NO MORE THAN THREE WORDS** from the passage, complete each gap in the diagram below.

Holidaymakers faced disruption yesterday because of new plumes of ash from an Icelandic volcano, which forced the closure of airports in Spain and Portugal.

The cancellations – which mainly affected Ryanair and easyJet services operating out of Stansted and Gatwick – came as scientists produced the first internal map of Eyjafjallajökull's network of magma chambers, which extend 12 miles below the ground.

A new ash cloud has risen 30,000ft into the air and drifted south after a pulse of meltwater and ice poured into the Eyjafjallajökull volcano last week. The water caused huge explosions as it hit the hot lava, generating more ash plumes. European aviation regulators have imposed a maximum safe limit of 0.002 grammes of ash per cubic metre of air, meaning that if levels rise above this, flights cannot enter that airspace.

The map shows how the volcano's tubes plunge deep down through the earth's crust to the start of the mantle, which is made of semi-molten rock. It reveals the huge scale of the eruption and the potential for a far greater one. This is because the magma chamber of Eyjafjallajökull is dwarfed by the much larger one under Katla, a volcano 15 miles to the east. Two of Katla's eruptions, in 1612 and 1821, are thought to have been triggered by those of its neighbour. While Katla is not part of the same underground network of magma channels and chambers, it is close enough to be affected by changes in pressure in Eyjafjallajökull's system. There is also a chance that a horizontal sheet of magma, known as a dike, beneath Eyjafjallajökull could stretch out far enough to penetrate a magma chamber beneath Katla. Hitting the roots of its neighbour would almost certainly trigger an eruption. The three eruptions of Eyjafjallajökull on record have each been associated with a subsequent eruption of Katla. There have, so far, been no signs of turbulence beneath Katla's surface but, having last erupted in 1918, volcanologists say that a new blast is overdue.

The workings of the volcanoes have been provisionally drawn up by Professor Erik Sturkell, a geologist at the Nordic Volcanological Centre, University of Iceland. Sturkell suggests the Eyjafjallajökull eruption has been building since 1994, when new lava began rising, forming two reservoirs three miles beneath the volcano. A surge of earthquakes under Katla mean it has experienced a similar influx of lava, Sturkell said. 'This suggests the volcano is close to eruption.'

