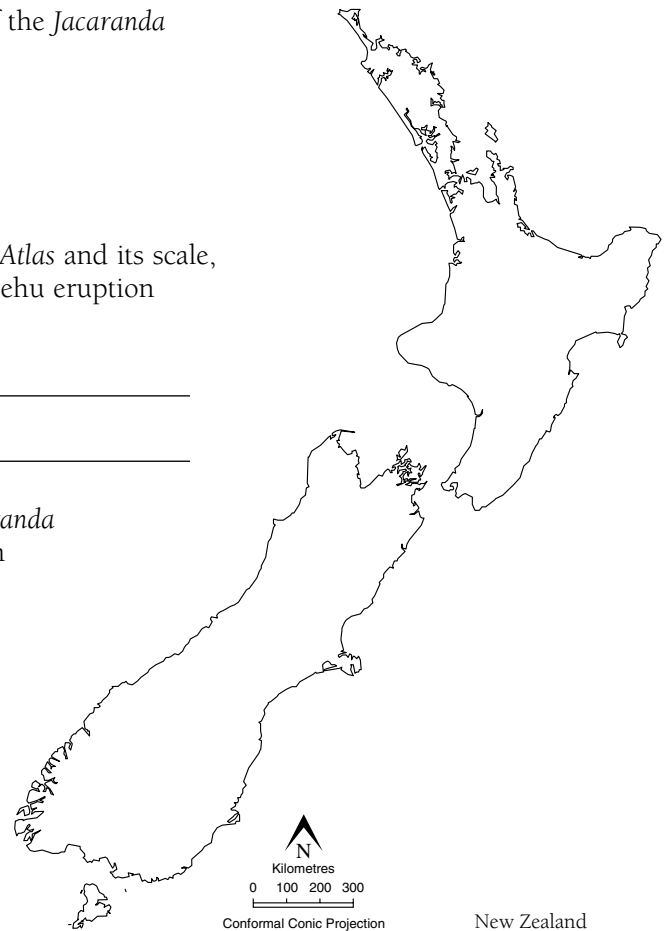
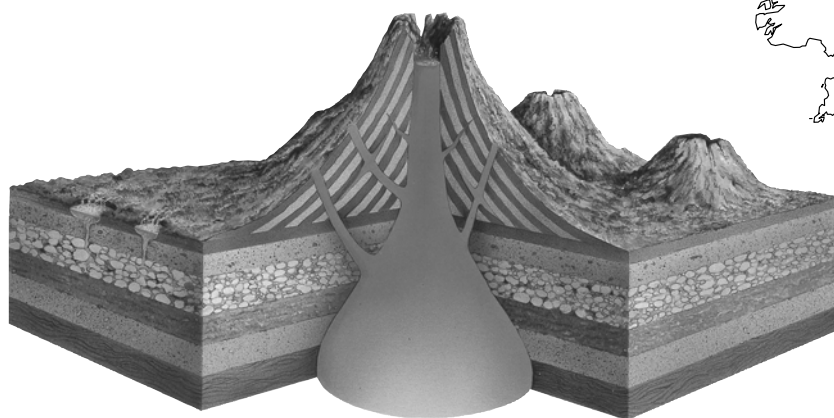


DATELINE: In September 1995 Mt Ruapehu, the southernmost active volcano in the Taupo Volcanic Zone of New Zealand, erupted. The eruption was preceded by steam eruptions in Mt Ruapehu's Crater Lake, an earthquake and a small eruption beneath the mountain. At the height of the main September eruption up to 10 000 tonnes of sulphur dioxide gas were emitted, and the plume reached 10 km into the sky. Ash fell as far away as 120 km to the east. By October, the lake in the crater had dried up, but two small lakes had re-appeared by the end of 1995. No deaths or injuries were reported during the series of eruptions.

- Using the outline of New Zealand on the right and page 137 of the *Jacaranda Atlas*, mark in the following features:
 - New Zealand's main volcanoes
 - the major fault lines running through New Zealand
 - New Zealand's volcanic areas
 - the Pacific Plate and its direction of movement
 - the Indo-Australian Plate and its direction of movement
- Using the map of New Zealand on page 136 of the *Jacaranda Atlas* and its scale, estimate the location of the furthest ash fall from the Mt Ruapehu eruption (120 km east of the volcano).

- Using the information and the diagram on page 9 of the *Jacaranda Atlas*, add the following labels to the blank diagram to explain how a volcanic eruption occurs: **main volcanic vent, branch pipe, magma chamber, pressure from gas and magma forces magma up the main vent and branch pipes, ash and gas explode from the crater, ash settles in a layer over the volcano, lava covers the ash and solidifies.**



- The eruption of Mt Ruapehu had little effect on New Zealanders because the area is isolated and sparsely settled. Consider the eruption of the Soufriere Hills volcano on Montserrat as described on page 203 of the *Jacaranda Atlas*. Explain the effects of the Soufriere Hills eruptions on the local populace.
