

White Island – What do you know?

White Island is 48 km offshore and about 70 percent of this volcano is under the sea. That means it's the most massive volcanic structure in N Z.

The upper slopes of White Island are steep and they're deeply eroded. They rise to a height of 321m.

This island has been built up by layers of lava, ash flows, and rubble from heaps of volcanic activity over the past 150,000 years.

Mt Taranaki, Mt Ruapehu and Mt Ngauruhoe built up in the same way as White Island. They're like giant chimneys with steep sides built from all those layers.

Mt Taranaki



See the layers from the different eruptions on Mt Taranaki? There's ash from one eruption and different sized stones from another. This volcano collapsed and then built up 5 times! Not many volcanoes do that.



White Island was really active between 1976 and 1993 - more active than at any time in the past few hundred years.

On clear, still days, Bay of Plenty people can see gas and ash plumes rising as high as 10 km .

Gases still pour from the craters and steam vents every day - several hundred to several thousand tonnes !

The gases are mostly steam, carbon dioxide and sulphur dioxide but some chlorine and fluorine will belch out too.

Acid gases combine with water in the steam to form acid droplets and if you're on the island these can sting your eyes and skin and make breathing more difficult.

There have been some very big eruptions in the past but there are no eruption deposits from the island preserved on the mainland.

Think, pair and then share your ideas

1. Do you think the White Island eruptions have had a **big impact** on the Bay of Plenty region like the Tarawera one did on the surrounding area?
2. Plenty of people visit White Island to see an active volcano. What are the hazards?