

**St Andrew's Secondary School
Geography Unit**

Topic: Living with Tectonic Hazards

Name: _____ () Class: _____ Date: _____

Practice Question

- 1 (a) Study Fig. 1 which shows the world's distribution of earthquakes and volcanoes.

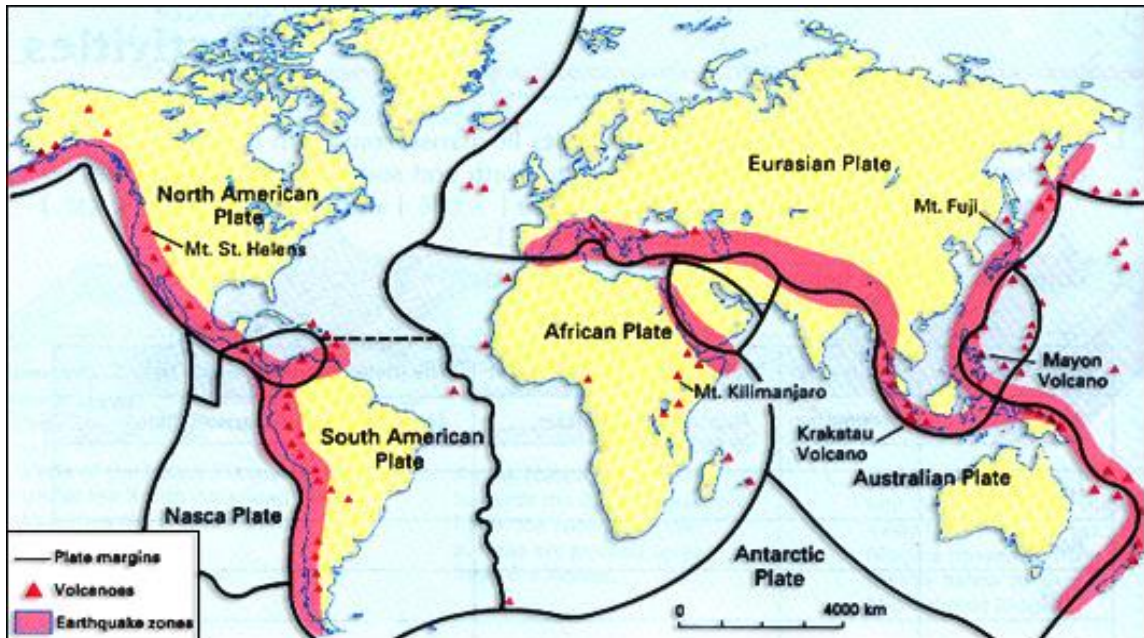


Fig. 1

Describe the world's distribution of volcanoes as shown in Fig. 1 and explain why earthquakes are also found in areas where there are active volcanoes.

[6]

- (b) Study Fig. 2 (Insert) which shows the Sumatran Fault and the Sunda Trench and Fig. 3 which contains a description of the Seismo-Tectonics of the Sumatra Region.

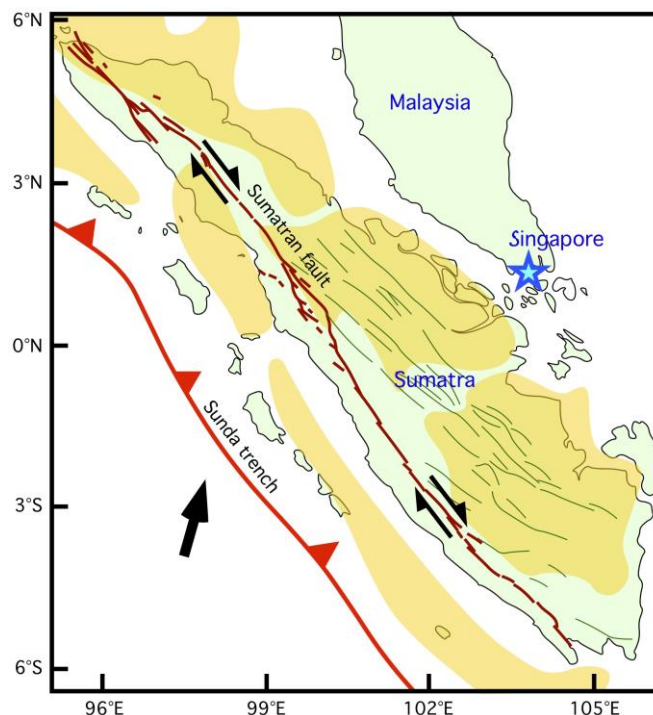


Fig. 2

Seismo-Tectonics of the Sumatra Region

The plate boundary southwest of Sumatra is part of a long tectonic collision zone that extends over 8000 km from Papua in the east to the Himalayan front in the west. The Sumatra-Andaman portion of the collision zone forms a subduction zone megathrust plate boundary, the Sunda-Java trench, which accommodates convergence between the Indo-Australia and Sunda plates. This convergence is responsible for the intense seismicity and volcanism in Sumatra.

Fig. 3

With reference to Figs. 2 and 3, describe and explain the formation of the volcanoes and Sunda trench in Sumatra.

[5]

(c) With the aid of diagram(s), describe and explain the formation of tsunamis.

[6]

(d) 'Pollution is the most devastating impact caused by volcanic eruptions.' How far do you agree? Explain your answers with relevant examples.

[8]