

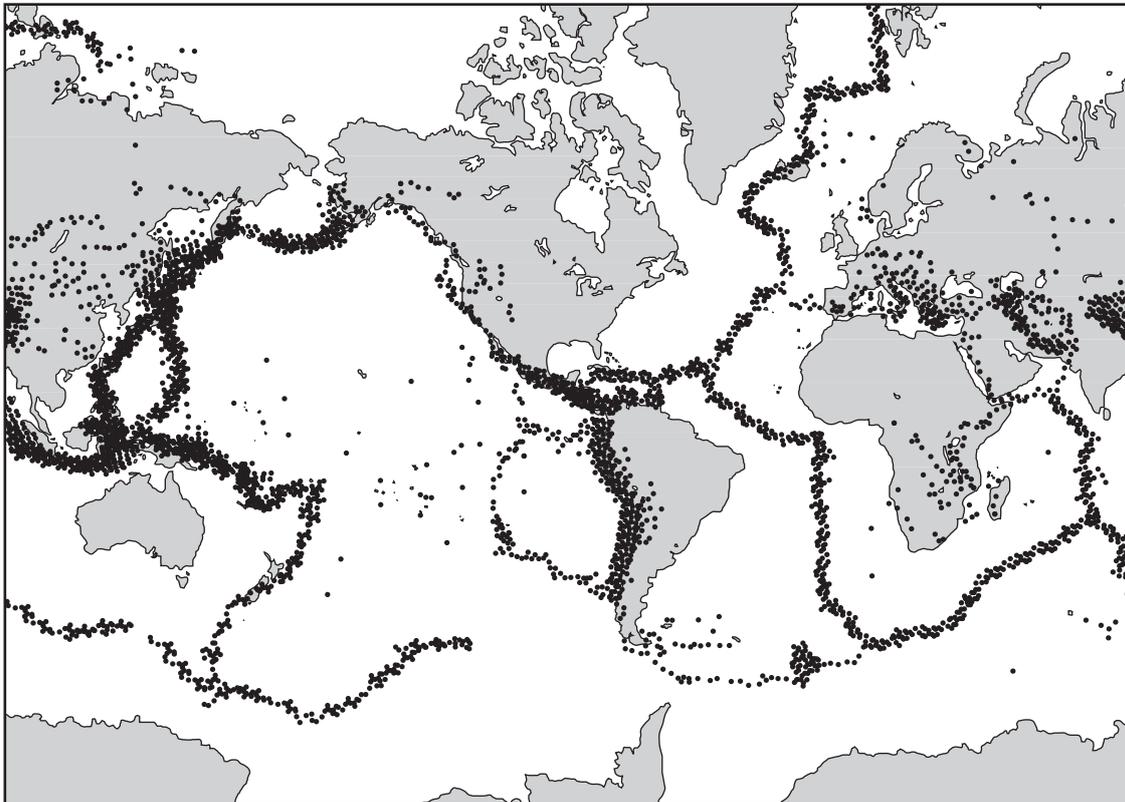
Research Field

Seismology

Definition

Seismology is the study of earthquakes and their effects. A seismologist is a person who studies in this field.

World map showing major earthquake areas (black dots)



Source: <http://www.solarviews.com/raw/earth/earthcyl2.jpg>

Observations

When seismologists plotted earthquakes on a map they discovered that all major earthquakes are located in chains – not just scattered randomly about the world.

When New Zealand seismologists calculated the depth of earthquakes, another interesting pattern emerged – in New Zealand’s North Island, the further west you go, the deeper the earthquakes get.

By estimating how long ago different fault lines (cracks in the Earth caused by earthquakes) last moved and how much they moved, seismologists are getting much better at predicting when and where earthquakes are likely to happen.

Questions

1. Where do earthquakes usually happen?
2. How can plate tectonic theory help seismologists to predict where earthquakes are likely to happen?

References

Institute of Geological & Nuclear Sciences

Shortcuts to 'cool' pages

<http://www.gns.cri.nz/kids/index.html>

United States Geological Survey

Earthquakes for Kids

<http://earthquake.usgs.gov/learning/kids.php>

J J Aitken (1996). *Plate Tectonics for Curious Kiwis*. Lower Hutt: Institute of Geological & Nuclear Sciences, BK61, 78, p. 83, photos and figures.