

# Earthquake Boundaries!

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**10 000 earthquake epicentres have been recorded on a map of the world. Can you use this data to locate the Earth's crustal plates?**

Earthquakes occur where slabs of rock grind past each other. This occurs at the boundaries of the Earth's crustal plates as the plates move past each other, move apart from each other or one plate slides over the top of another plate.

While some earthquakes occur away from plate boundaries, the majority occur in zones along the boundaries.



Like a huge "Join-the-dots" puzzle, trace around the locations of the earthquakes to mark out the plates. In some places this will be easy — in some places it will be difficult.



Compare your plates with those of a friend. Do you agree on the location of the plates? Do you have some plate boundaries in different locations?

Geologists have identified the following major plates :

Australian plate

Antarctic Plate

Pacific Plate

North American Plate

Cocos Plate

Nazca Plate

South American Plate

African Plate

Eurasian Plate

Philippine Plate

Caribbean Plate

Arabian Plate

- NEATLY Label each plate with its name (12 points)
- NEATLY color each plate a different color (12 points)
- Use the symbol from the mini paper globe to mark the divergent boundary at the Atlantic Mid-Ocean Ridge (1 pt)
- Mark the convergent boundary that is making the Andes (1pt) (use the globe's symbol)
- Mark the transform boundary in California (1pt) (use the globe's symbol)
- Using the mini globe or a poster, find 3 convergent boundaries that are making volcanos and draw a tiny volcano in those spots. (3 points)

