
The Ring
of Fire
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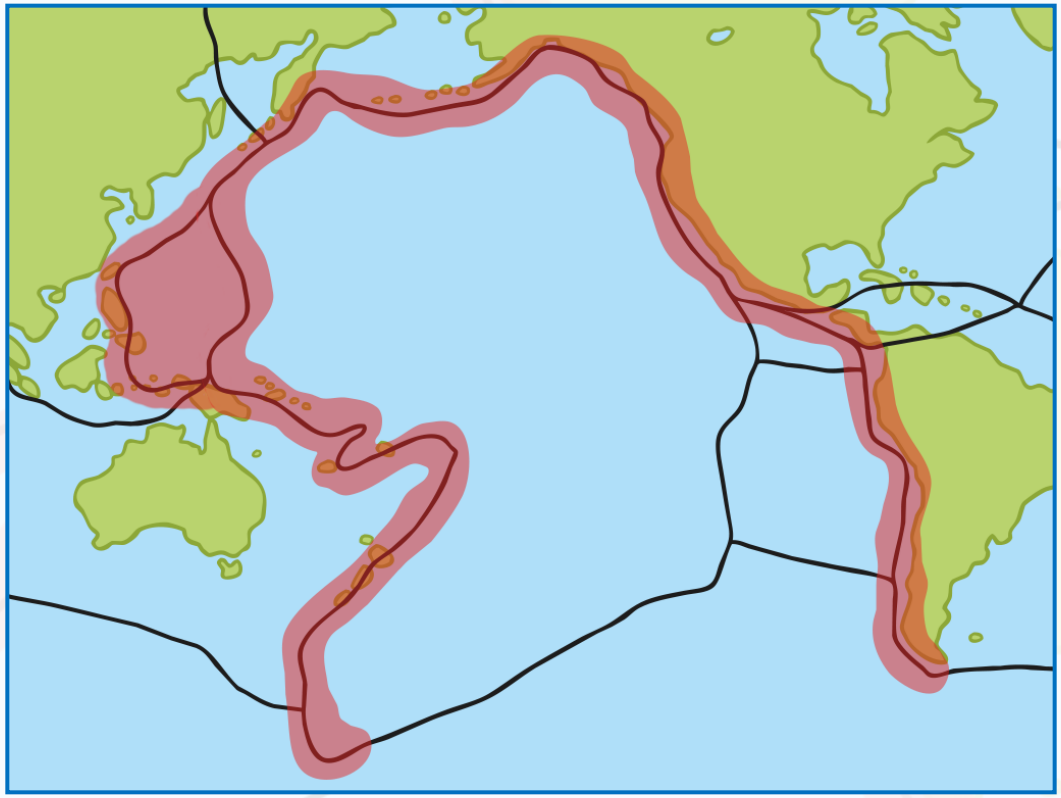
What Is the Ring of Fire?

The Ring of Fire is a horseshoe-shaped line on a map which is home to around 75% of the world's volcanoes and 90% of the world's earthquakes.

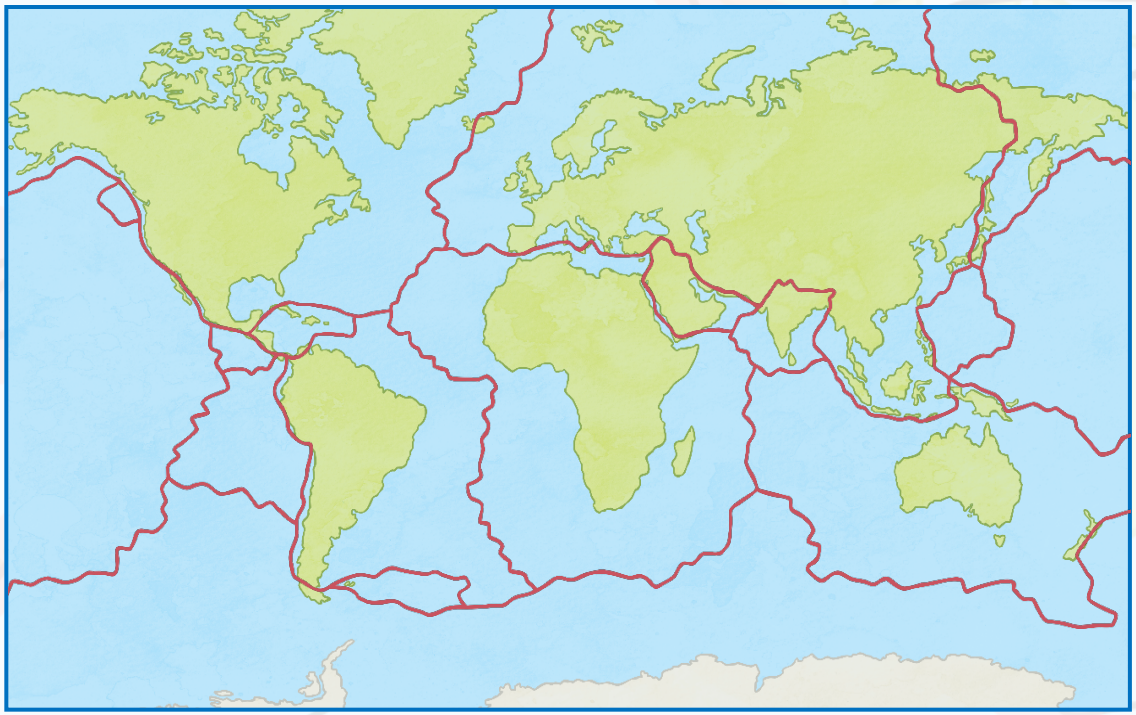
The area is a 25 000 mile line of volcanoes, tremors and earthquakes around the edge of the Pacific Ocean.



Why Do Earthquakes Happen?

Earth's crust is made up of lots of pieces. The edges of these pieces rub against each other and this can cause sudden movements which can lead to earth tremors or earthquakes.

These pieces of Earth's crust are called tectonic plates and they make a jigsaw covering Earth.



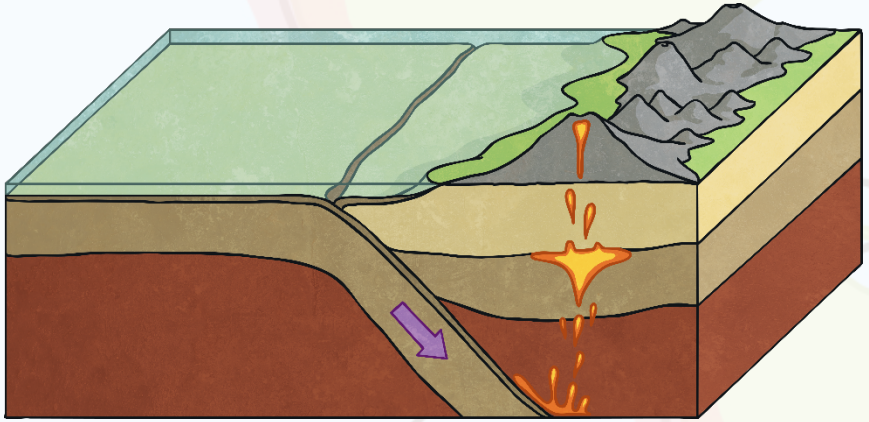
Where Do Earthquakes Happen?

Here is a map showing earthquake hotspots around the world.

What do you notice about the locations of the hotspots?

What Makes the Ring of Fire so Special?

One way that tectonic plates meet and move is when one slides under the other creating what is known as a subduction zone.



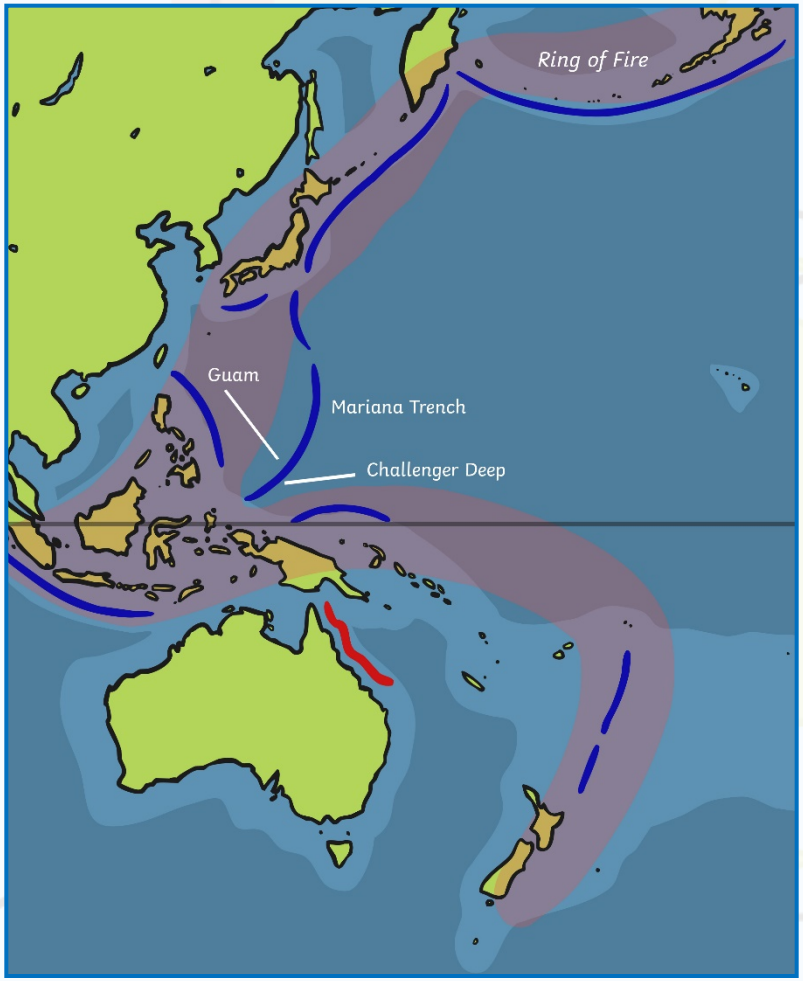
The boundary of the Ring of Fire is mostly subduction zones which are more likely to cause earthquakes.
The subduction also leaves behind trenches. Trenches are the very deepest parts of the oceans.

The Mariana Trench

The Mariana Trench is the deepest known trench in Earth's oceans. It was formed when one tectonic plate moved beneath its neighbour.

It is 7 miles deep and is found just to the east of the island of Guam.

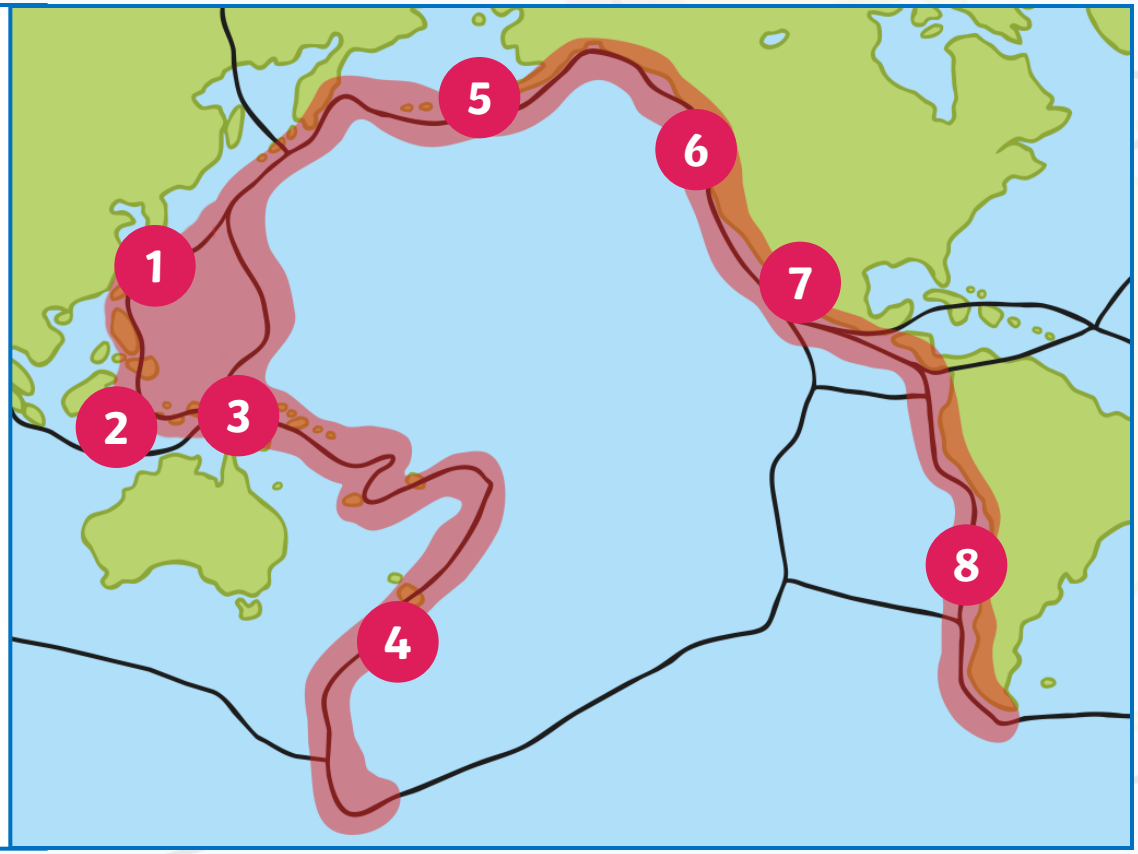
Challenger Deep is the deepest part and also the deepest known part of our oceans. It is 10 898m which is bigger than the height of Mount Everest which is only a tiny 8848m!



Hotspots on the Ring of Fire

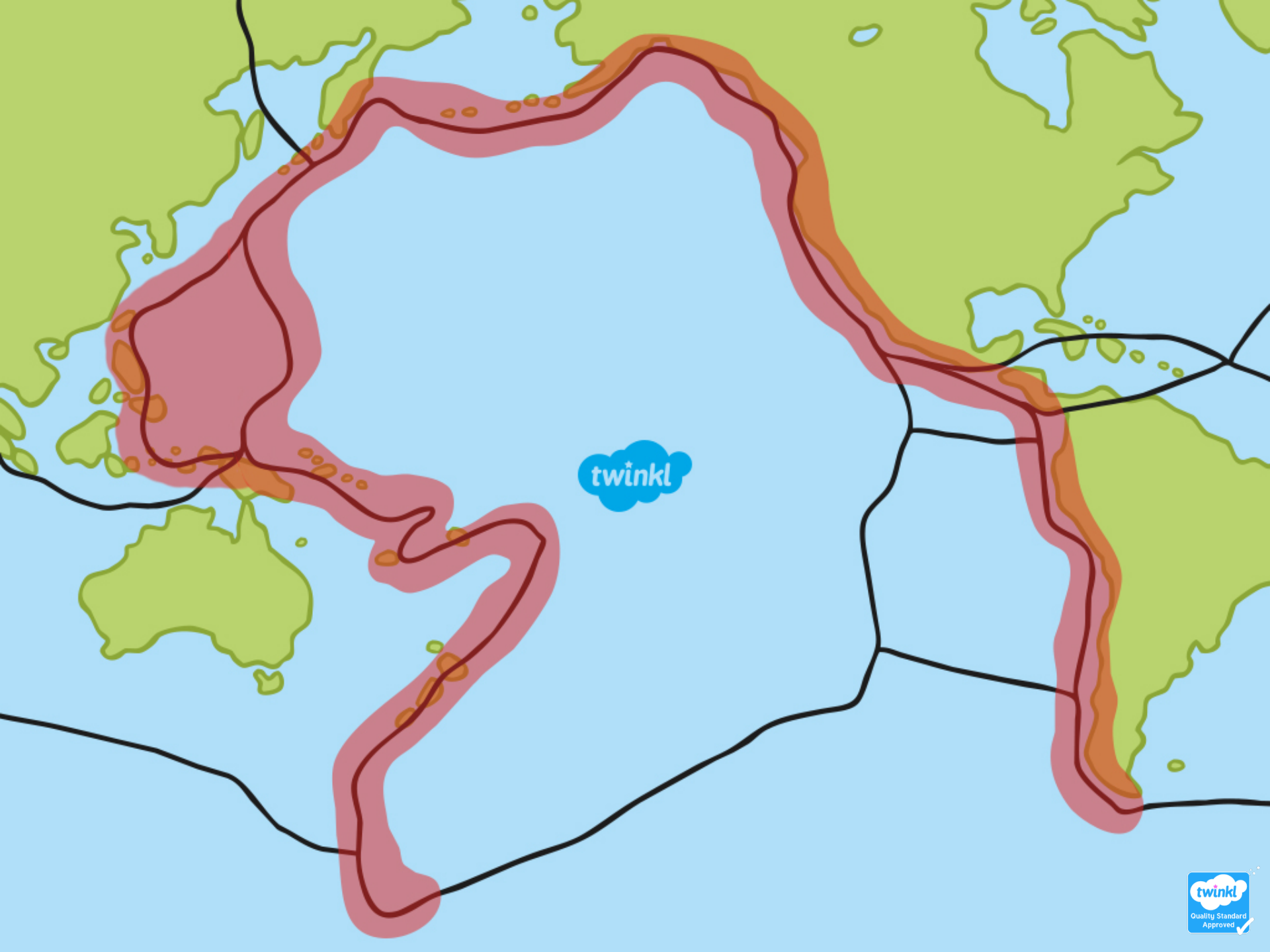
There are at least 452 volcanoes in the Ring of Fire. Here are some of the more famous or important hotspots... click on each to find out more.

Valdivia earthquake in 1960 was the largest recorded earthquake at 9.5 out of 10 on the Richter scale.



Things to Do Next...

- Find out more about the Richter scale.
- Find out more about the discovery of Challenger Deep.
- Find out more about how earthquakes are predicted.
- Find out the difference between a tremor and an earthquake.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