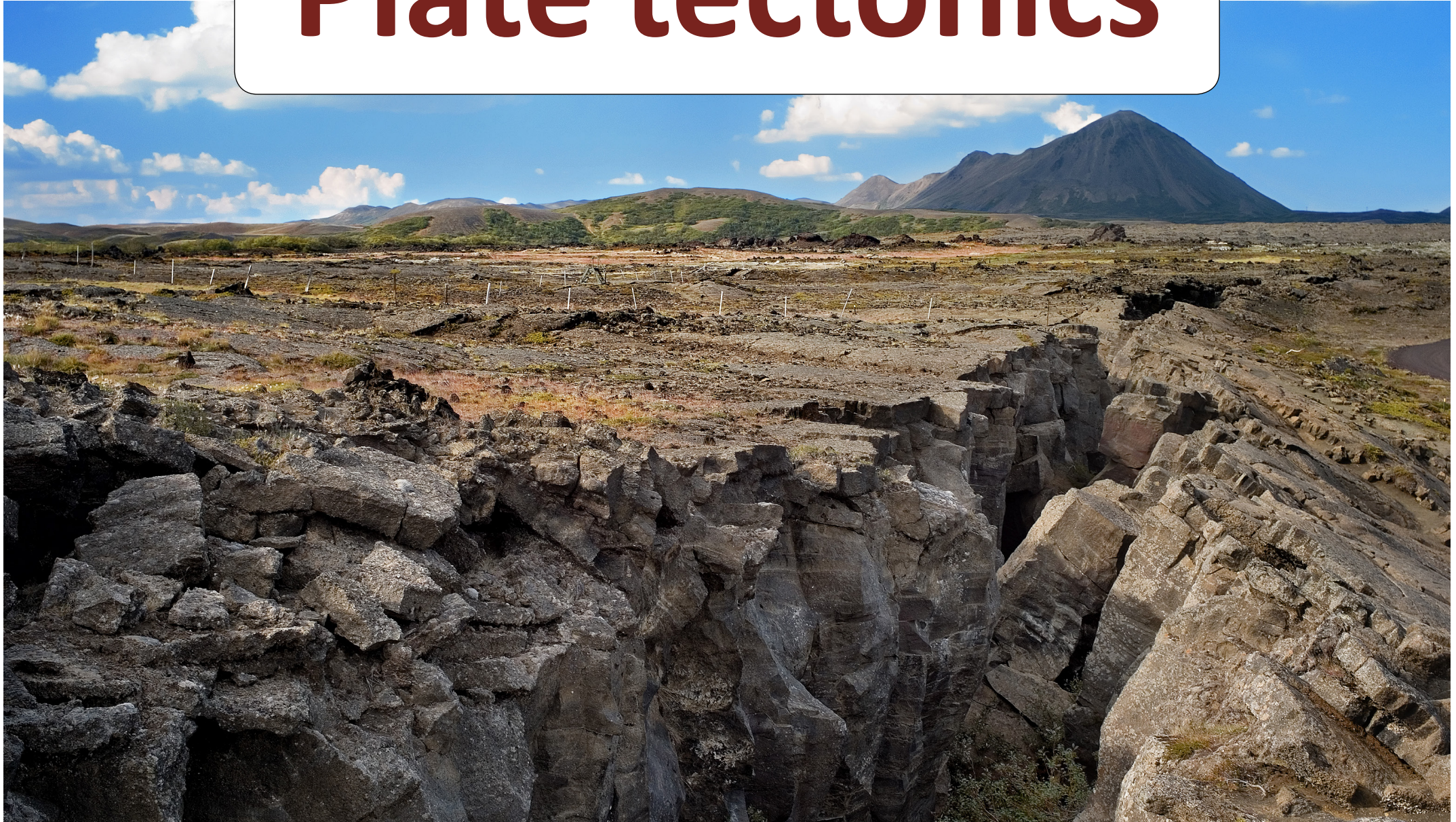
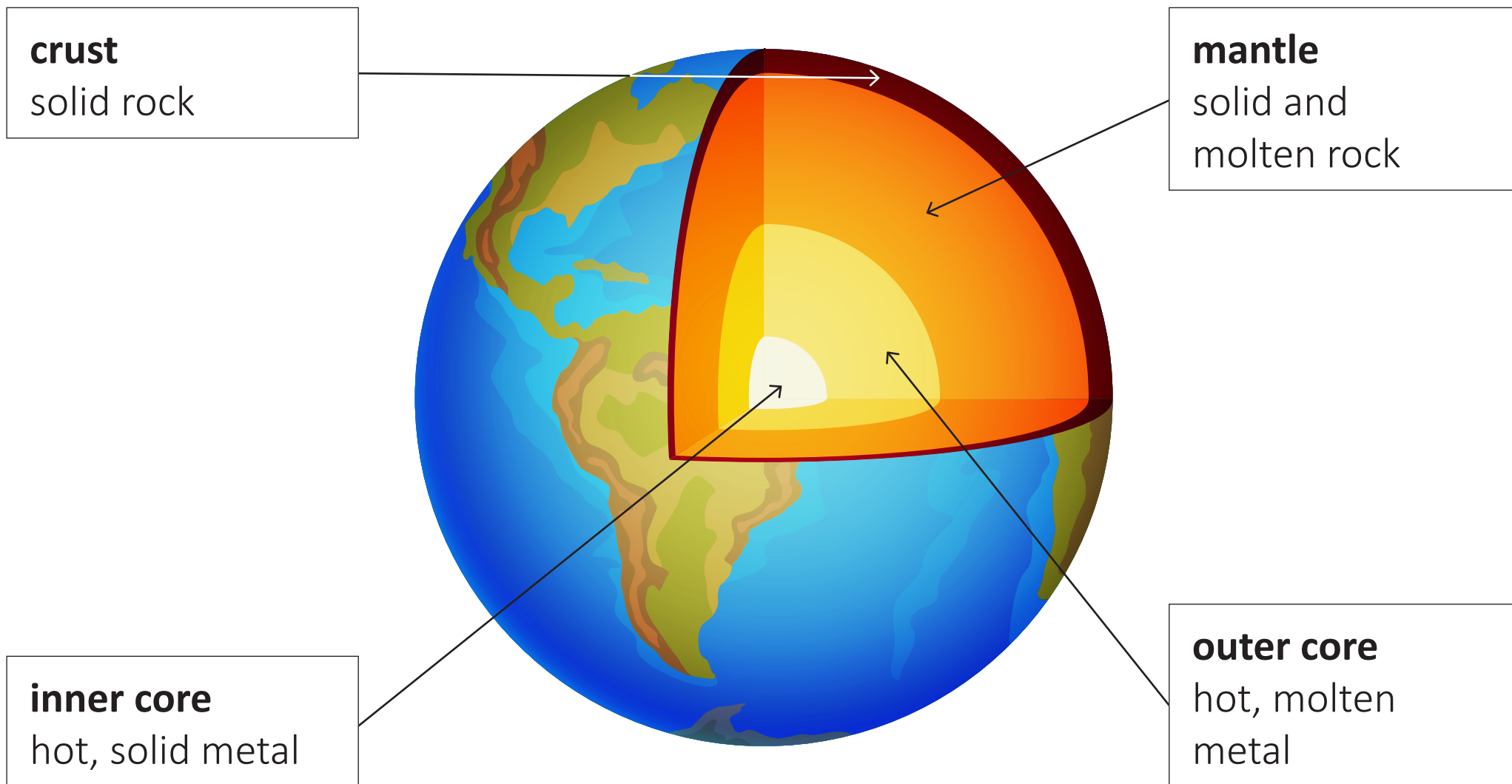
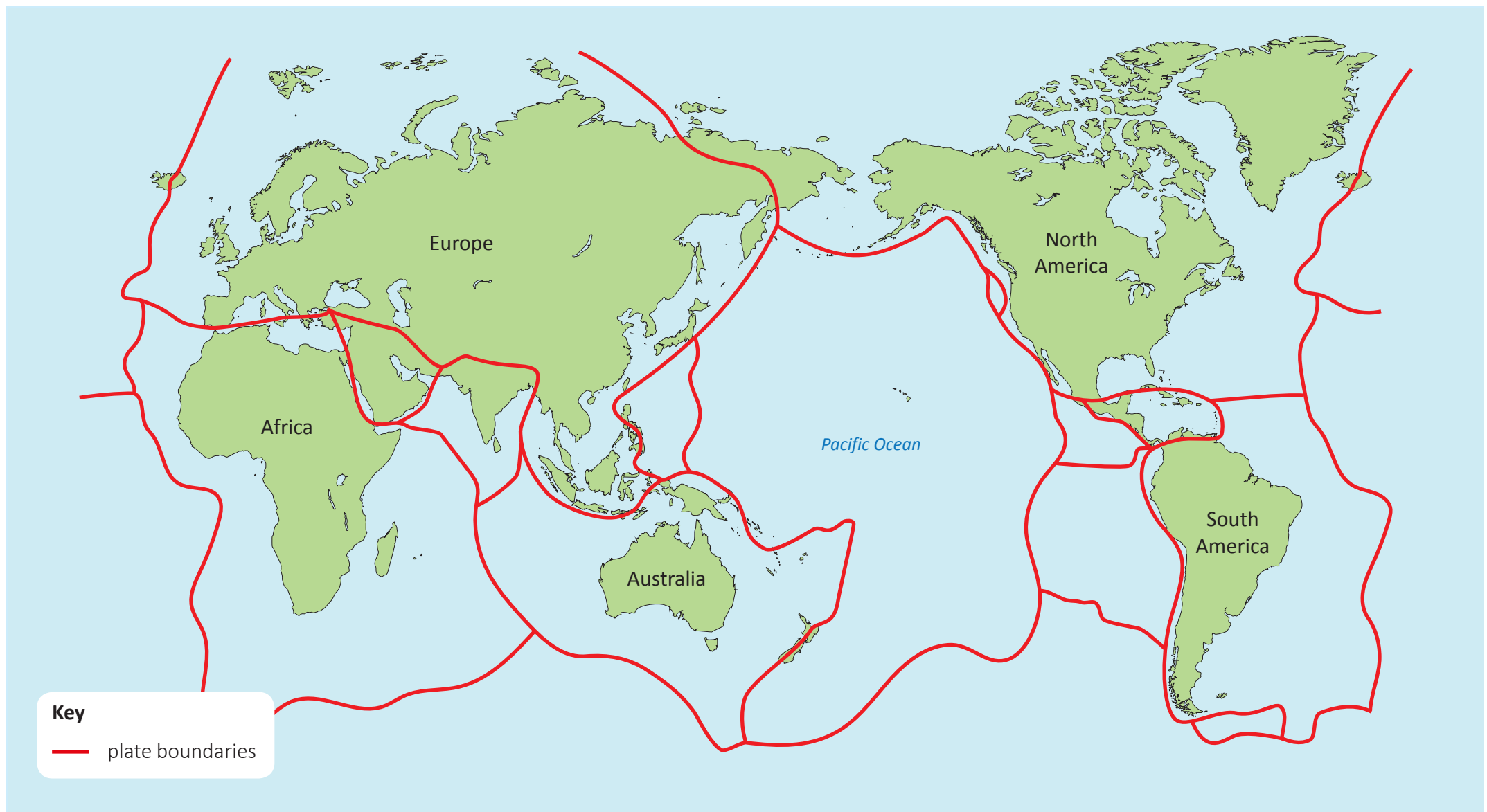


Plate tectonics



Earth is made up of **four** layers.





The Earth's crust is made up of different pieces called **tectonic plates**.
Where tectonic plates meet is called a **plate boundary**.



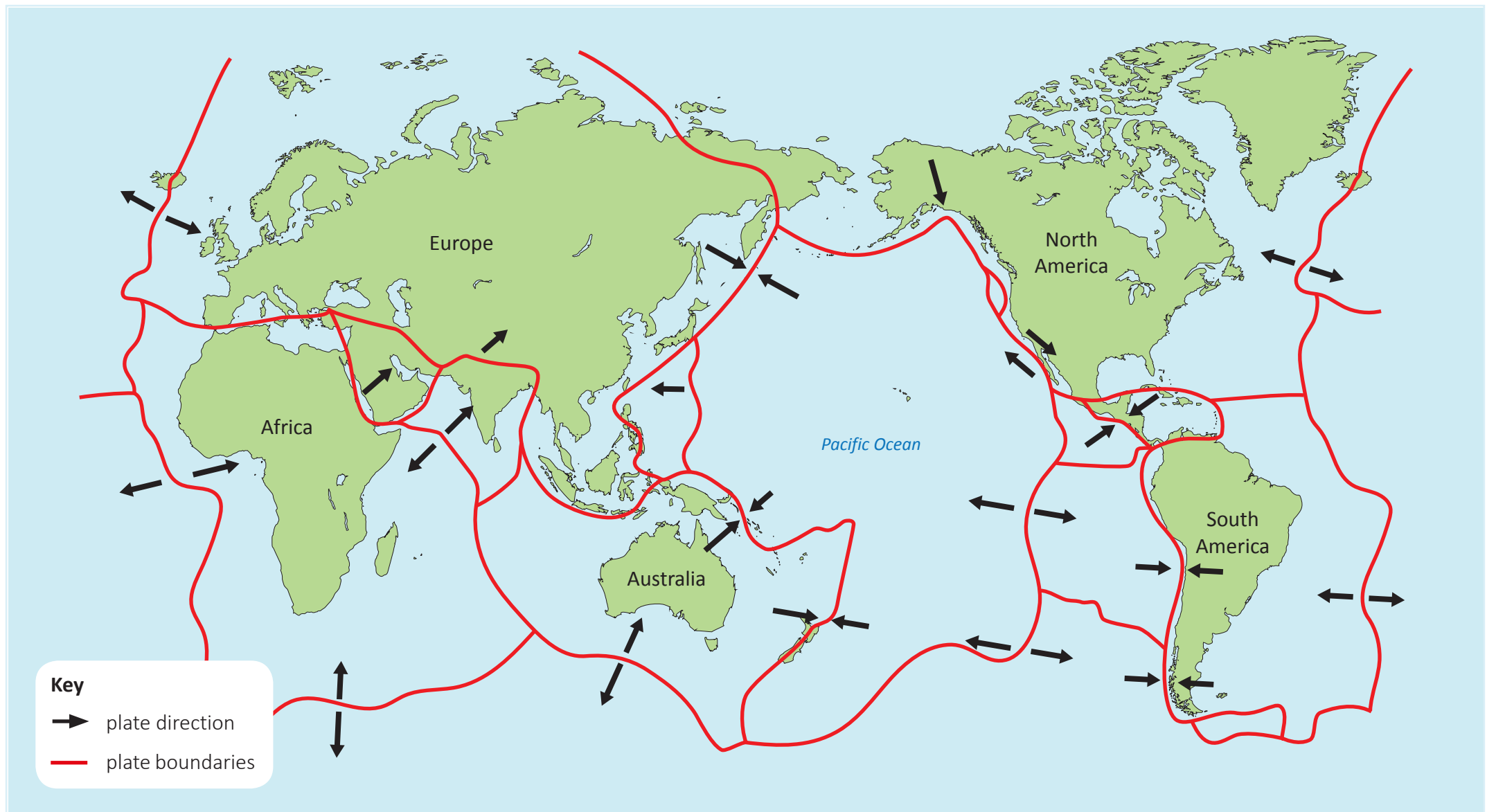
mantle



mantle

The tectonic plates float on top of the **mantle** and are constantly moving.





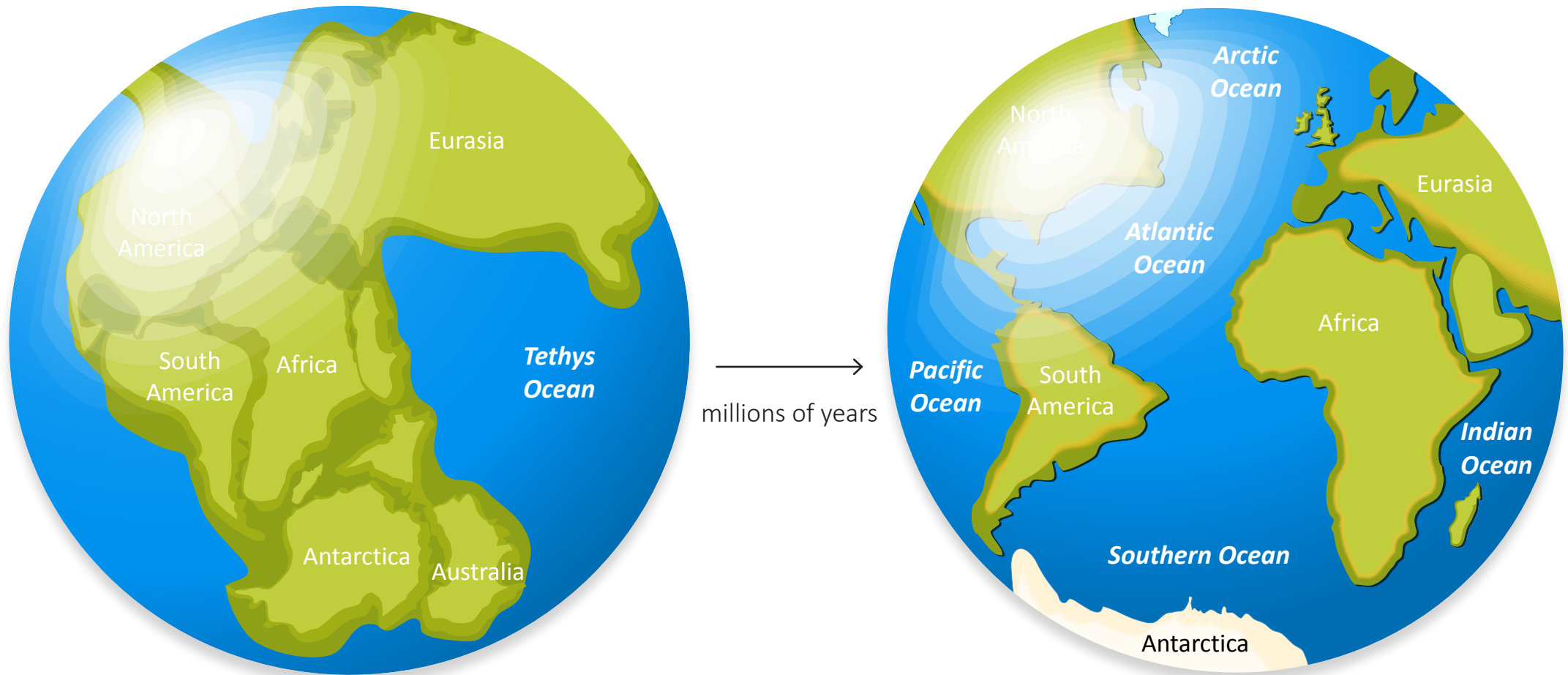
Tectonic plates move very slowly.
They can **push** together, **pull** apart or **slide** past each other.





Over 200 million years ago, all of Earth's continents were joined together as one **supercontinent** called **Pangaea**.

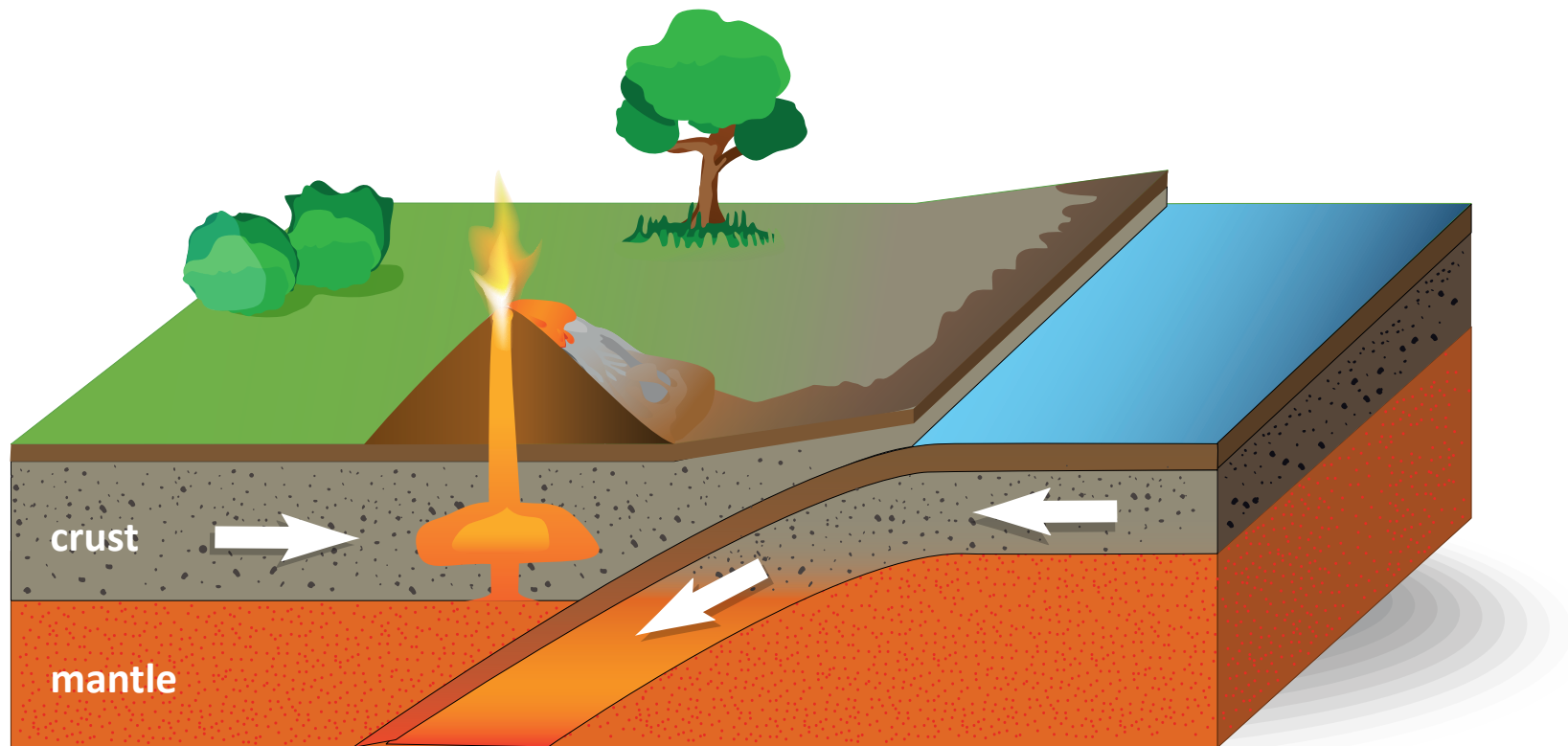




Over millions of years, the supercontinent broke up and the pieces moved away from each other to form separate continents. This process is called **continental drift**.



Convergent plate boundaries



Convergent plate boundaries are when two tectonic plates push together. At convergent plate boundaries, the Earth's crust crumples and buckles. This can result in the formation of mountain ranges or magma may be released as lava in a volcanic eruption.



Examples

The Himalayas in Nepal and the Andes in Argentina were formed over millions of years by tectonic plates pushing together.



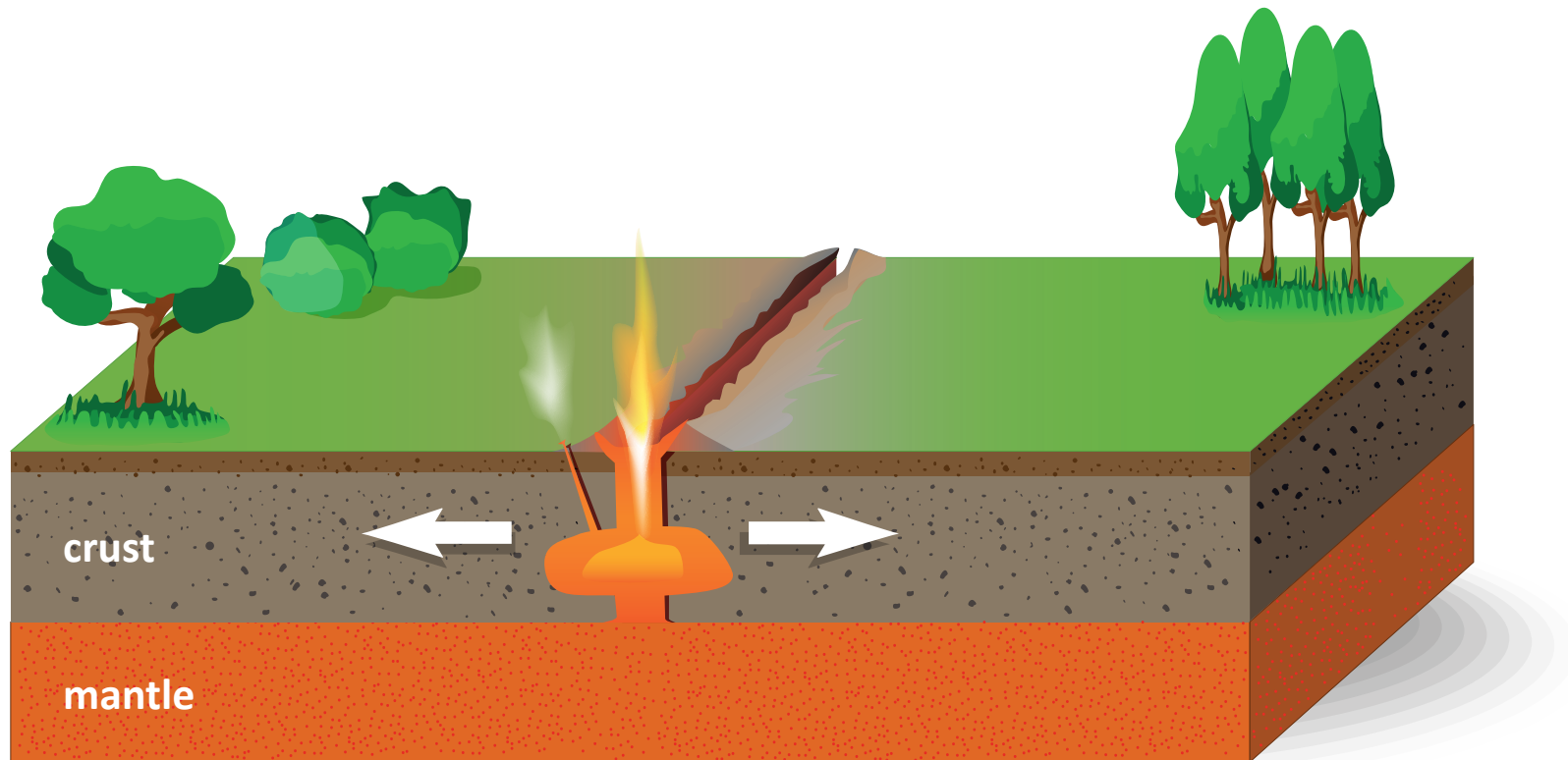
Himalayas, Nepal



Andes, Argentina



Divergent plate boundaries



Divergent plate boundaries are when two tectonic plates pull apart. At divergent plate boundaries, a gap forms in the Earth's crust that is filled with magma rising from the Earth's mantle. Mountains and volcanoes form over millions of years along the gap.



Examples

The Great Rift Valley in Kenya and the Thingvellir Valley in Iceland were formed over millions of years by tectonic plates pulling away from each other.



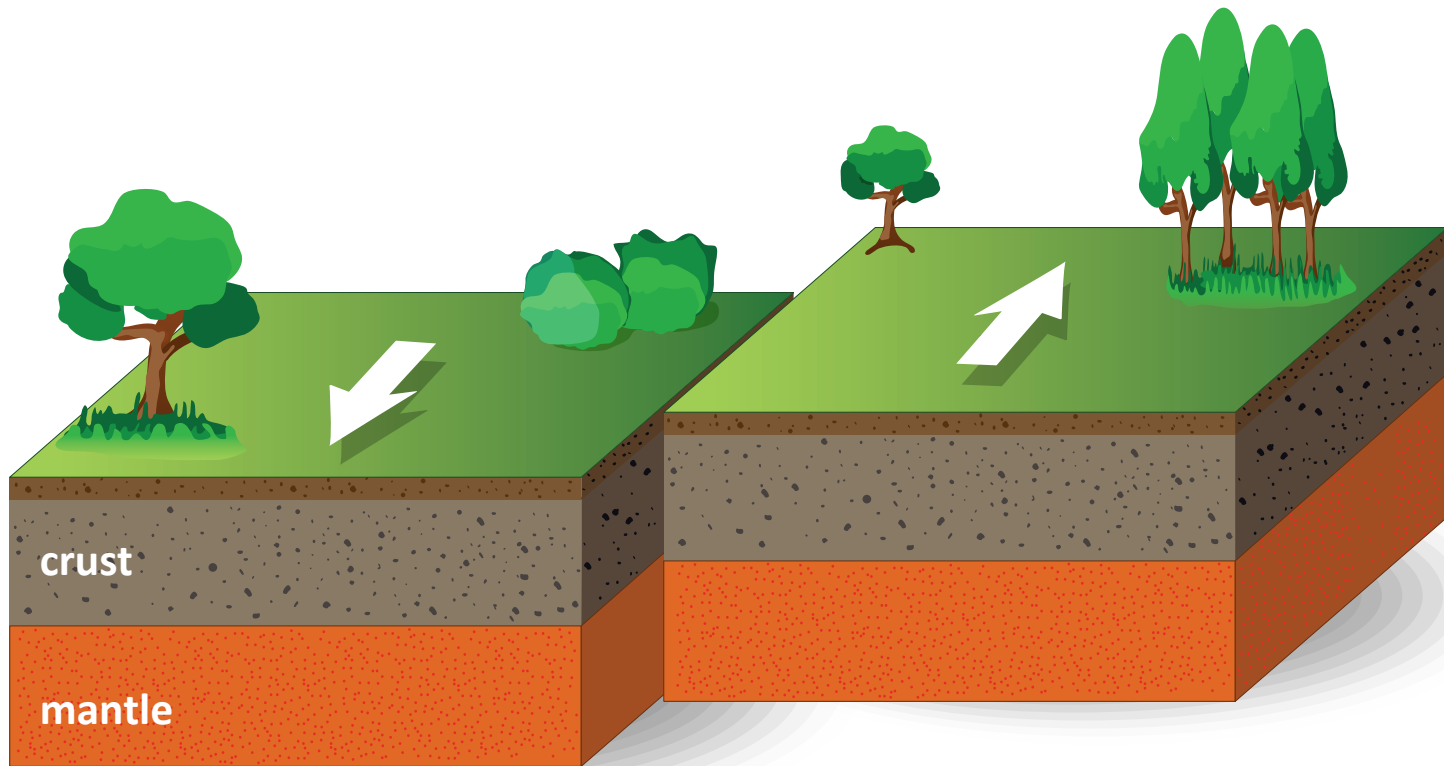
Great Rift Valley, Kenya



Thingvellir Valley, Iceland



Transform plate boundaries

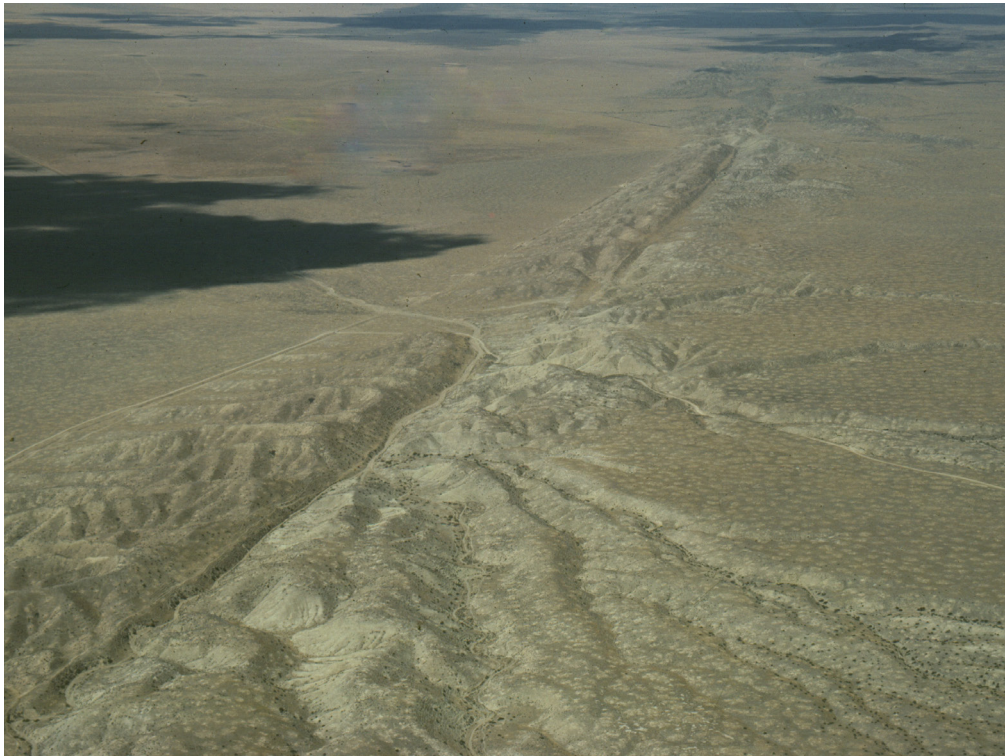


Transform plate boundaries are when two tectonic plates slide against each other. This sliding at transform plate boundaries cause earthquakes. If the tectonic plates get stuck as they slide, pressure builds up. When they release, major earthquakes can occur.



Examples

The San Andreas Fault in the United States of America and the North Anatolian Fault in Turkey were formed by tectonic plates sliding past each other.



San Andreas Fault, USA



North Anatolian Fault, Turkey

