

Plate Boundaries – Student Worksheet

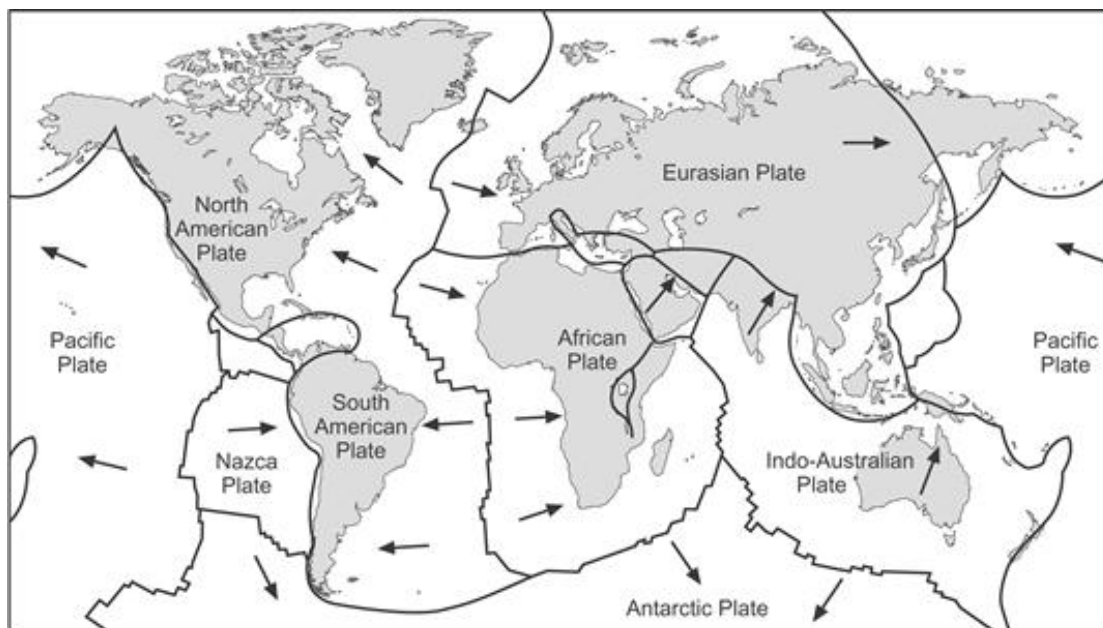
The theory which describes how large pieces of lithosphere move around the Earth's surface is known as:

The outer layer of the Earth consists of _____ crust and _____ crust.

Contrast the two different types of crust found at the Earth's surface

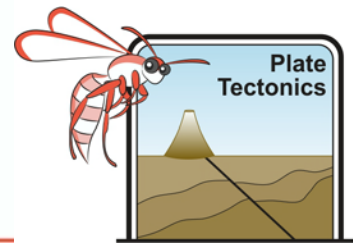
	Continental crust	Oceanic crust
Chemistry of rocks		
Density		
Thickness		
Typical rocks		
Age (maximum)		
Flexibility of crust		

The behaviour of moving plates depends on these physical and chemical characteristics.



How many major tectonic plates, form our planet's lithosphere? _____

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Within which plate is the continent of Australia?

Which other countries share the large plate within which Australia is found?

What three different types of movement can happen between plates at their boundaries?

We refer to plate boundaries as **constructive** or **destructive**.

Boundaries at which continental and oceanic crust converge are called _____. At these boundaries the denser oceanic crust, and accompanying material, subducts below the lighter continental crust and dewateres. This can cause the continental crust above it to partially melt sending silica rich volcanic material upwards. Earthquakes and volcanoes are common at these boundaries.

Name a plate with which Australia shares a destructive boundary.

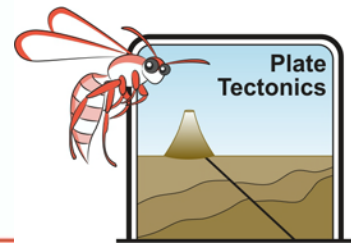
Give an example of mountains that have been created at this constructive boundary.

At constructive boundaries plates move apart, or diverge, causing the lower crust and upper mantle to melt, forming magmas, which upwell to form mid-oceanic ridges.

Name a plate with which Australia shares a constructive boundary.

Give an example of ridges of volcanic outpourings that have been created at this type of boundary.

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Using the map provided on the first page describe the type of boundary (constructive or destructive) that can be found at the meeting of the following plates. Explain your answer.

The Nazca Plate and the South American Plate.

The North American Plate and the Eurasian Plate.

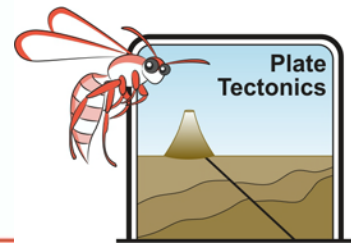
When a dense plate converges with a less dense plate, what happens?

Label the model

It was last session on a hot Friday afternoon and everyone was a bit tired. The weary teacher handed out lots of plasticine and asked students to make a model demonstrating a particular type of plate boundary. She was going to take them home to mark but students hadn't finished in time. She let them take them home then collected them in. When she saw that many of the models were identical she realised that some students had copied other's models. She couldn't mark them because it wouldn't be fair. However she realised that by handing back each student their model without labels and asking them to re-label it, she would find out who should get good marks.



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Label the model shown below using the terms provided.



asthenosphere
continental crust
convergent plates
oceanic crust
subduction zone
volcano
zone of dewatering