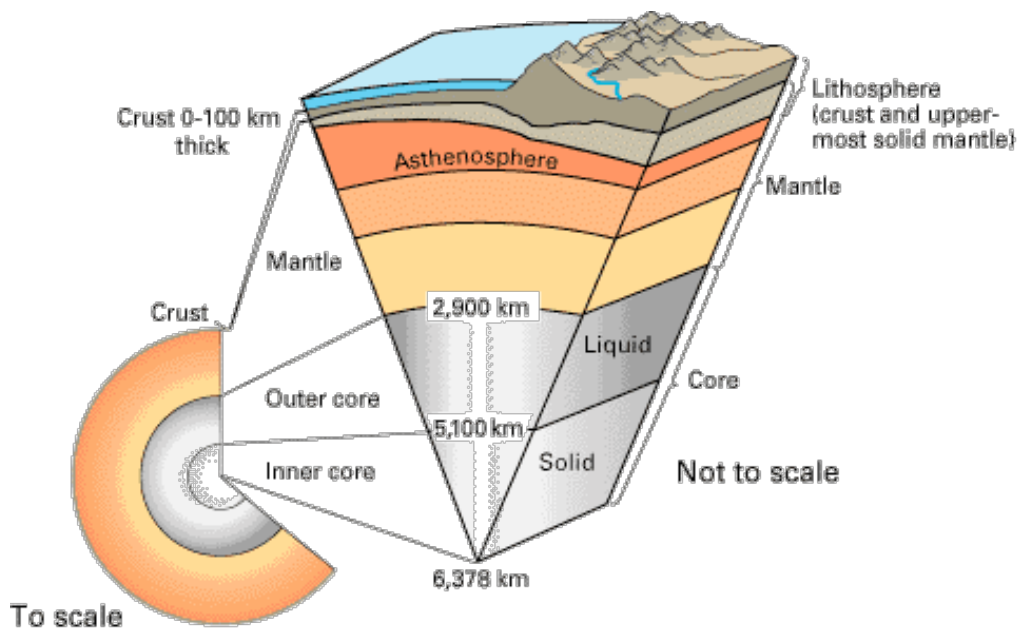


Structure of the Earth

Earth is made up of three layers:

Layer		Description: What is it made up of?	How thick is it?
crust			
mantle	lithosphere		<u>3000km</u>
	asthenosphere		
	Lower mantle		
Core	Outer Core		
	Inner Core		



The surface of the earth is warmed by _____ from the sun and through contact with the Mantle, which is hot because of _____ and _____.

The lithosphere is divided up into _____ that float on the denser _____. Plate tectonics is the theory that explains this plate movement and its consequences (earthquakes, volcanoes).

Continental Drift

In the early 1900s

_____ proposed the Theory of Continental Drift, which stated that the continents fit together like a puzzle (Africa and S.America), suggesting that a supercontinent, named



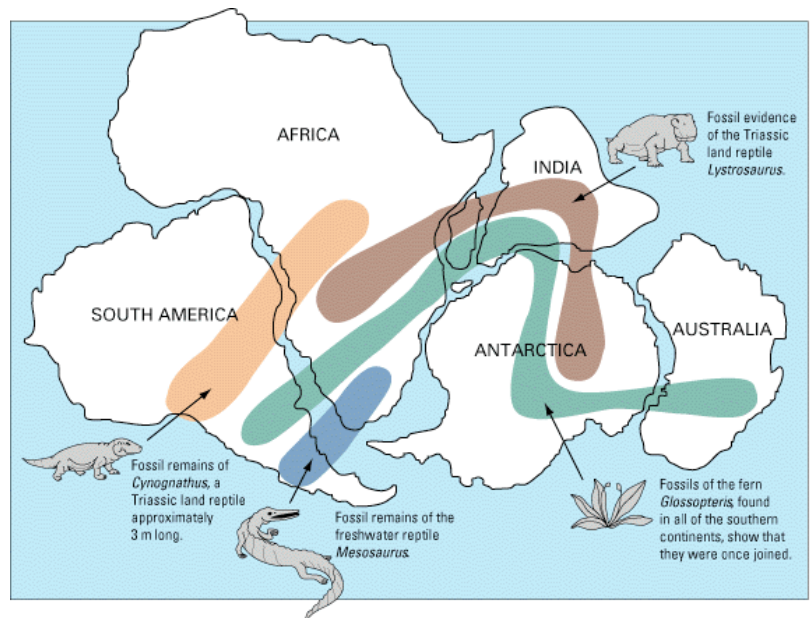
_____, once existed and pieces of it have since 'drifted' apart.

Evidence of Continental Drift

Fossil evidence

Mesosaurus: purely _____ reptile

Glossopteris: seeds too large to be effectively _____-transported



Rock Evidence:

Rock types show strong correlation across the Atlantic, as did mountain ranges of similar _____.

Coal deposits from _____ forests are found in _____



Geometry Evidence: shape of the continents

E.g. the shape of the west coast of _____ and the east coast of _____ are remarkably similar and were perhaps once joined



Glacial evidence

- _____: extensive periods when glaciers covered most of the earth
- Evidence of glaciers in India

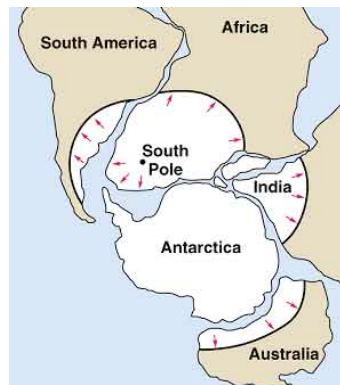


Plate Tectonics

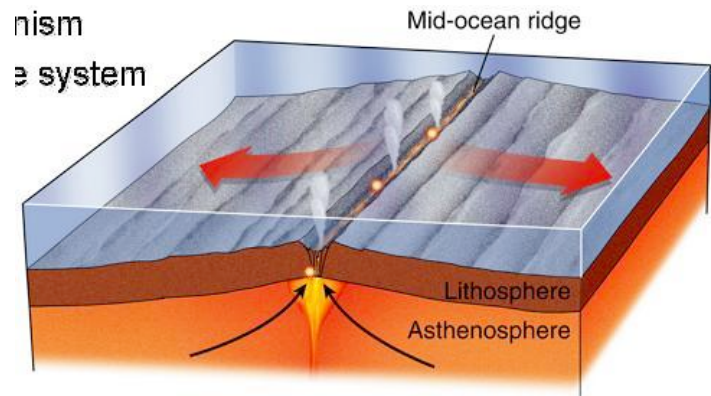
The theory of plate tectonics states that the _____ is divided into _____ large plates and about 20 smaller ones. These plates “float” on the more dense, fluid _____.

Plate Boundaries

Divergent Boundaries are where two plates move _____ from each other, creating shallow valleys or _____

Oceanic-Oceanic divergence

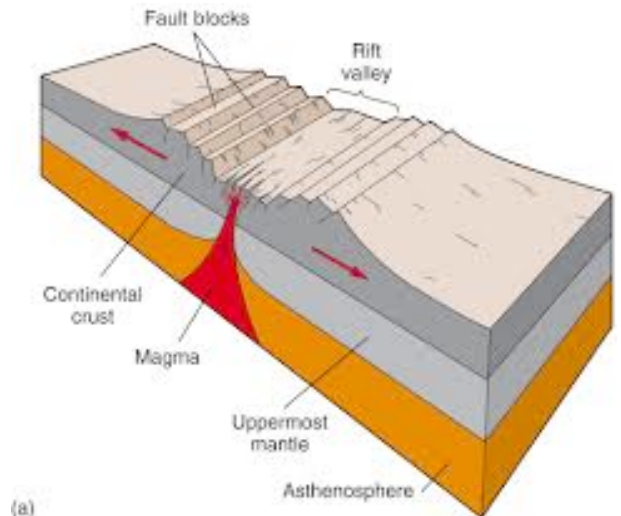
- a _____ forms
- _____ occurs, where new crust is added from upwelling magma from the mantle



(a) Divergent boundary
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Continental-Continental divergence

- a _____ forms

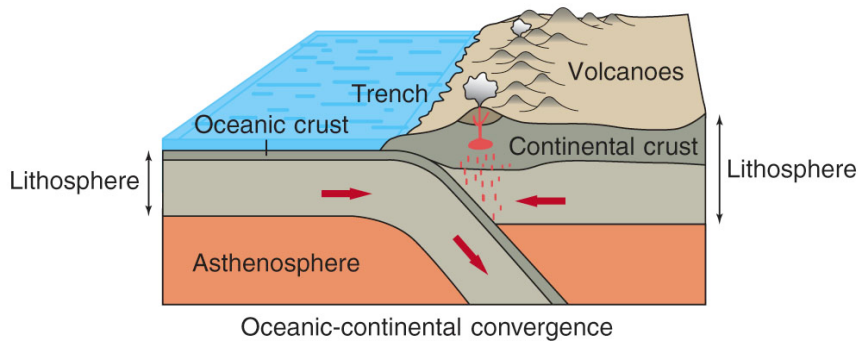


(a)

Convergent Boundaries are where plates move _____ each other.

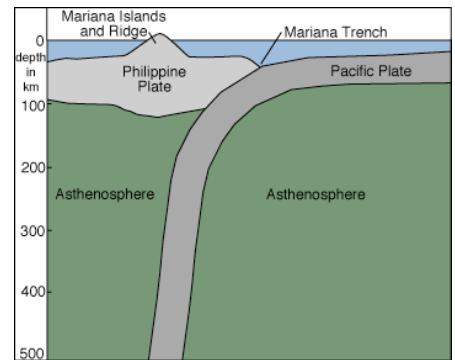
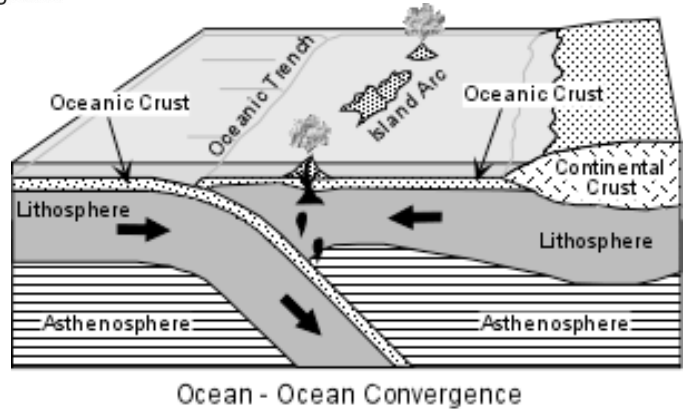
Oceanic – Continental Convergence

- the _____ oceanic crust descends beneath the _____ continental crust
- Coastal _____ develop due to compressive forces
- Magma material rises from descending slab and builds _____ in the rising mountains



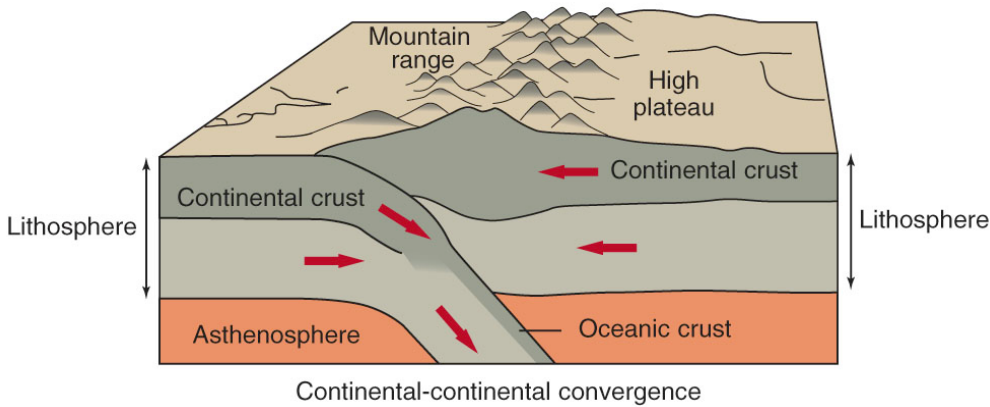
Oceanic –Oceanic Convergence

- the _____, _____ crust normally descends beneath the younger crust
- _____ occurs when the descending plate pulls the rest of the plate with it as it descends into the mantle
- forms volcanic _____ and deep ocean _____
- Eg. Mariana Trench



Continental-Continental Convergence

- The _____ plate subducts under the other one.
- compressional forces cause the continent margins to _____ forming an extensive _____ belt.



At transform boundaries plates move past each other in opposite directions. These are often known as _____ faults.

_____ often result as the plates slip past each other.

