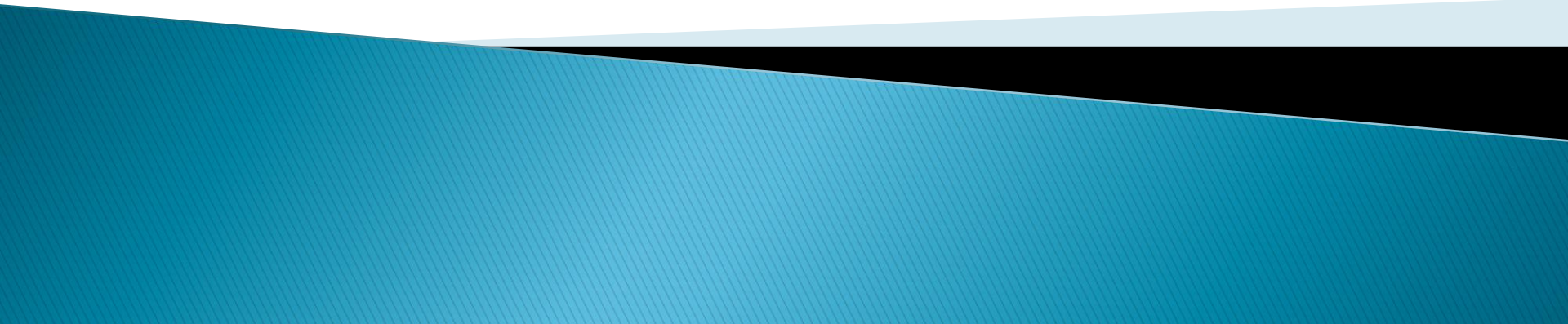
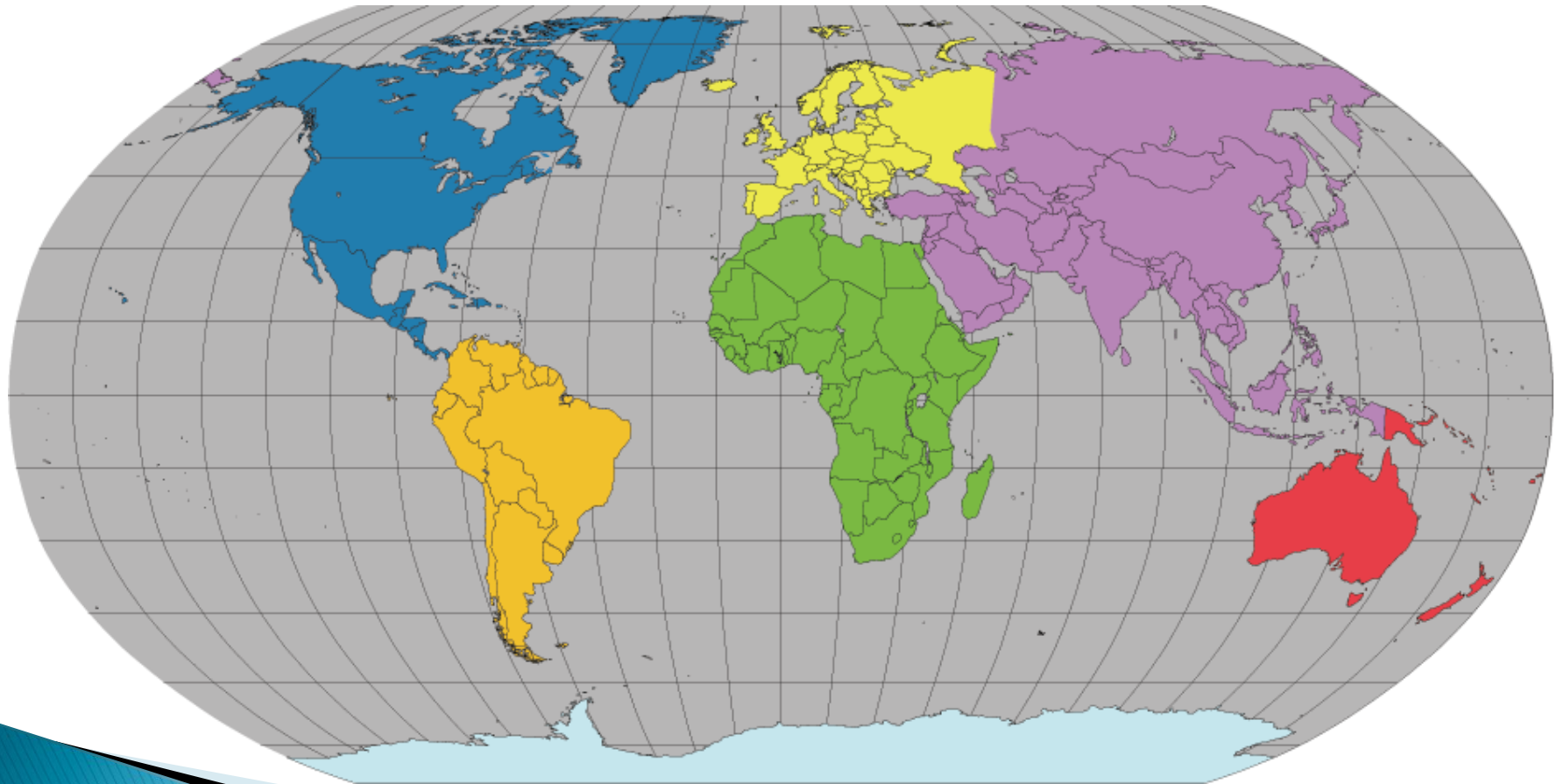


# PLATE TECTONICS



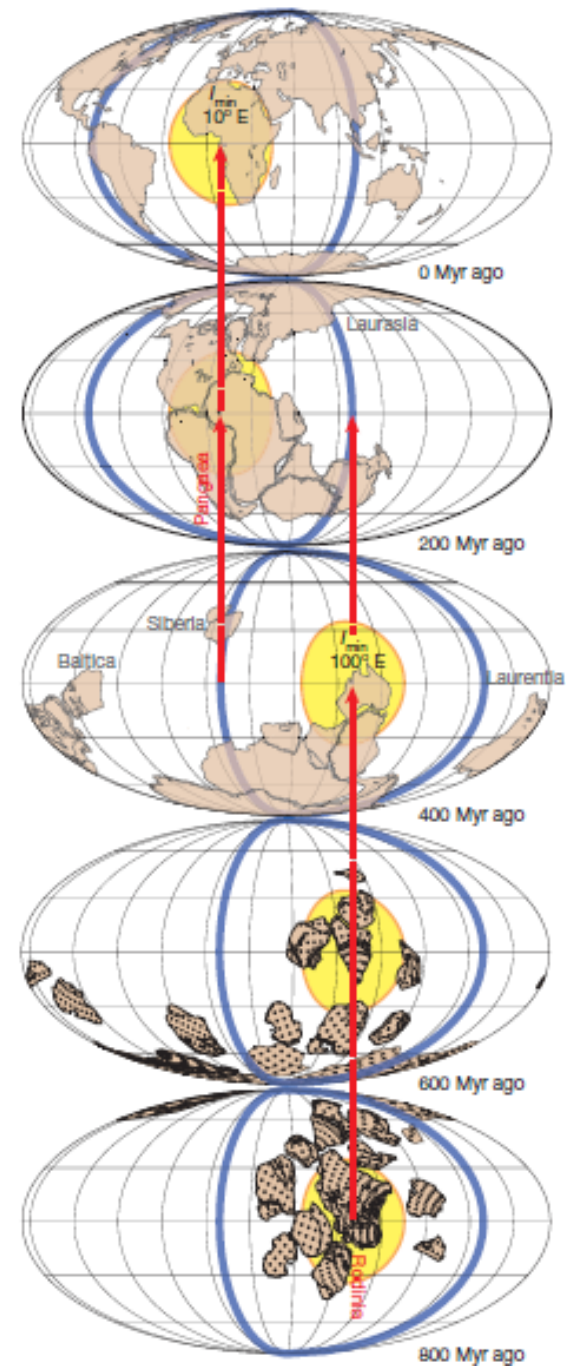
# EARTH – TODAY



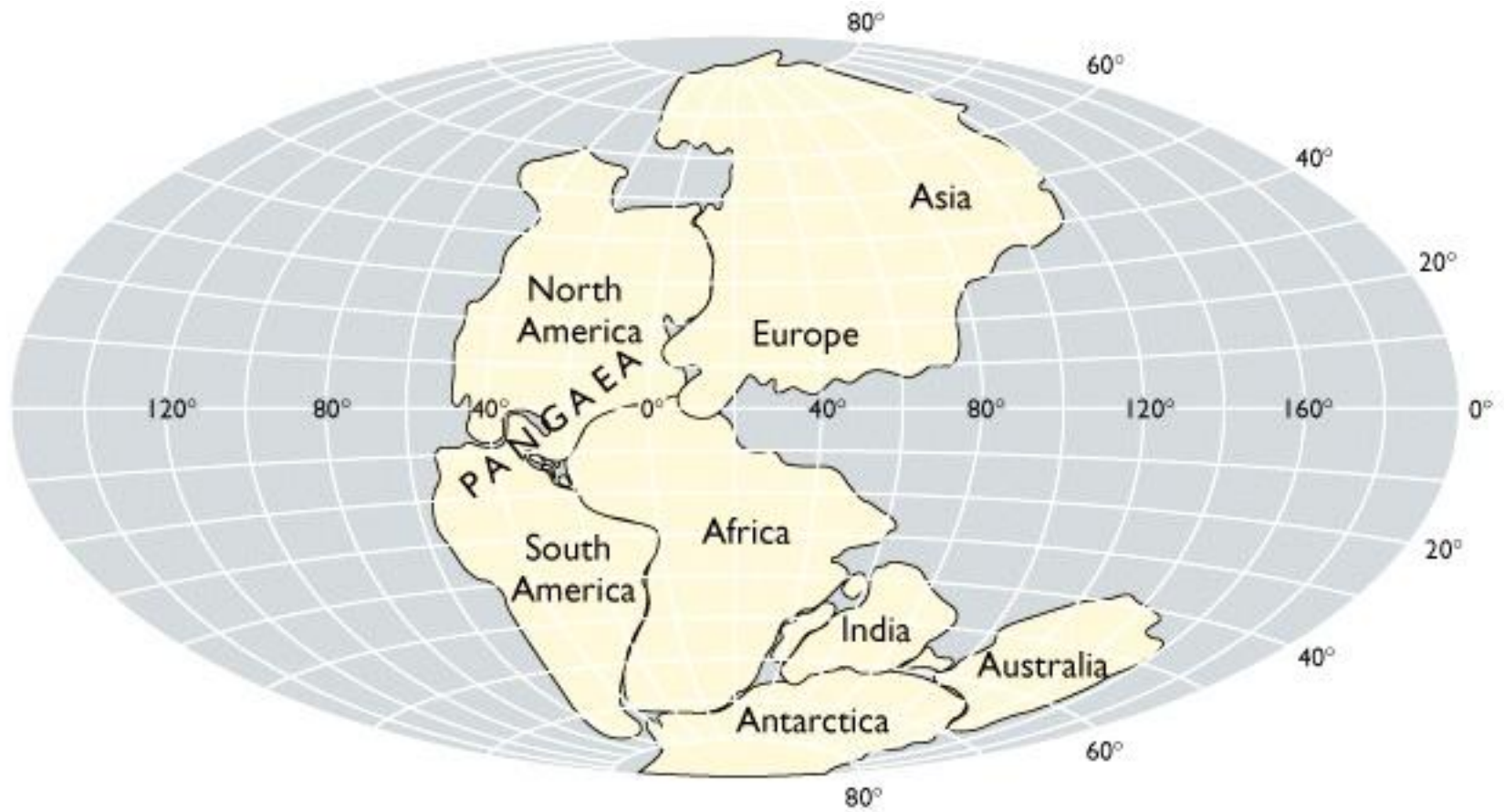
# EARTH – JIGSAW







# PANGAEA



WELL, WELL,  
WELL... WE  
WERE  
COUSINS!!

AFRICA



INDIA



Fossil evidence  
of the Triassic  
land reptile  
*Lystrosaurus*.

AMERICA



Fossil remains of  
*Cynognathus*, a  
Triassic land reptile  
approximately  
3 m long.



ANTARCTICA

Fossil remains of the  
freshwater reptile  
*Mesosaurus*.

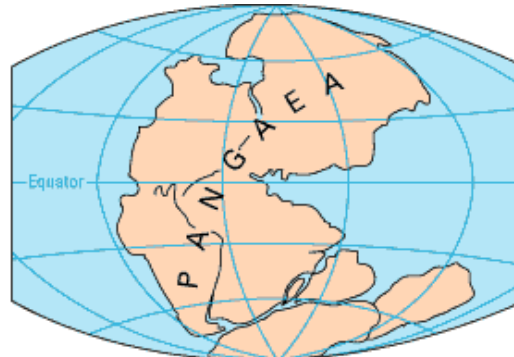


AUSTRALIA



Fossils of the fern  
*Glossopteris* found  
in all of the southern  
continents, show that  
they were once joined.

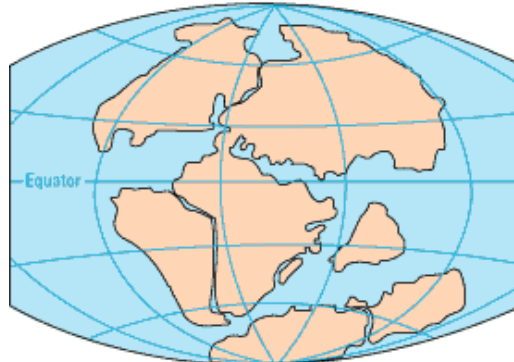
# OOPS... PANGAEA BREAKS UP



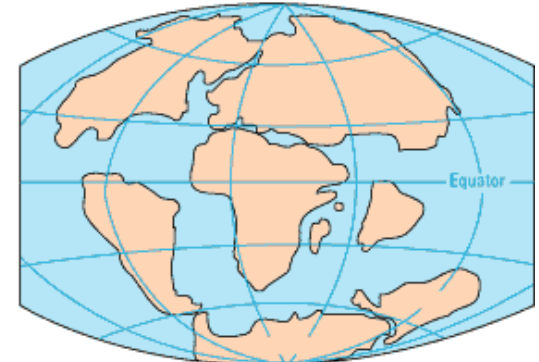
PERMIAN  
225 million years ago



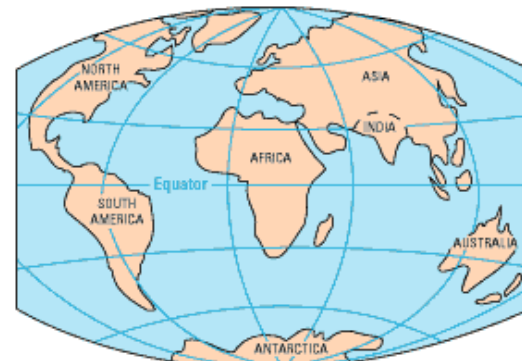
TRIASSIC  
200 million years ago



JURASSIC  
135 million years ago



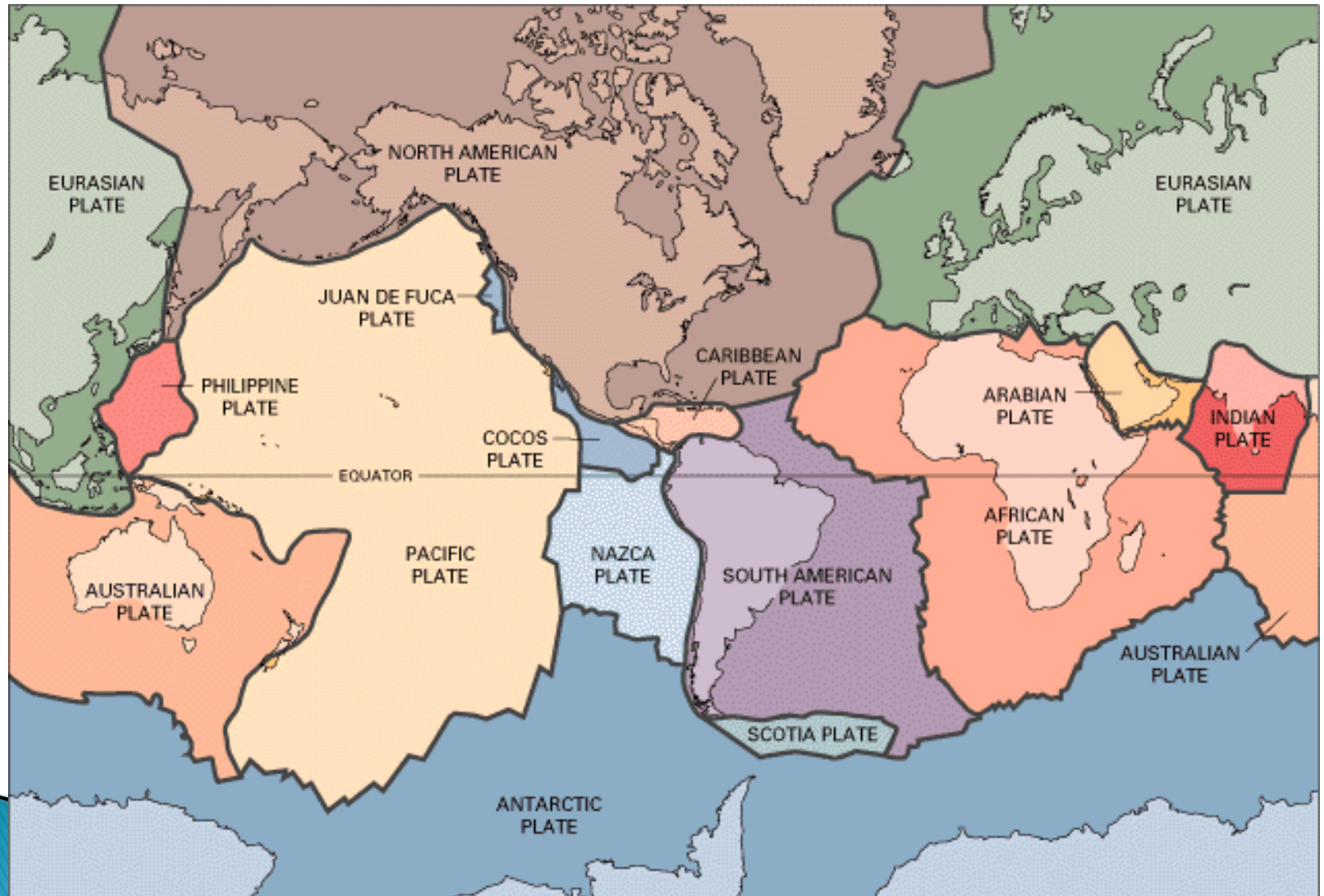
CRETACEOUS  
65 million years ago



PRESENT DAY




# 12 TECTONIC PLATES

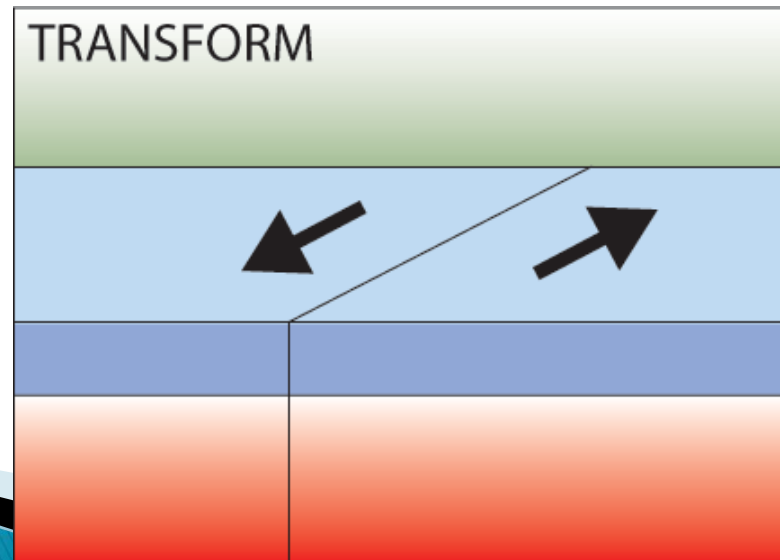
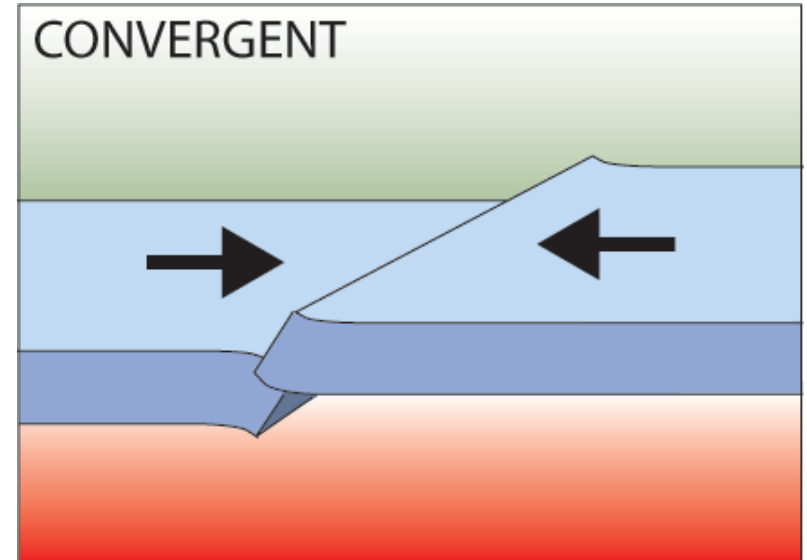
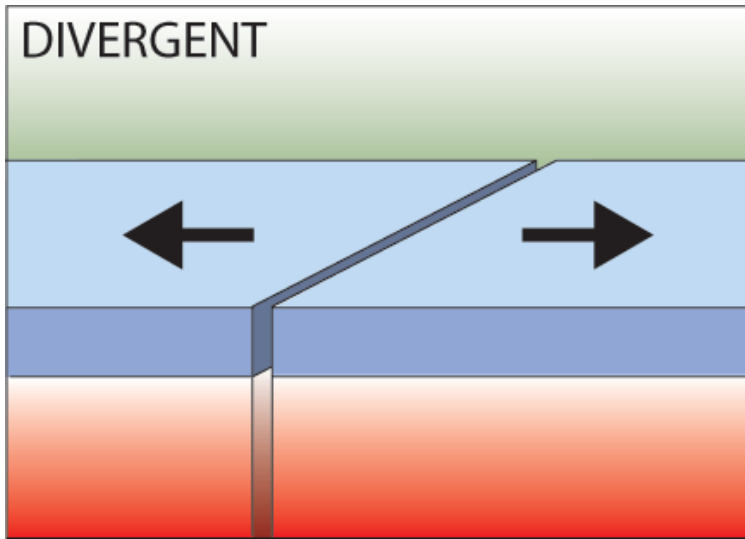


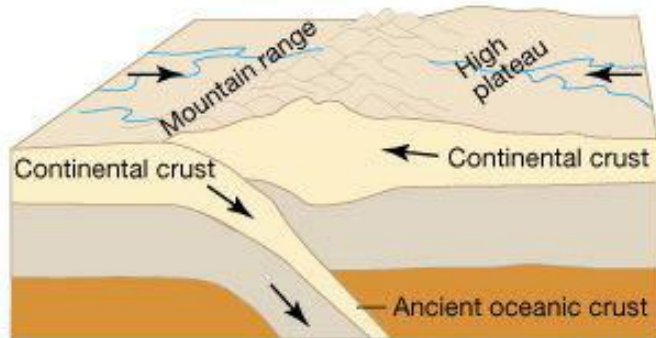
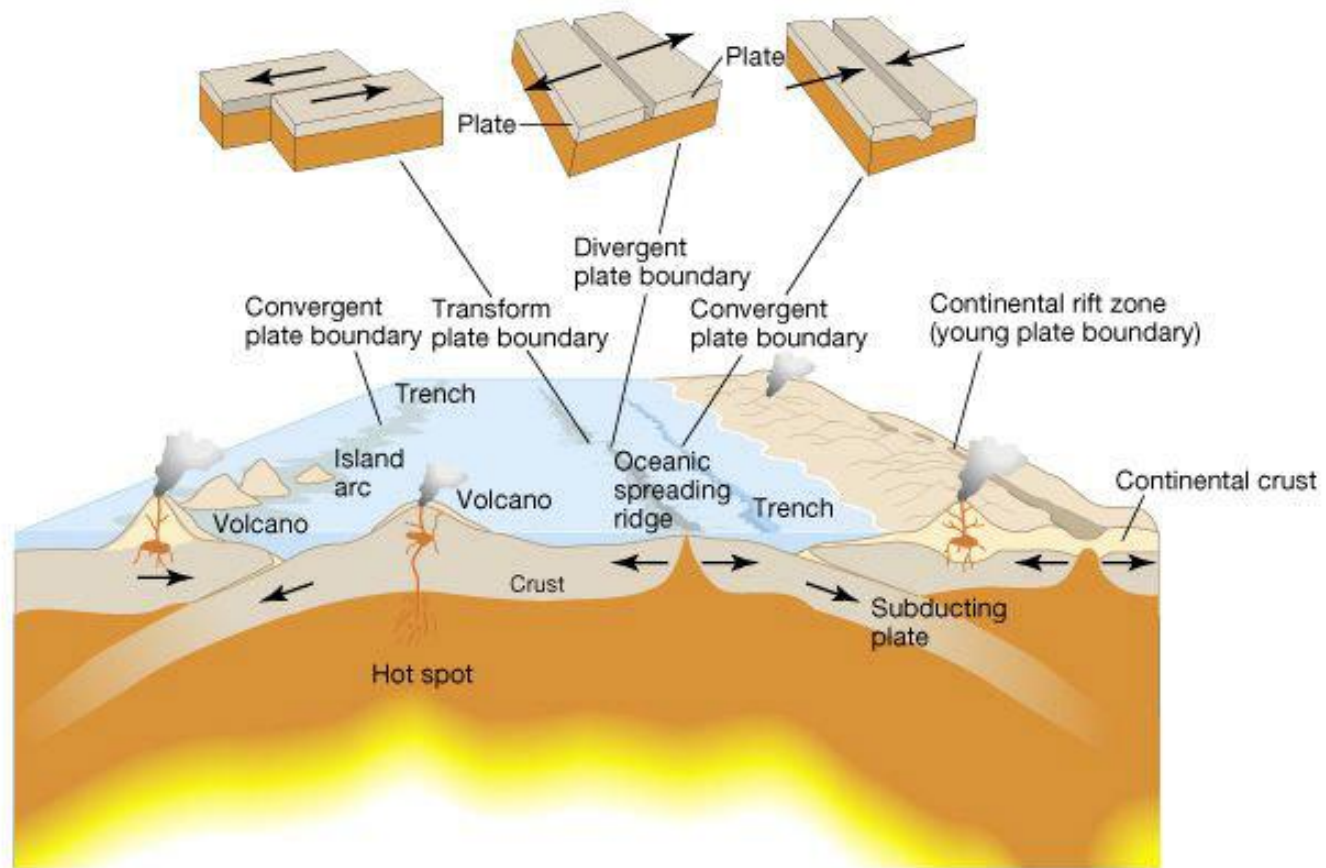


# Plate Tectonics:

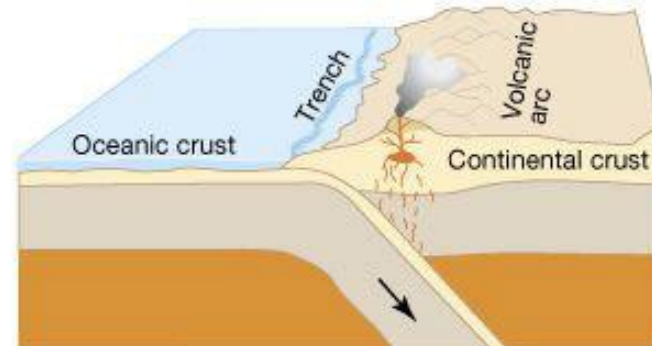
- ▶ The Earth's crust is divided into 12 major plates which move in various directions.
  - ▶ Plate motion causes them to collide, pull apart, or scrape against each other.
  - ▶ Each type of interaction causes a characteristic set of Earth structures or “tectonic” features.
  - ▶ The word, tectonic, refers to the deformation of the crust as a consequence of plate interaction.
- 

# TYPES OF PLATE BOUNDARIES

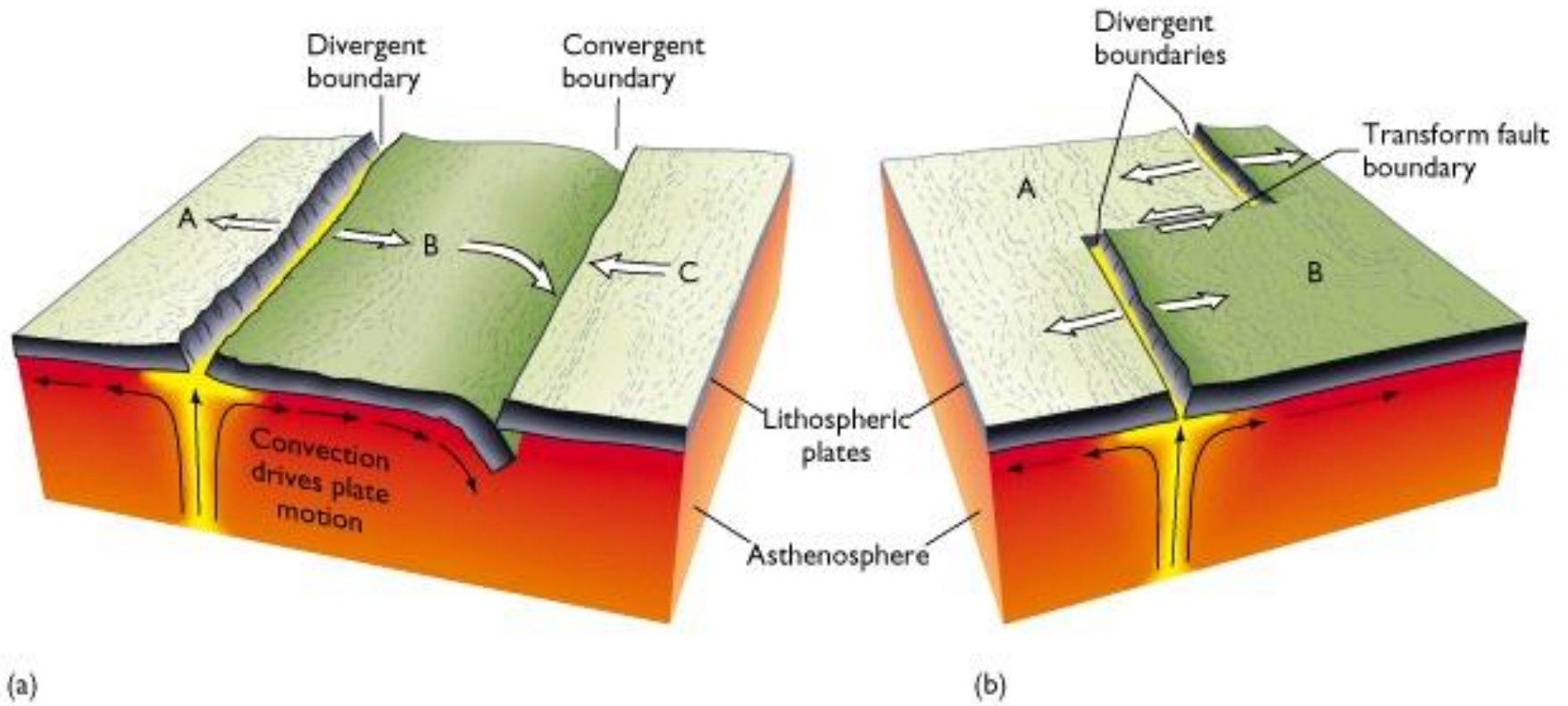




Continental-continental convergence

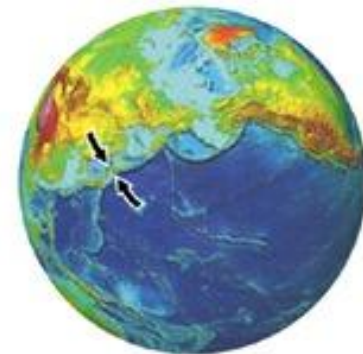
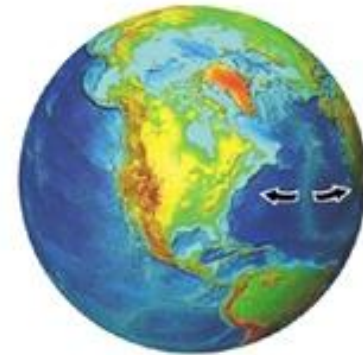
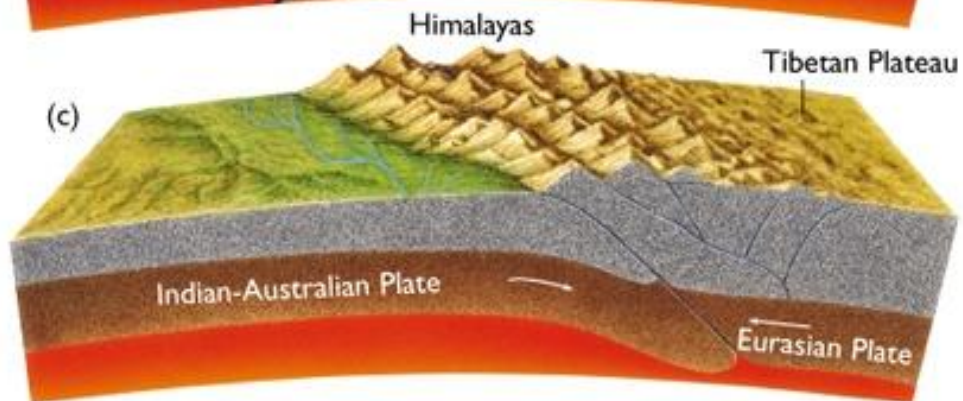
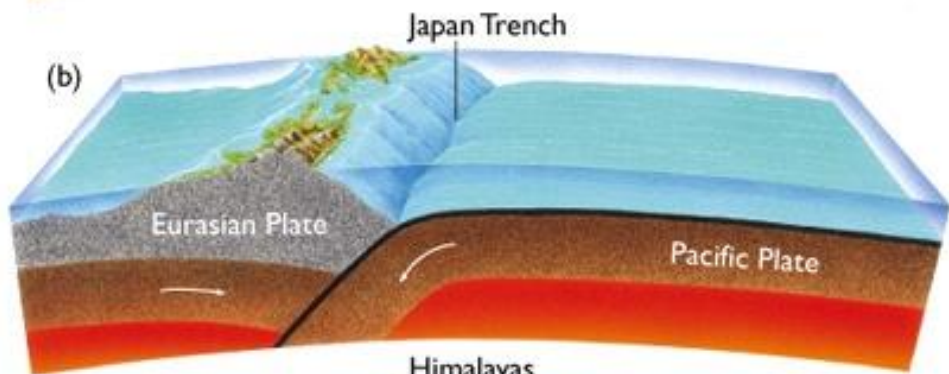
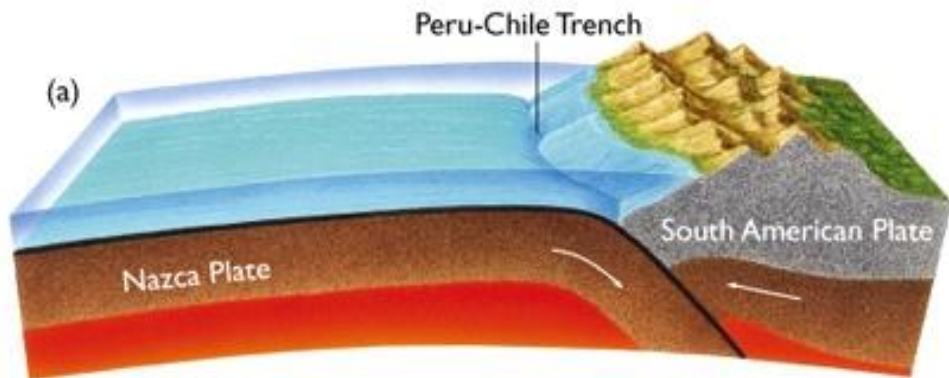


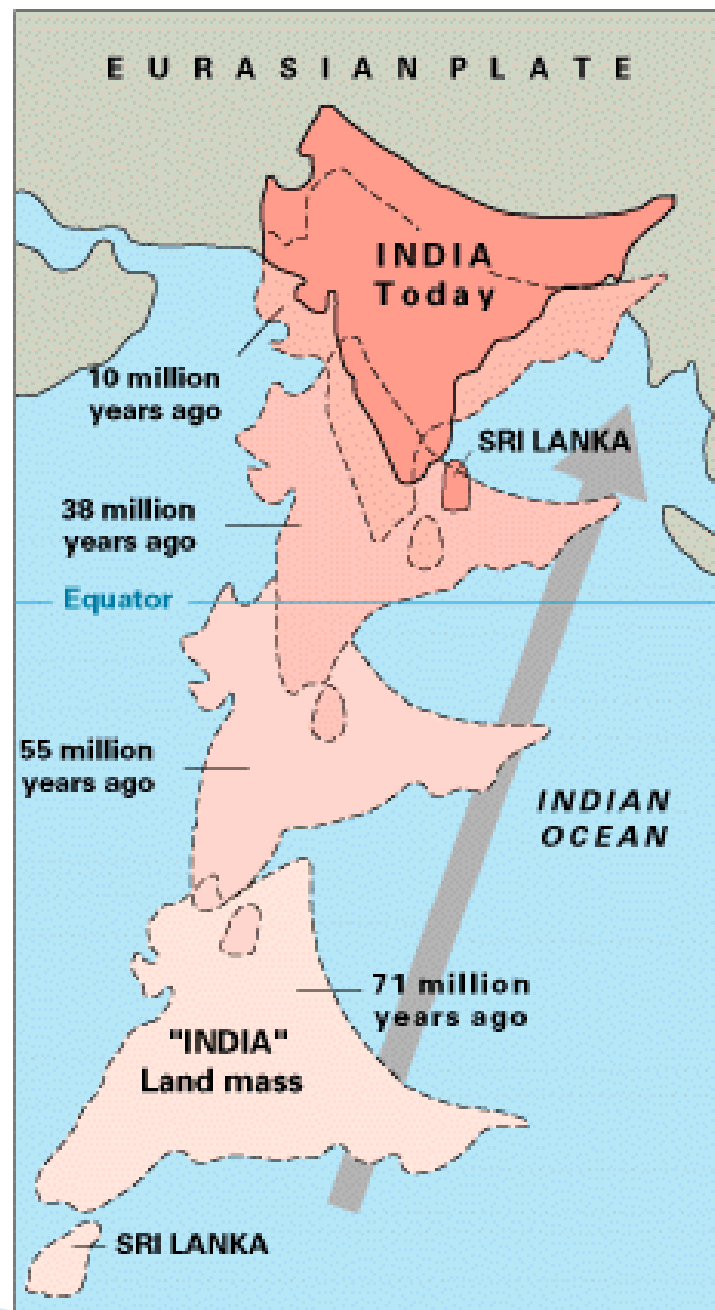
Oceanic-continental convergence



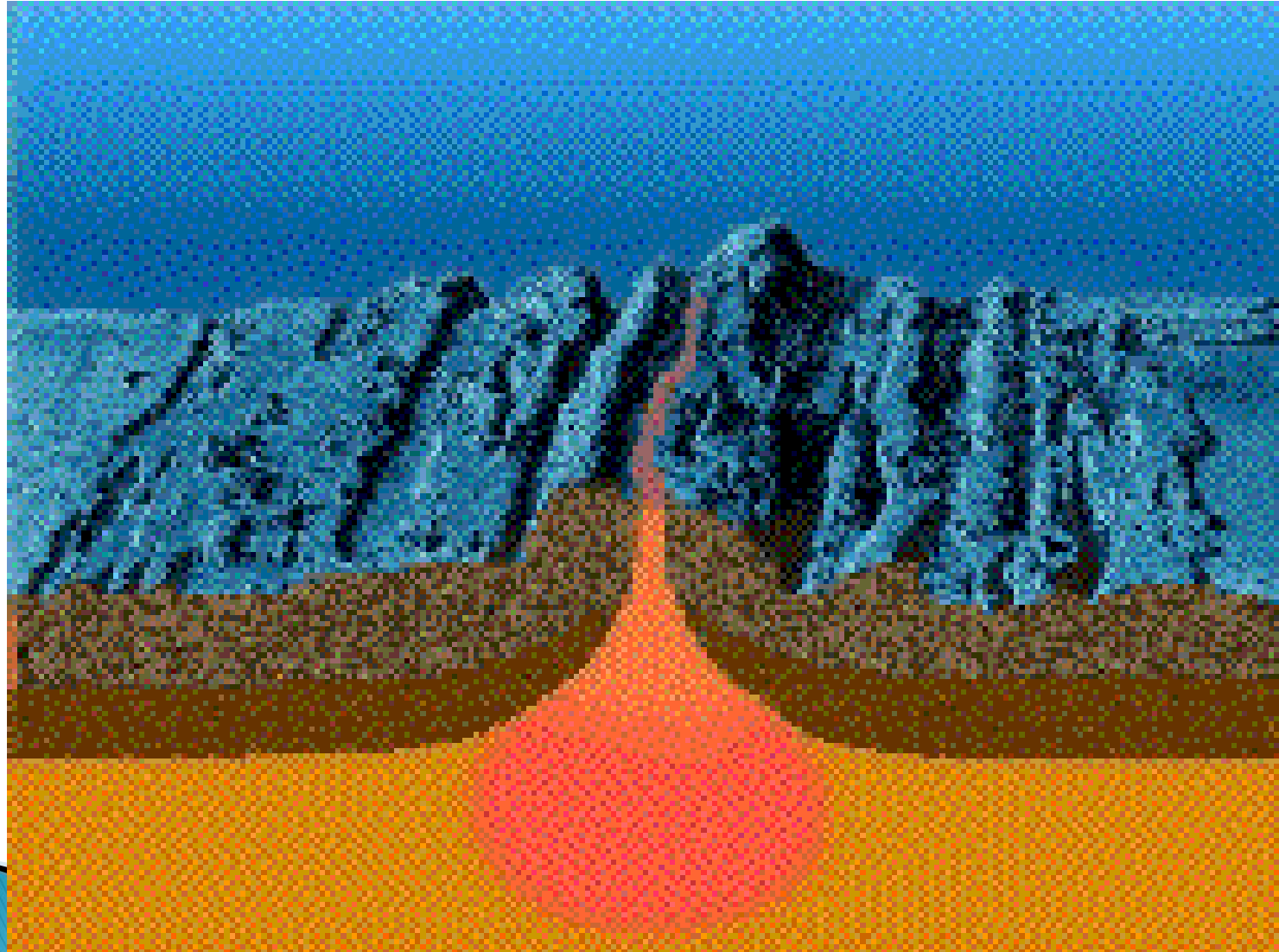


# CONVERGENT





# DIVERGENT





# EYJAFJALLAJÖKULL

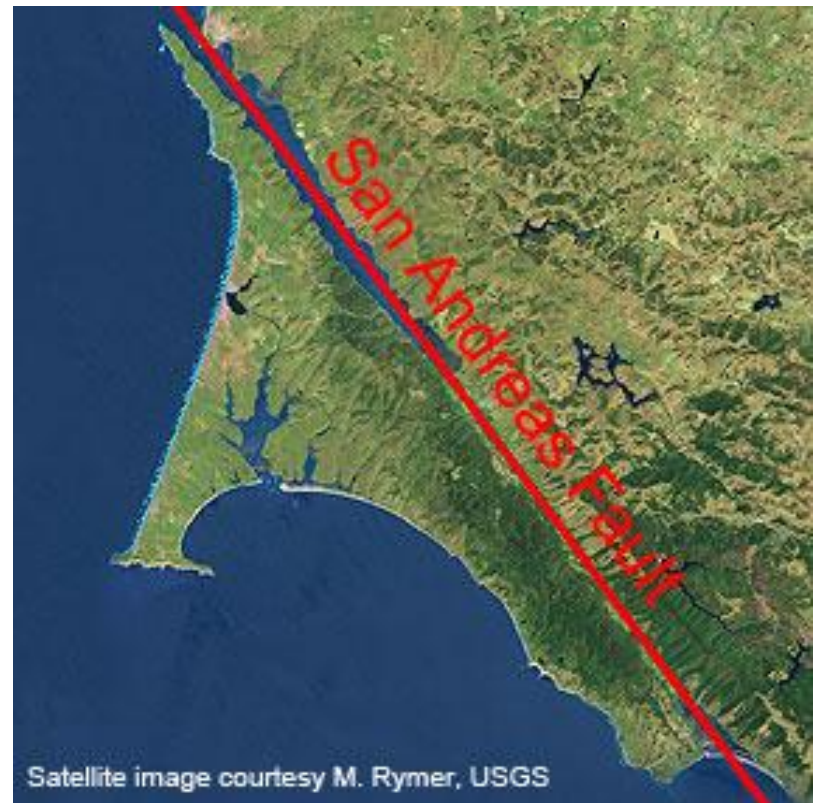
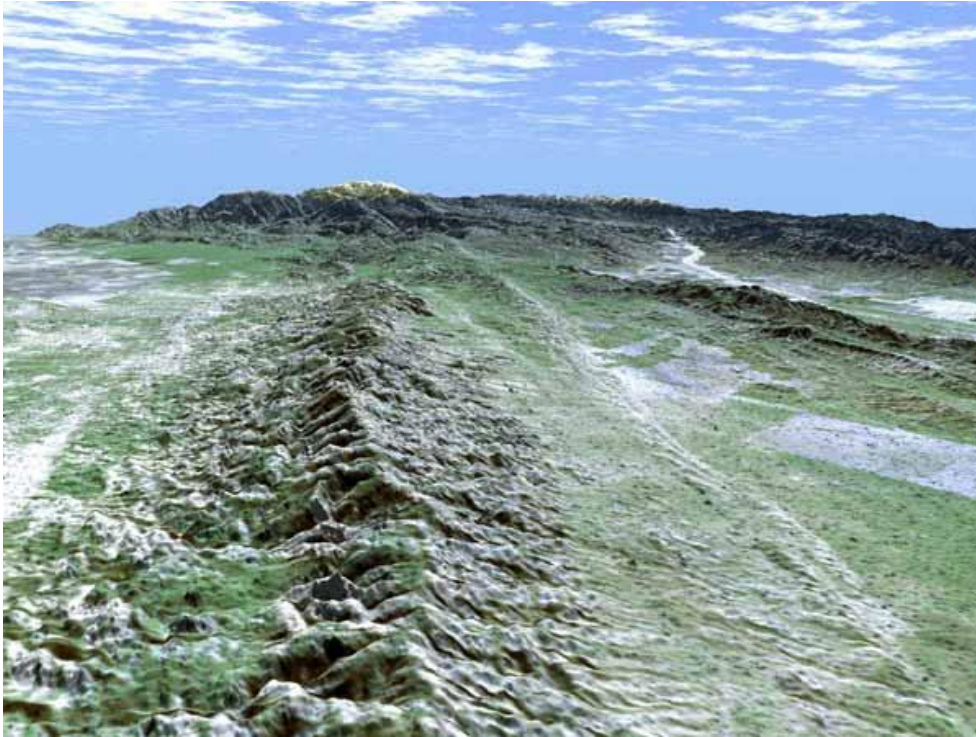
▲ = Active volcano



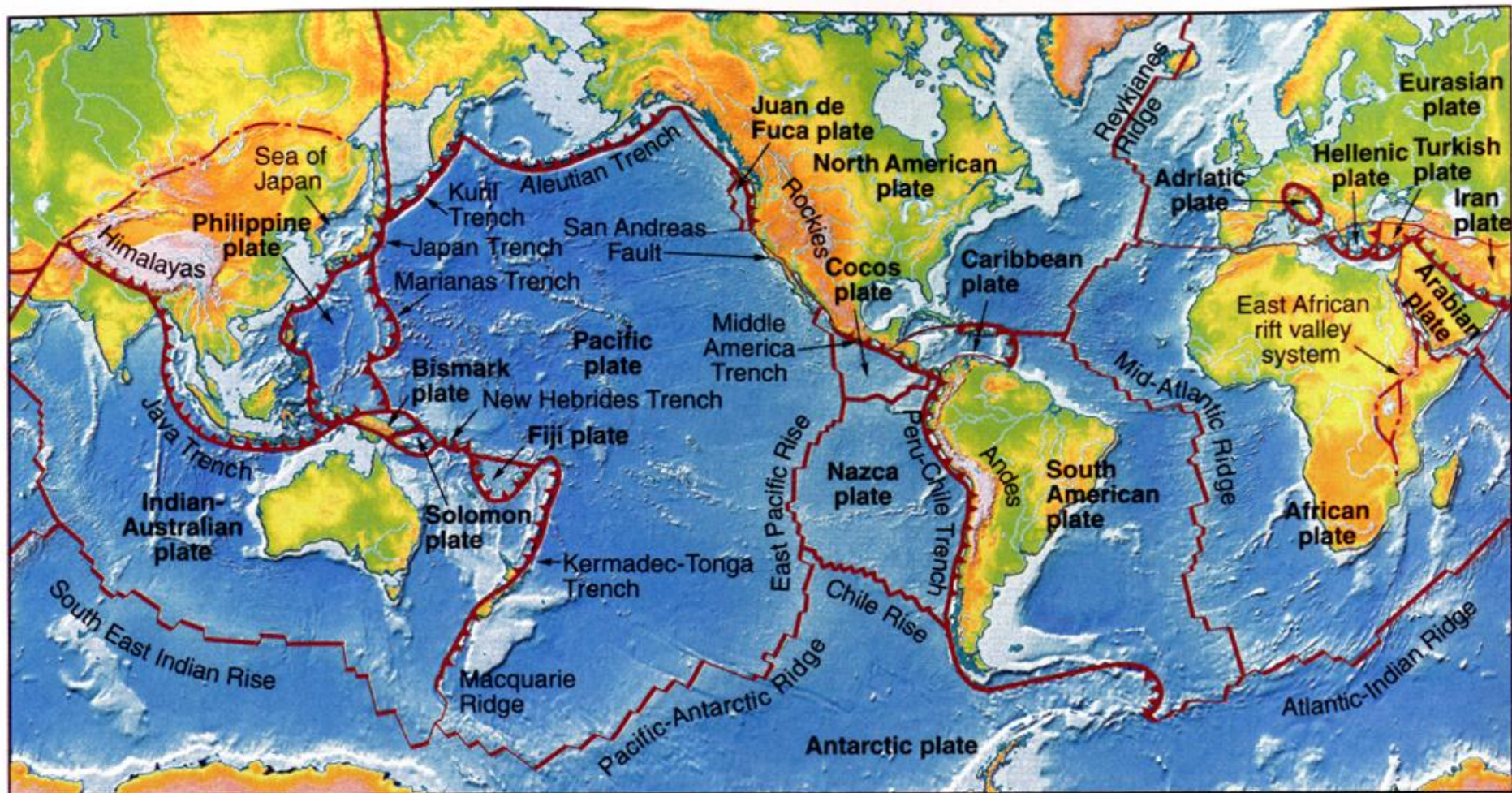
# TRANSFORM FAULT



# TRANSFORM FAULT







Ridge axis  
divergent boundary

Transform

Subduction zone  
Convergent boundary

Zones of Extension within continents

Uncertain plate  
boundary



# WHY DO PLATES MOVE?!

