### Physical landscapes

- tectonic forces
- Denudation

# **Evolution of theory**

- Longtime theory
- 1950's
- PANGAEA

#### Pieces of Evidence

- 1) Cartographic evidence
- 2)Paleontological
- 3) Paleoclimatological
- 4) Ring of Fire

# Major Reason for opposition?

■ Driving mechanism?

### Plate tectonics

provided answers to many unknowns

Earth Structure: A boiled egg

- The inner earth
- 3 parts
  - core
  - mantle
  - Crust

Plate density

- how do they float?
- 1) continental crust
- 2)oceanic crust

Plate Boundaries and associated characteristics

■ 1) Divergent plate

Landforms

Mid-Atlantic Ridge

Surtsey island

rift zones East African Rift zone

divergent volcanoes

- Non-explosive volcanoes2) Convergence zonesOceanic-continental
- violent tectonic activity

Why violent?

Subduction zone landforms

continental-continental