

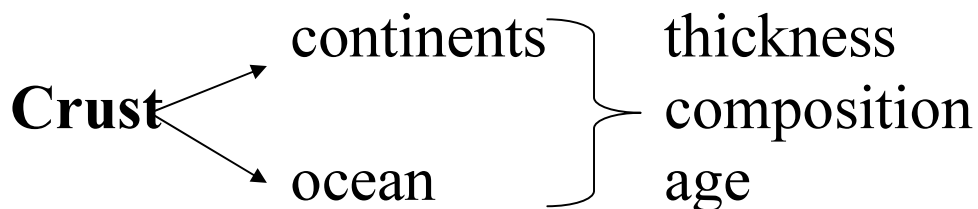
How does Earth's inside structure control the ocean floor and the continents?

What's inside Earth?

- * drilling
- * volcanic gases
- * earthquake shakes
- * the pull of gravity

Chemical	vs.	physical properties
- oxygen		TEMPERATURE
- silicon		PRESSURE
- iron		
- magnesium		
- aluminum		

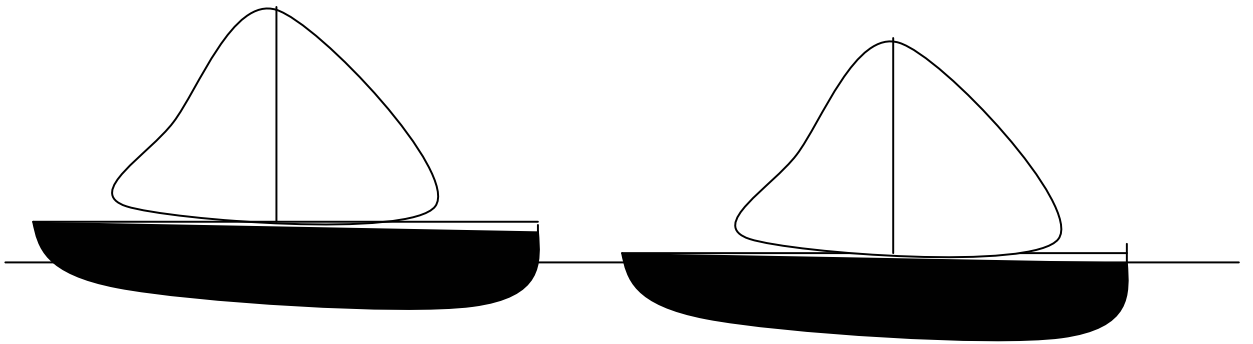
Layered Earth



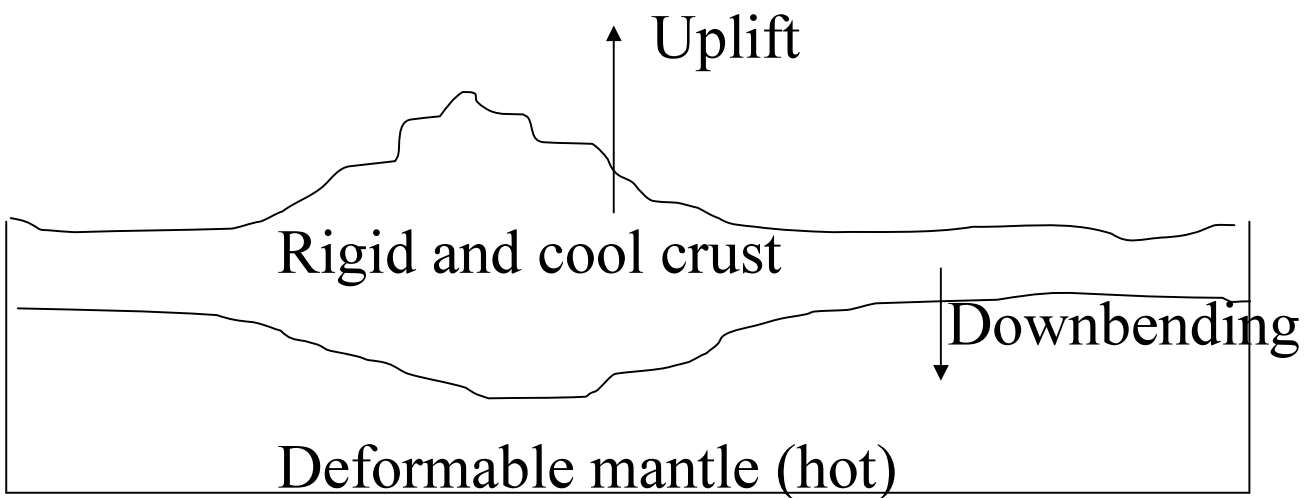
Mantle (Upper and Lower)

Core (Inner and Outer)

Buoyancy = the ability to float in a fluid by displacing a volume of that fluid equal in weight to the floating object's weight



Isostatic equilibrium
isos = equal
stasis = standing



Sources of information that lead to a new understanding of Earth

- The age of Earth - the age of continents
- the age of ocean floor
- A puzzling fit (Suess)
- Continental Drift (Wegener)
- Atoll formation (Darwin)
- Earthquakes around Pacific (Benioff)
- Sunken islands (Hess)
- Mid-Atlantic Ridge (Meteor-echo sounder)
- Radiometric dating