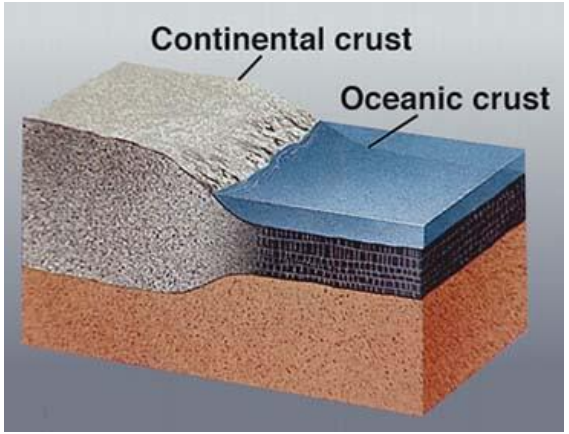
Earth’s Layer and Tectonic Plate Motion

Earth's Layers

Crust-

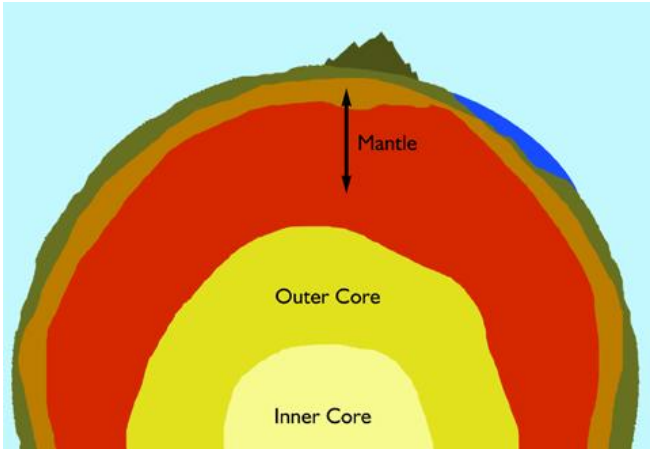
1) Oceanic crust: the outer layer of Earth that lies under oceans
    a) Thin *(escaso)*
    b) Young *(joven)*
    c) Made of two rock types
2) Continental crust: the outer layer of Earth that forms land
        i) Thick *(denso)*
        ii) Old (viejo)
        iii) Made of many rock types



Earth's Layers

Mantle- a shell beneath the crust of the Earth

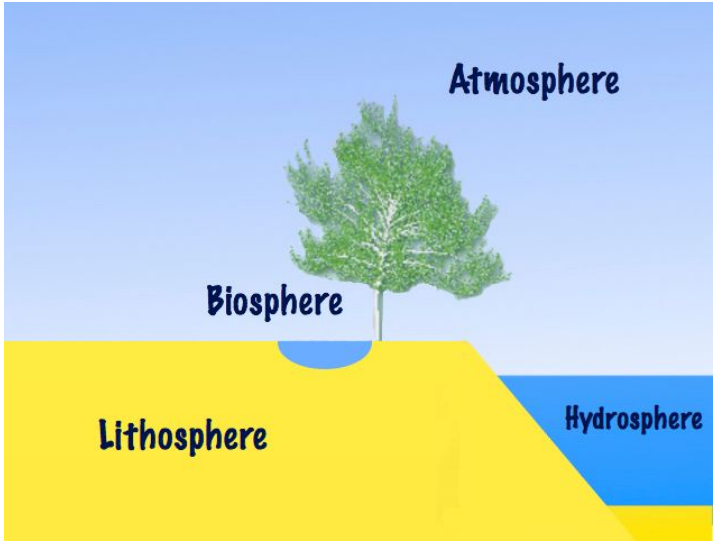
- solid
- made of rock
- Contains 82% of the Earth's volume



Earth's Layers

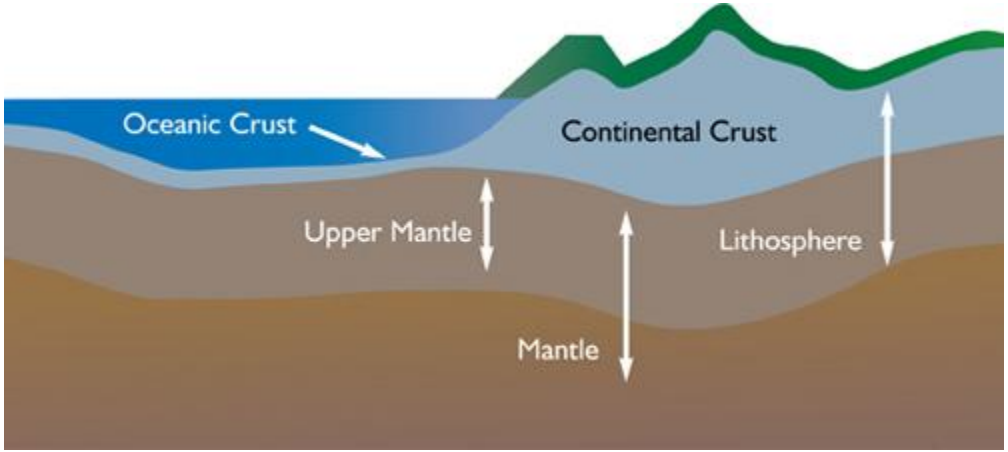
Lithosphere- Earth's crust + upper mantle

- cool in temperature
- rigid



Example: Sphere of Rock

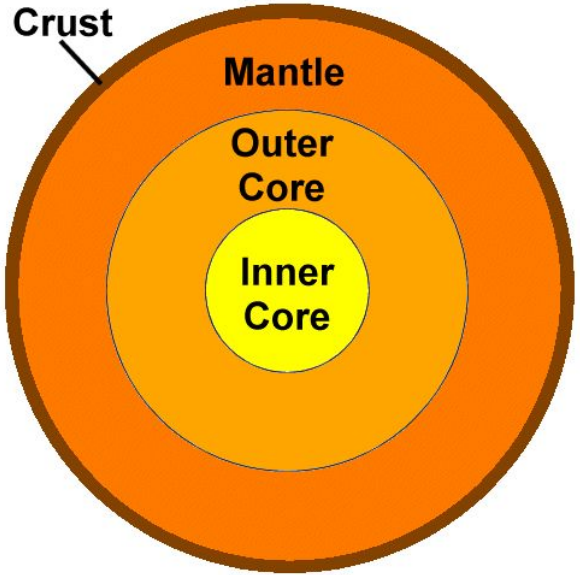
Earth's Layers



Earth's Layers

Outer core- the layer surrounding the inner core

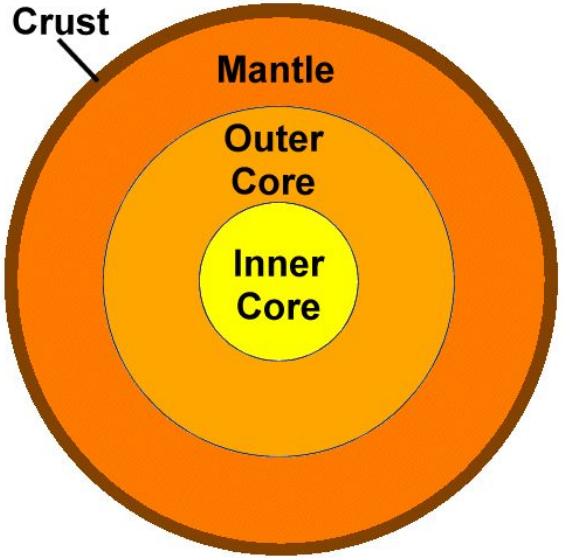
- liquid
- made of metallic iron *(hecha de hierro metálico)*
- generates Earth's magnetic field



Earth's Layers

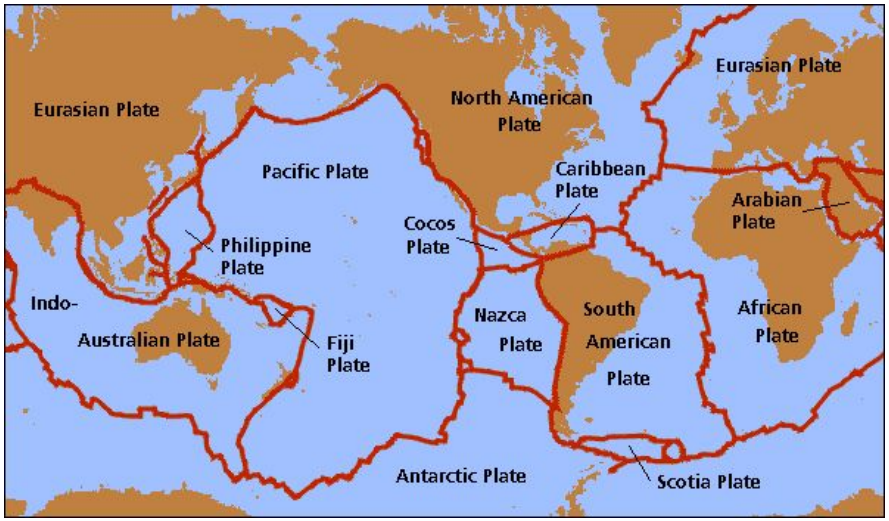
Inner core- the layer in the center of the Earth

- high temperature
- solid
- made of metallic substance



Tectonic Plates

- **Tectonic Plates**- divisions of the lithosphere (crust+upper mantle)
  - move continuously
  - change in shape and size *(forma y tamaño)*
  - movement causes events such as earthquakes (*terremotos)* and volcanoes *(volcanes)*

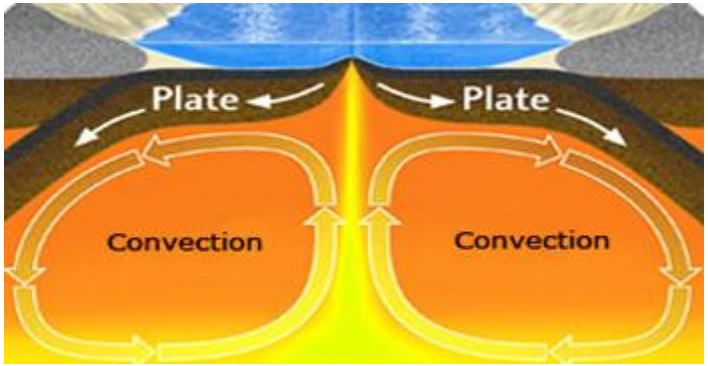


Mechanisms of Tectonic Plate Motion

- **Convection**- the transfer of heat through liquid

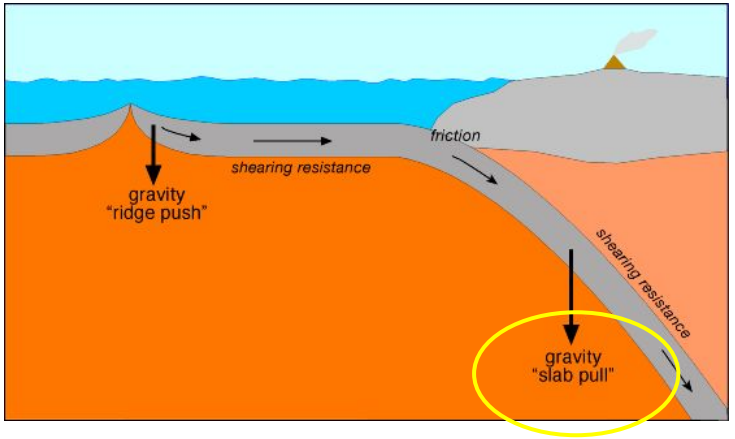
Mechanisms of Tectonic Plate Motion

- **Mantle convection**
  - heat rises from the Earth's core



Mechanisms of Tectonic Plate Motion

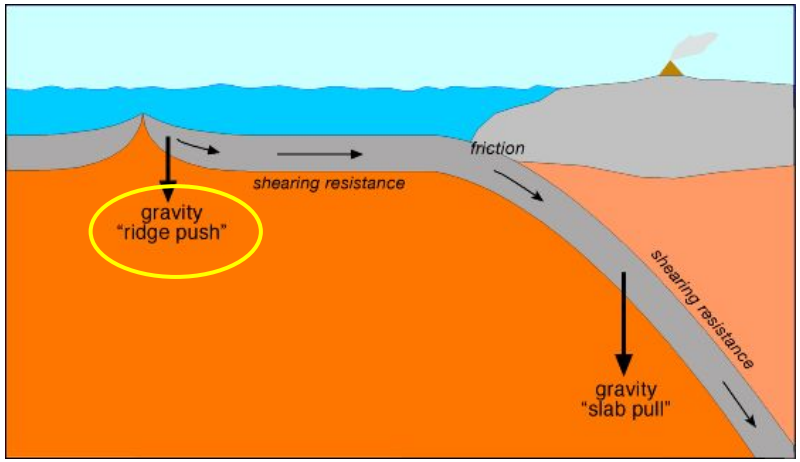
- **Slab-pull**- sinking of old oceanic crust
  - cool *(fresco)*
  - dense *(denso)*
  - sinks *(hunde)*
  - downward pull *(tirón hacia abajo)*



Mechanisms of Tectonic Plate Motion

Ridge-push- new crust pushes older crust away

- hot *(caliente)*
- downward push *(empuje hacia abajo)*



Mechanisms of Tectonic Plate Motion

https://www.youtube.com/watch?v=ryrXAGY1dmE