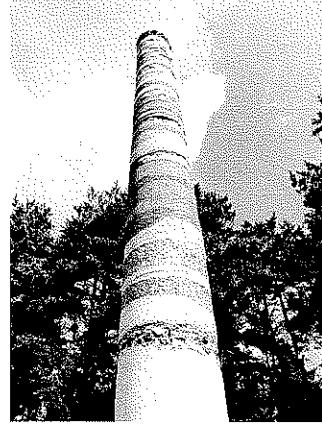


## How is this experiment different from how geologists study the earth?

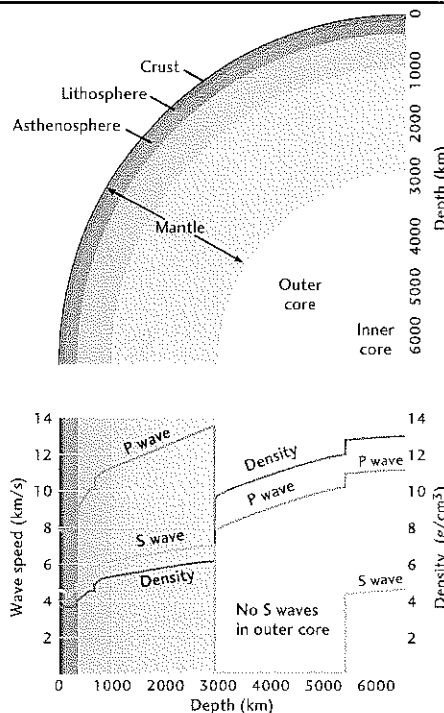
- Drilling helps scientists obtain samples of the rock that makes up the crust ranging from about 5 to 40 kilometers in thickness
- But in order to sample the earth's core you would need to drill down nearly 2,200 km!



Core Sample from Earth

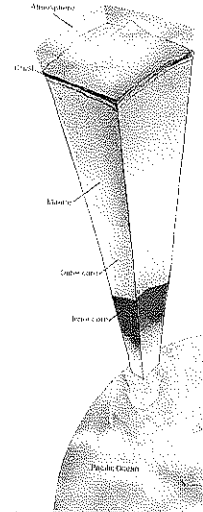
## Seismology

- The science of using \_\_\_\_\_ in solids to know about the structure of the earth
- A \_\_\_\_\_ is used to measure different types of waves



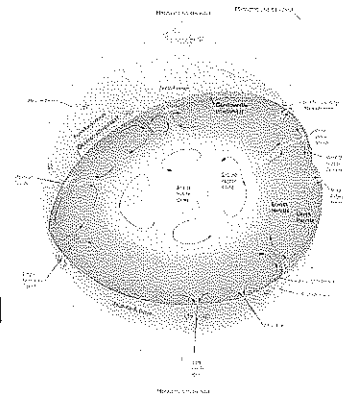
## Center of the Earth- The Core

- \_\_\_\_\_
- Scientists debate the composition of Earth's core
- Most agree it is primarily composed of \_\_\_\_\_ and \_\_\_\_\_
- Additional evidence suggests \_\_\_\_\_  
such as Oxygen, Sulfur, and Silicon are present
- More research needed!



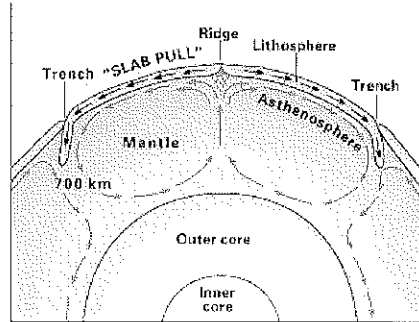
## Layers of the Core

- The \_\_\_\_\_ core
  - Innermost layer
  - A sphere of hot \_\_\_\_\_ metal
  - Held solid by extreme \_\_\_\_\_
- The \_\_\_\_\_ core
  - Surrounds the inner core
  - Hot enough to turn \_\_\_\_\_



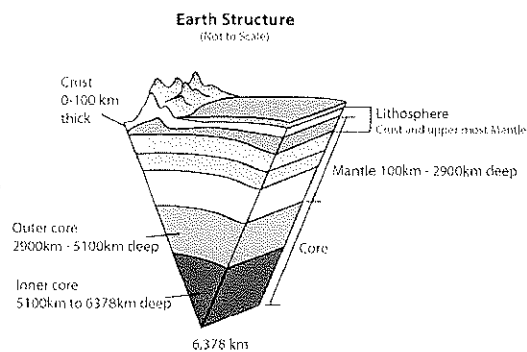
## Mantle

- Thick layer surrounding the core
- Composed of hot but mostly \_\_\_\_\_ material
- Less dense than the core
- Mantle is \_\_\_\_\_ slowly but remains solid
- High \_\_\_\_\_ - thick, resistant to flow
  - Low viscosity- water
  - High viscosity- honey

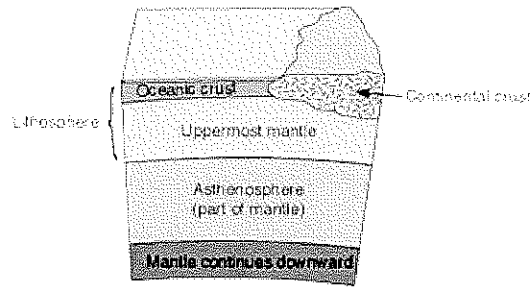


## Outermost Layer- Lithosphere and Crust

- The rigid \_\_\_\_\_ of the Earth \_\_\_\_\_ of lithosphere
- Lithosphere includes the uppermost part of the mantle down to about 100 km



## There are 2 types of Crust



- \_\_\_\_\_
- \_\_\_\_\_

