## EARTHQUAKES OCCUR ALONG CRACKS IN EARTH'S CRUST CALLED

## FAULTS

# EARTH'S OUTER LAYER

## THE CRUST

THE HOT LAYER **JUST** UNDER THE **CRUST THAT** MOVES SLOWLY.

## MANTLE

## THE WAVES THAT TRAVEL THROUGH THE EARTH AFTER AN EARTHQUAKE

### SEISMIC WAVES

**ALSO CALLED** "P" WAVES FASTEST WAVES FIRST TO ARRIVE AT DISTANT POINTS

# PRIMARY WAVES

"S" WAVES TRAVEL **SLOWER THAN** PRIMARY WAVES, ARRIVE LATER, **ONLY TRAVEL** THROUGH SOLIDS

## SECONDARY WAVES

A DEVICE USED BY SCIENTISTS TO DETECT AND MEASURE **EARTHQUAKE** STRENGTH.

## **SEISMOGRAPH**

THE PRINTED RECORD OF AN EARTHQUAKE'S STRENGTH PRODUCED BY A SEISMOGRAPH

## SEISMOGRAM

# SPHERE OF SOLID MATERIAL AT EARTH'S CENTER.

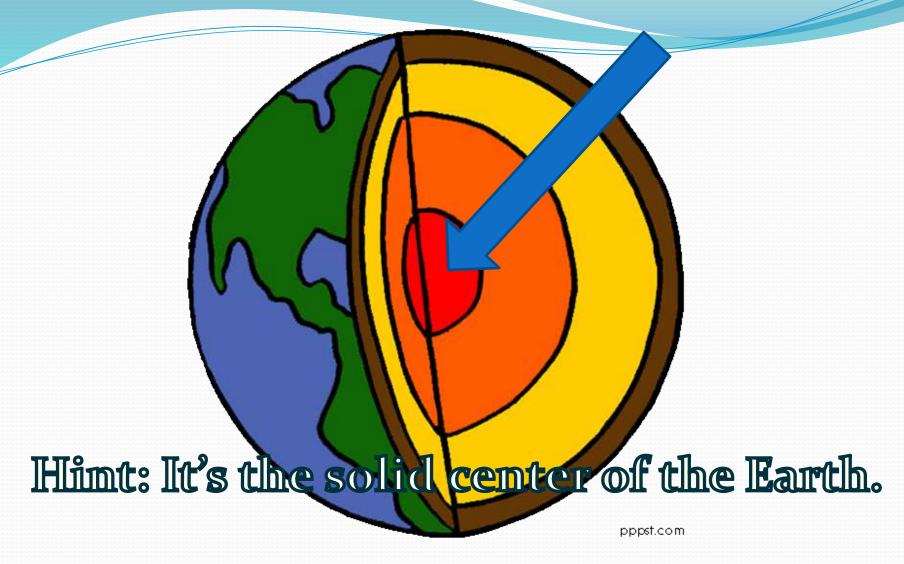
## INNER CORE

## LIQUID LAYER **BELOW THE** MANTLE, **PROBABLY** MELTED IRON

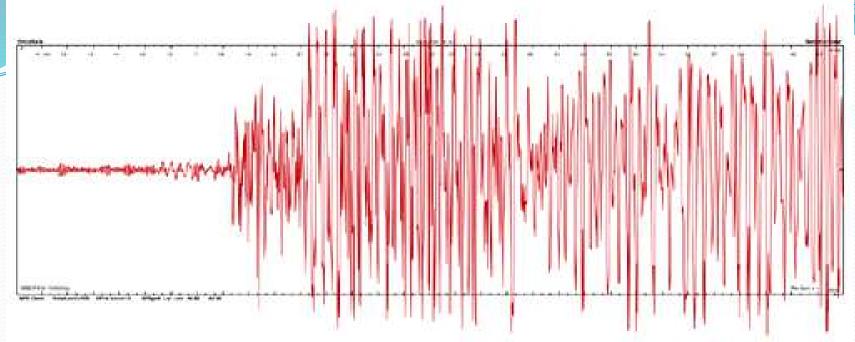
## OUTER CORE



## It's a SEISMOGRAPH



## It's the INNER CORE!



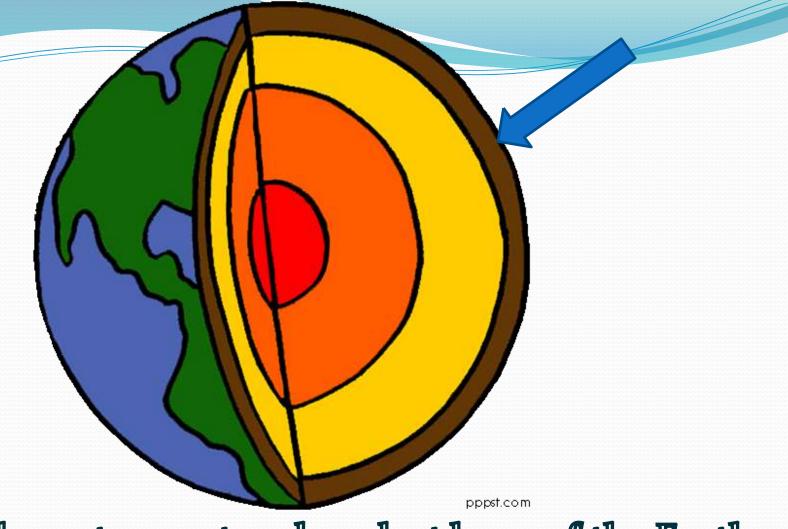
### OFF THE WEST COAST OF NORTHERN SUMATRA

December 26, 2004

Magnitude — 9.0 • Depth — 10 kilometers • Origin time — 00:58:50 UTC Recorded at the Ohio Geological Survey OhioSeis Station — OGSO Fountain Square, Columbus

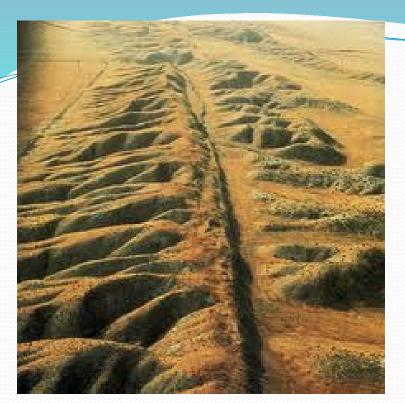
### Hint: It is printed out by a SEISMOGRAPH.

## It's a SEISMOGRAM!



Himt: It's the outermost and coolest layer of the Earth.

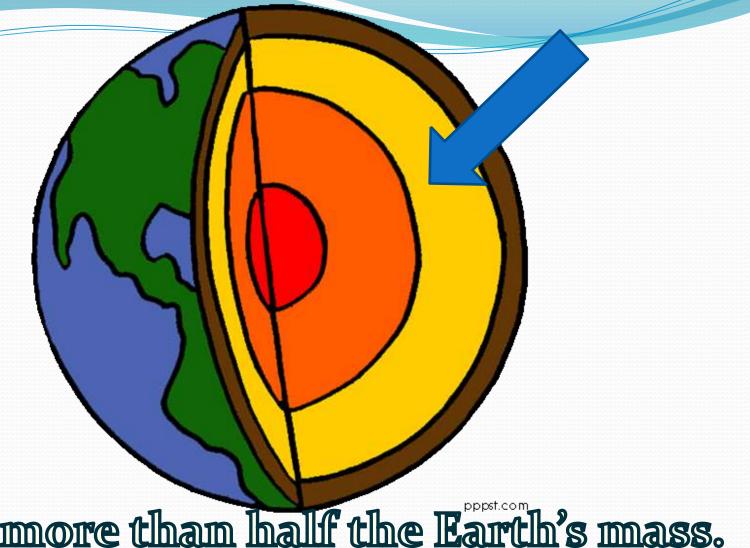
## It's the CRUST!





Himt: It's a crack in the crust where two plates collide.

### It's a FAULT!



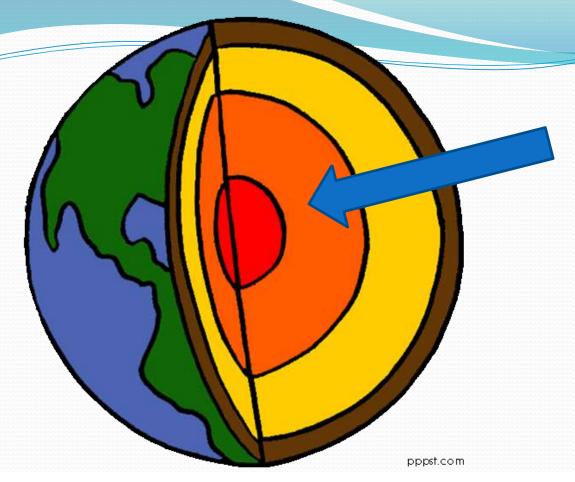
Himt: It's more than half the Earth's mass.

### It's the MANTLE!



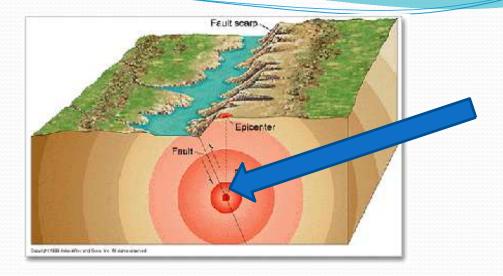
Himt: It's a movement of the Earth's crust.

## It's an EARTHQUAKE!



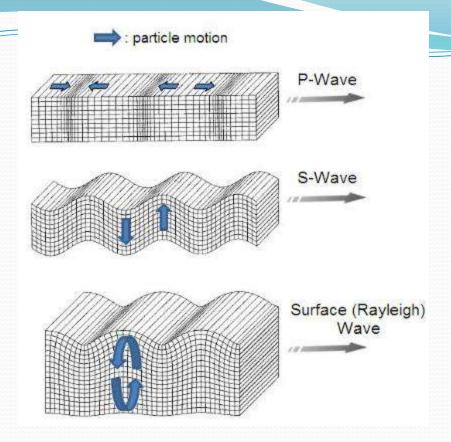
Himt: It's the liquid iron layer that creates Earth's magnetic field.

### It's the OUTER CORE!



### Himt: All the emergy from the earthquake starts here.

### It's the FOCUS!



Himt: These move away from the focus in all directions

## They're SEISMIC WAVES!