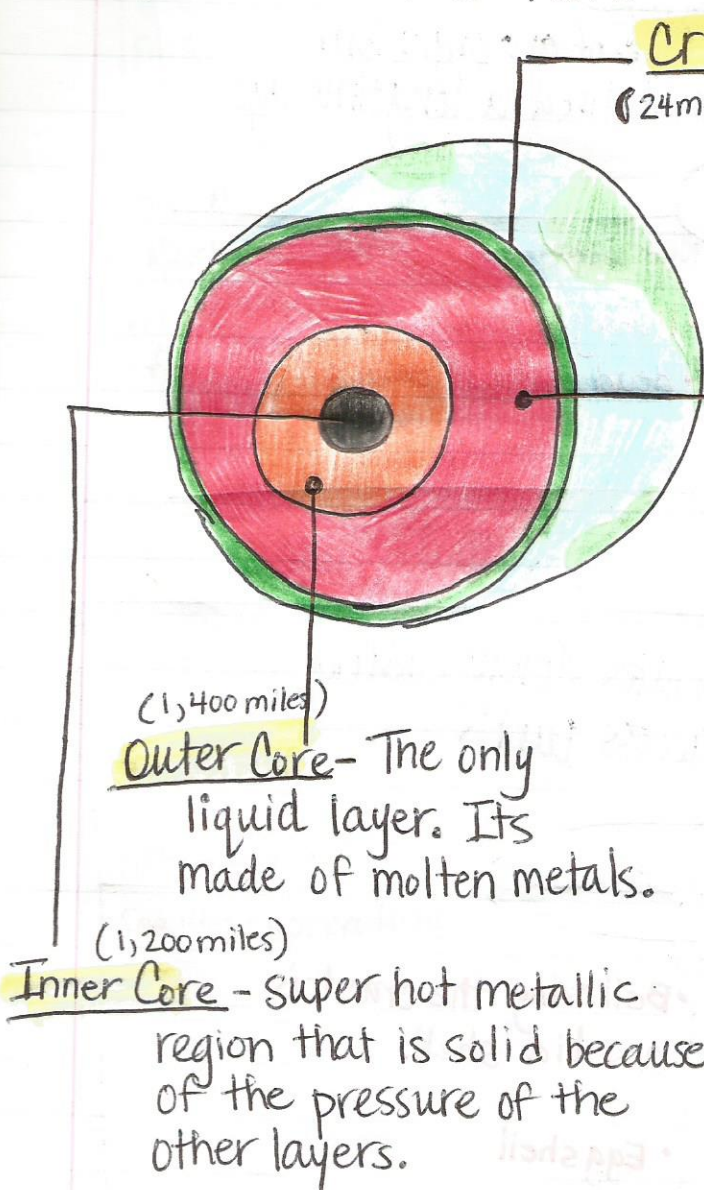


Earth's Structure



Crust - Earth's thin most outer layer. It's thicker under the continents than under the ocean. It's nearly all rock.
(24 miles)

(1,800 miles)
Mantle - The thick layer beneath the crust.

- The very top part of the mantle is solid and combines with crust to form the lithosphere.

- Beneath the lithosphere the mantle is melted (like melted plastic).

(1,400 miles)
Outer Core - The only liquid layer. It's made of molten metals.

(1,200 miles)
Inner Core - super hot metallic region that is solid because of the pressure of the other layers.

DEFINITION the physical remains or trace of an organism that lived long ago	OWN WORDS evidence of an organism that lived a long time ago
Fossil	
EXAMPLE Dinosaur bone	NON-EXAMPLE <ul style="list-style-type: none"> • living animal • dead animal on road

the theory that giant plates of rock are moving slowly across Earth's surface	Plates slowly sliding across Earth
PLATE TECTONICS	
<ul style="list-style-type: none"> North American plate Oceanic plates Continental plate 	<ul style="list-style-type: none"> • Believing the crust is a solid shell. • Egg shell

Two plates move toward each other. One may move under the other (subduction)

Plates colliding

Converging Boundaries

- The fault found near Washington + Oregon
- Areas where ocean trenches form

- two boundaries move away from each other

Two plates move away from each other. Molten rock rises to fill the gap forming new crust.

Plates moving away from one another.

Diverging Boundaries

- Rift valley
- Sea floor spreading

- two boundaries moving toward each other

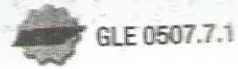
Two plates slide past each other, moving in opposite directions.

Plates moving past one another ↕.

Sliding Boundaries

Fault line where earthquake occurs

- two boundaries moving away from each other



What Is Earth's Structure?

Main Idea Earth has a layered structure. Its outer layer is made up of moving plates.

Write answers to the questions on the lines below.

1. What information does the existence of geysers and volcanoes provide scientists about Earth's interior?

The earth is hot inside

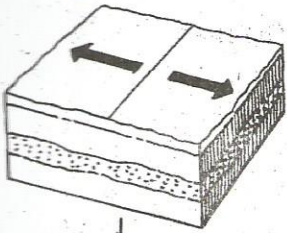
2. Beginning at the surface and moving inward, list the four main layers that make up Earth's structure.

Crust, mantle, outer core, inner core

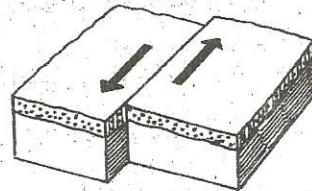
3. Describe the lithosphere.

Crust and hard upper part of the mantle

For each drawing shown below, identify the type of boundaries and describe the movement of the plates.

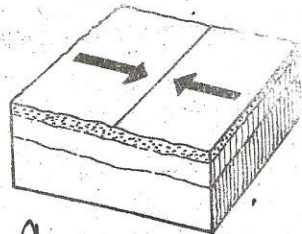


4. Divergent plates move away from each other



5. Sliding plates move past each other

Transform Boundary



6. Converging plates move toward each other

p211 Review

- ① A hard-boiled egg could represent the layers of the earth because the shell could be the crust, the white part could be the mantle, and the very center yolk could be the outer and inner core.
- ② The lithosphere is formed from the solid upper mantle and the crust combined.
- ③ In ^{the} 1950s, scientists discovered ... that molten rock from the mantle was rising to Earth's surface in the ocean basins. As this rock cooled it was being added to the Earth's crust. This discovery supported the theory that the lithosphere was divided into moving parts.
- ④ At converging boundaries, ocean plates go beneath continental plates because oceanic plates are more dense and slide beneath the lighter continental plate.

⑤

TCAP

On Earth, new crust is formed at diverging boundaries (C)