

1. Layers of the Earth
2. Plate Tectonics Theory
3. Convection Currents

- Scientists believe that Earth began as a \_\_\_\_\_ over \_\_\_\_\_ billion years ago
- As Earth cooled, the \_\_\_\_\_ (\_\_\_\_\_) materials floated to the surface and the \_\_\_\_\_ (\_\_\_\_\_) materials sank toward the interior.

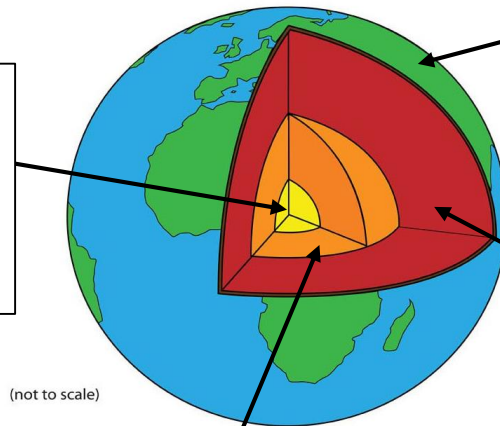


## Layers of the Earth

Let's go from the inside to outside:

Inner Core

State:  
Temperature:  
Thickness:  
Composed of:



Crust

State:  
Thickness:  
Composed of:

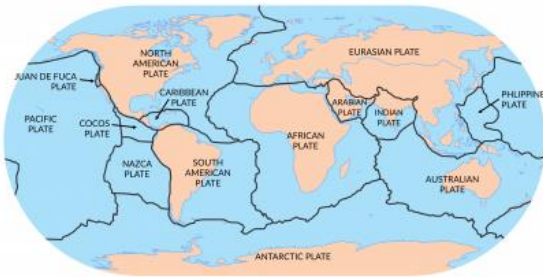
Mantle

State:  
Thickness:  
Composed of:

Outer Core

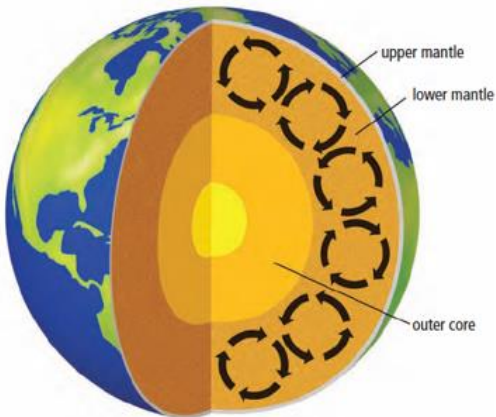
State:  
Thickness:  
Composed of:

## Plate Tectonic Theory



- Earth's outer layer is comprised of several large, rigid but mobile chunks called \_\_\_\_\_.
- There are \_\_\_\_\_ tectonic plates that make up the crust.
- Divided into:
  - 
  -

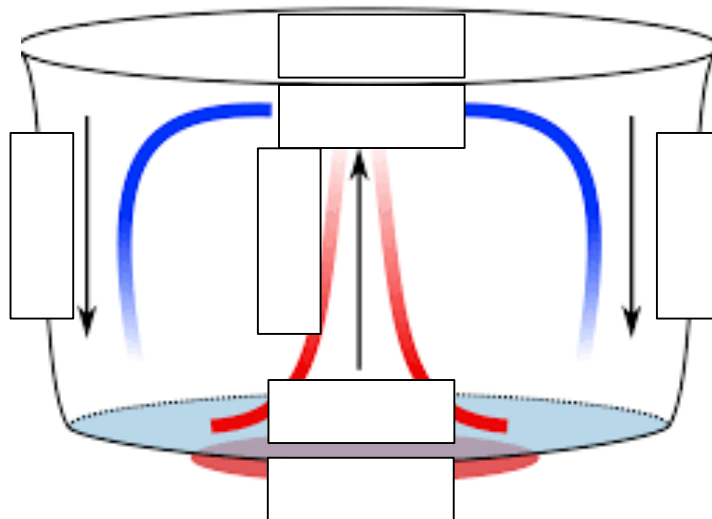
## Convection Currents



1. The \_\_\_\_\_ in the mantle closest to the hot core is \_\_\_\_\_ which makes it \_\_\_\_\_ dense.
  2. This low-density fluid \_\_\_\_\_ towards the crust where it is \_\_\_\_\_.
  3. The \_\_\_\_\_ liquid is now \_\_\_\_\_ dense and \_\_\_\_\_ again where it is \_\_\_\_\_.
- This cycle continues and creates what we call a \_\_\_\_\_.
  - This convection is the \_\_\_\_\_ behind plate movement.

Fill in the following diagram with the words from the word bank.

- Cold region
- Hot region
- Liquid rising
- Liquid sinking (x2)
- High density liquid
- Low density liquid



## Summary Questions

1. Compare the Earth to an avocado. What are the similarities and differences?

*Similarities:*

*Differences:*

2. How does the state (solid, liquid, gas) of the mantle affect plate movement? Include a diagram in your answer.

3. How would the Earth be different if the mantle was a solid?

4. How would the Earth be affected if the core cooled down?

5. Create a foldable of the Earth's layers. Label each layer and include a thorough description of each layer (thickness, characteristic, state etc.)