3.3 Layers of the Earth

Read about the Layers of the Earth and complete the words of the day and diagram

Words of the Day

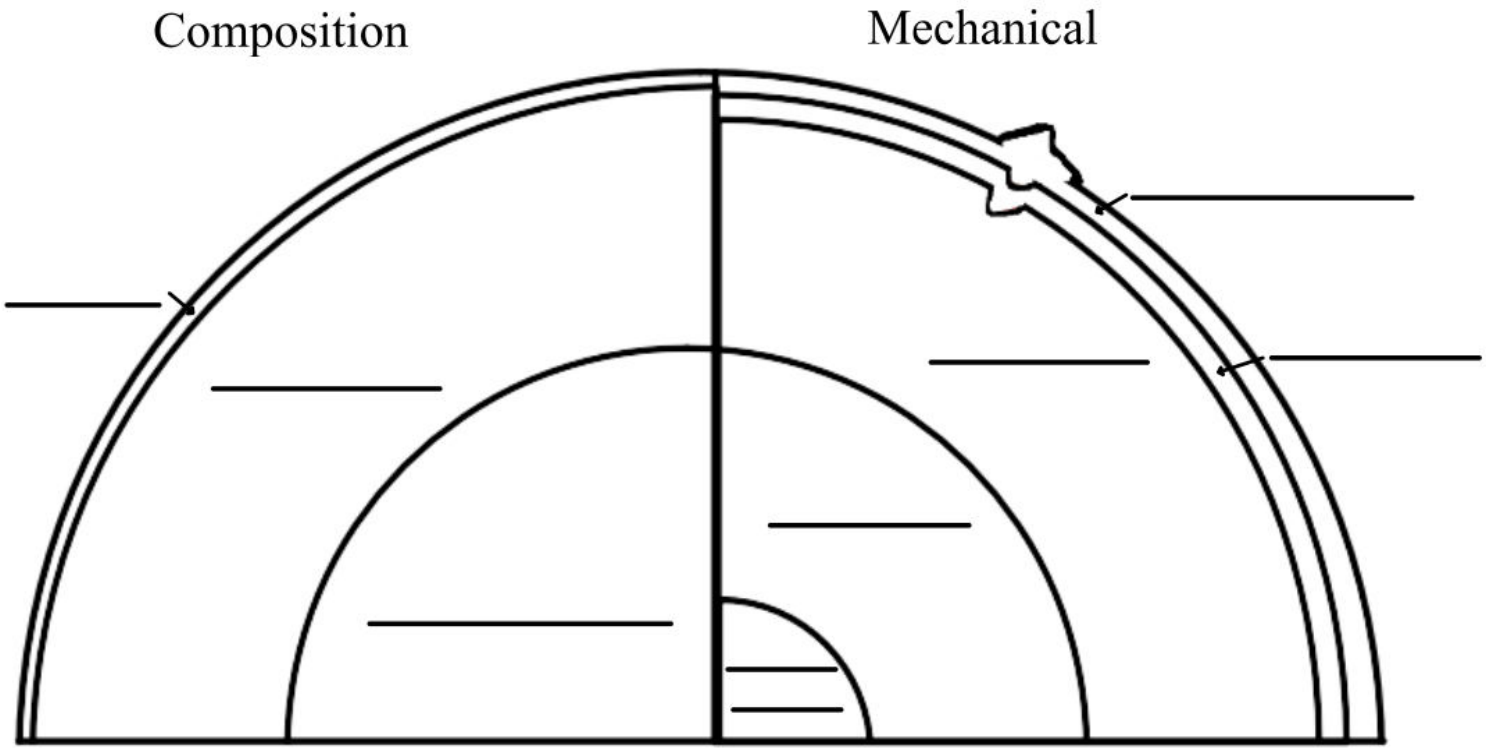
Differentiation:

Magnetosphere:

Ridgid:

Plastic:

Use *figure1* found *on the Layers of the Earth Reading* to color and label the layers of the Earth in the diagram below



Layers of Earth Facts

Directions: Read about the Layers of the Earth and complete the questions below.

Separation of Layers

1. Why did Earth's layers form?

2. The layers of the Earth are separated into 2 different ways, what are these 2 different ways?

Layers Based on Composition

3. What properties are used to distinguish between layers based on composition?

4. What are the names of the layers based on composition?

5. Complete the table below.

Layer	Definition	Elements found	Typical rock	Average Depth
Crust			Oceanic:	
			Continental:	
Mantle				
Core				

6. Label on the left side of your diagram on page 1:
   a. The elements found in each layer, use the symbol of the element to save space.
   b. Along the bottom write the depth of each layer.

7. List in order from least dense to most dense the layers of the Earth by composition.

Layers Based on Mechanical Properties

8. What properties are used to distinguish layers based on mechanical properties?

9. What causes the changes to the mechanical properties?

10. Complete the table below

Layer	Definition	State of Matter	Plastic or Rigid	Average Depth
Lithosphere				
Asthenosphere				
Mesosphere				
Outer Core				
Inner Core				

11. Add to the right side of your diagram on page 1:
    a. Write the state of matter for each layer
    b. Write if it is Plastic (P) or Ridgid (R)
    c. Along the bottom write the depth of each layer
    d. Draw in the convection currents in the outer core-Label them Magnetosphere BONUS Draw the magnetic field lines for the Earth!

12. How are rigid and plastic solids different from each other?

13. Describe how the asthenosphere is able to flow.

14. Which layer is responsible for the Earth's Magnetism?