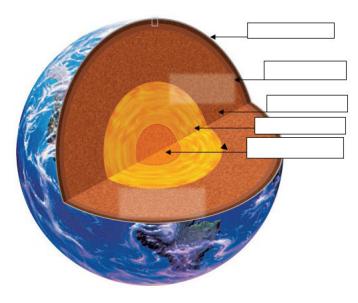
NAME

EARTH'S COMPOSITIONAL LAYERS

## CH 8.4 EARTH'S INTERIOR

## EARTH'S STRUCTURAL LAYERS



	COMPOSED OF?	PERCENT OF EARTH'S MASS
CRUST		
MANTLE		
CORE		

- 1. Which structural layer creates the magnetic field?
- 2. Which structural layer is a tectonic plate?
- 3. Which structural layer do tectonic plates float on?
- 4. Which structural layer has hot magma rising and cooler magma sinking?
- 5. Which structural layer is the most dense?
- 6. The least dense?
- 7. Which compositional layer is the thinnest?
- 8. Which compositional layer is the thickest?
- 9. Define gravity

Put a check in the correct box:

	Less gravity	More gravity
10. Bigger objects have		
11. Smaller objects		
12. Items that are closer together		
13. Items that are farther apart		

	increases	decreases
14. As you go deeper in the earth, temperature		
15. As you go upward towards the crust, temperature		
16. As you go deeper in the earth, pressure		
17. As you go upward towards the crust, pressure		

18. What causes the hot temperatures inside Earth?

19. Why is there great pressure deep inside Earth?

## CHAPTER 9.1 +9.2 CONTINENTAL DRIFT AND SEAFLOOR SPREADING

- 20. What is continental drift?
- 21. Who came up with the continental drift theory?
- 22. What are the 5 evidences that support the theory?

1	 	 	
2		 	
3			
4			
5			

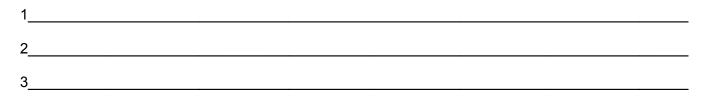
- 23. What is the name of Earth's supercontinent?
- 24. About how long ago did it start breaking up?
- 25. What is the process by which new oceanic crust forms under the ocean?

- 26. What is the name given to a long chain of underwater mountains?
- 27. Label the 6 boxes below, then based on the convection currents in the mantle, draw 3 arrows on the

and crust erust erust being formed)

tectonic plates showing which direction they are moving.

28. What evidence have scientists found that proves the sea floor is spreading?



- 29. Compared to the mid ocean ridge, where are the oldest rocks found?
- 30. Compared to the mid ocean ridge, where are the youngest rocks found?
- 31. Before lava hardens, iron atoms line up with the \_\_\_\_\_ pole. Under the ocean we can see that rock magnetic fields flip \_\_\_\_\_ and forth all across the ocean. This shows that the ocean floor must have been continually created over \_\_\_\_\_.

32. Shallow earthquakes occur near \_\_\_\_\_\_, and deep earthquakes are

from the trench. When we plot a cross section of these earthquakes on a piece of

paper, you can clearly see what?

33. Why do we not have earthquakes below 700 km?

## CHAPTER 9.3 +9.4 PLATE TECTONICS AND PLATE MOTION

34. What 2 parts of Earth's compositional layers are glued together to make a tectonic plate?

\_\_\_\_\_ and \_\_\_\_\_

35. About how many tectonic plates are there?

36. What do tectonic plates float on?

37. When tectonic plates move, what landforms/natural can form/occur?

1		

38. A place where 1 tectonic plate touches another is called a \_\_\_\_\_\_

Fill in the chart for CONVERGENT boundaries

	Lithosphere goes up or down?	Landform created	Lithosphere melts or buckles?
continental/continental	39.	40.	41.
continental/oceanic	42.	43.	44.
oceanic/oceanic	45.	46.	47.

48. The seafloor is spreading due to what kind of boundary?

49. What is the name of the place where new seafloor is forming?

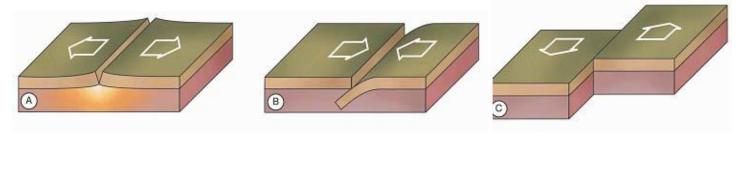
50. If a divergent boundary forms on land, what landform occurs?

51. What is a transform boundary?

52. What are the 3 theories for how tectonic plates move?

1	
2	
۷	
3	

53. Label the three types of plate boundaries:



54.\_\_\_\_\_