

GLG110: Ch 2 Study Sheet - Internal Structure of Earth & Plate Tectonics Name _____

1. Why isn't Earth worn flat?
2. Describe each of the following layers of the earth.

	THICKNESS (MI)	COMPOSITION	STATE	DENSITY
CRUST	_____	_____	_____	_____
MANTLE	_____	_____	_____	_____
OUTER CORE	_____	_____	_____	_____
INNER CORE	_____	_____	_____	_____

3. Where is the crust the thickest? _____ The thinnest? _____
4. What is strange about the age of the continental crust compared with the age of the oceanic crust?
5. How can this be? What can explain this difference?
6. What is driving this process and can you watch it happen? Why or why not?
7. Question for lazy people like me: We know about the inside of Earth because of _____
8. Why was Alfred Wegener doubted?
9. *Figure 2-5* Earth "grows" at the _____ & "disappears" at the _____
10. *Figure 2-5* What causes the divergent boundary to diverge?
11. *Figure 2-5* Two things that happen at an ocean-continent convergent boundary are ..
 - a. _____
 - b. _____
12. *Figure 2-4* There are about _____ major plates. We live on the _____ Plate which consists of the countries of _____, _____, & _____ & part of the _____ Ocean crust. The _____ Ocean floor is spreading apart down the middle. Imagine "un-spreading" the the Atlantic Ocean crust. In the north, _____ & _____ would join. In the south, _____ & _____ would join.
13. What is the cause of major earthquakes?
14. How can we know the angle at which at a plate descends into the asthenosphere? We've beer been down there!
15. Why do ocean-ocean and ocean-continent boundaries result in volcanoes but continent-continent do not?

16. In which 2 types of boundaries do submarine trenches form and why?
17. Why did the author of the book include a silly drawing of an Admiral on an iceberg?
18. Would you call the rate of plate movement fast or slow? Explain.
19. Explain how each of the following supports Harry Hess' seafloor spreading hypothesis.

paleomagnetism -

age of the sea floor -

ocean ridges -

20. Earth's magnetic field is caused by...
21. What happens to Earth's magnetic field every so often and how often does this happen?
22. How long does this change normally take? _____
23. *Figure 2.15* How can the oldest sea floor be only 200,000,000 years old?
20. Two hot spots on Earth's crust are _____ and _____
21. How are hot spots different from spreading centers?
22. Why is Kauai so much older than Hawai'i? How can this be?
23. What happened to the Pacific Plate about 43 million years ago and how do we know?

*That's enough.
Eat a doughnut. :)*

