Continental Drift, Plate Tectonics, Earthquakes & Volcanoes Study Guide

1. Define the following vocabulary: lithosphere, asthenosphere, fault, tectonic plate, Pangaea, earthquake
2. What does the Theory of Continental Drift say?
3. What evidence did Alfred Wegener offer to support his theory of Continental Drift?
4. What evidence did exploration of the ocean floor reveal to further support Wegener's theory?
5. Why didn’t most scientists believe Alfred Wegener’s Theory of Continental Drift when he first proposed it?
6. What are tectonic plates?
7. What does the Theory of Plate Tectonics say?
8. What makes the tectonic plates move?
9. Describe the 3 types of plate boundaries, and the movement that occurs at each one.
10. What land features or events are formed at each type of plate boundary?
11. What does tectonic plates folding on each other cause?
12. What is a mid-ocean ridge and how does it form?
13. Describe what sea-floor spreading is and how it occurs
14. Name the three types of evidence we studied that supports sea-floor spreading
15. What is subduction?  Where does it occur and why?
16. What role does subduction play in changing the size and shape of oceans?
17. Name the 3 types of stresses that act on rocks, and describe which type of boundary they occur at.
18. What is a fault?
19. What is the difference between a hanging wall and a foot wall?
20. Name and describe the 3 types of faults we discussed in class.
21. How are plate boundaries and stresses related?
22. How are stresses and faults related?
23. How can plate tectonics affect the size of oceans?
24. Define the following vocabulary: earthquake, seismic wave
25. How do earthquakes happen?
26. What is the difference between the focus and epicenter of an earthquake?
27. Compare and contrast P waves, S waves, and Surface Waves.
28. Where do most earthquakes occur?
29. What is the difference between a seismograph and a seismogram?
30. What does the Richter scale measure?
31. What does the Mercalli scale measure?
32. When geologists study rock layers, the younger rock is usually layered above the older rock. What might explain why a geologist might find an area where older rock is above the younger rock?
33. What is a volcano and how does it erupt?
34. How are earthquakes and volcanoes related?
35. Name and describe the main parts of a volcano.
36. Name and describe the 3 main types of volcanoes.
37. What is the difference between magma and lava?
38. Where do most volcanoes occur?
39. What is the Ring of Fire?
40. What is a hot spot volcano?
41. What is the difference between an active, dormant, and extinct volcano?
42. What is a pyroclastic flow?