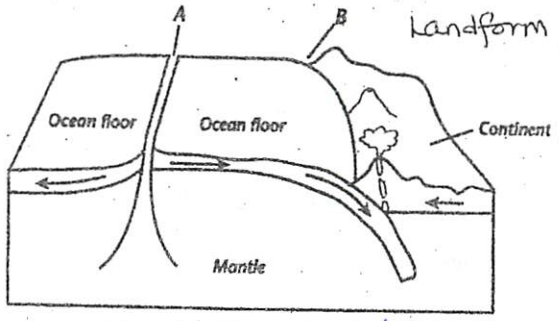
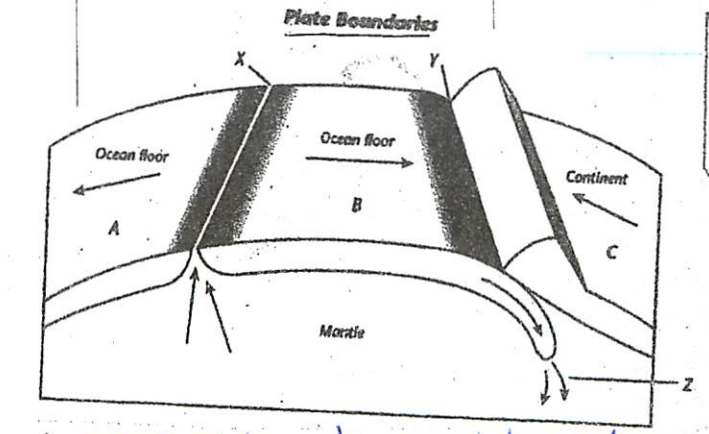
27. What do you call a plate boundary where two plates move away from each other?	27. A divergent boundary.
28. What landform occurs at a convergent boundary where subduction of one plate occurs below the other plate?	28. A deep ocean trench. * the deepest trench is the Marianas trench.
29. As subduction carries one plate below the other, melting of sediment and oceanic crust will occur. What results when the magma rises?	29. Volcanoes!!!!! If it is continental- oceanic plates then volcanoes form on the land. If it is oceanic- oceanic plates, then a chain of volcanic islands will form on the ocean floor known as an island arc.
30 What are seismic waves?	30. Seismic waves are vibrations that carry energy released from an earthquake.
31. What is the difference between a focus and epicenter of an earthquake?	31. The focus is the area where the earthquake originates far below the ground. The epicenter is the land on the surface directly above the focus.
32. What are three types of Seismic waves?	32. P waves- primary S waves- secondary Surface waves
33. What instrument records and measures seismic waves? What are two scales for measuring and describing Earthquakes?	33. A seismograph The Richter Scale and the Mercalli Scale
34. What causes a tsunami?	34. An earthquake on the ocean floor.
35. List three ways Earthquakes cause damage	35. Shaking, Liquefaction, aftershocks.
36. A volcano that has not erupted for many years, but might erupt again in the future is known as	36. Dormant volcano
37. A volcano that is never expected to ever erupt again is known as an	37. Extinct volcano
38. A volcano that is currently erupting or releasing gas or ash	38. An active volcano

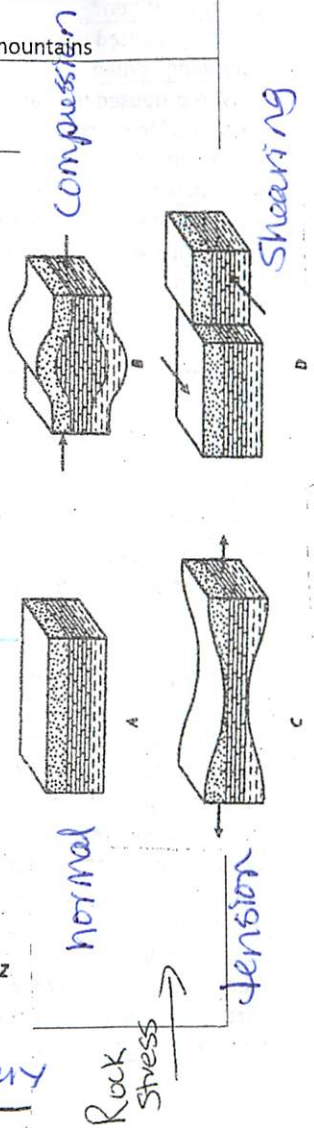
39. Three types of volcanoes are	39. Shield volcano, composite volcano, and cinder cone volcano
40. types of landforms from lava flows	40. Lava plateaus, volcanic necks, dikes, sills Batholiths, dome mountains
41. Geothermal activity can heat up water beneath the surface. Name two geothermal features	41. Hot springs geysers



A midocean ridge
B deep ocean trench



A oceanic plate X divergent boundary
B oceanic plate Y convergent boundary
C continental plate Z subduction



Earth Plate Processes Study Guide

1. Which theory did Alfred Wegner propose? When?	1. Continental Drift in 1915
2. Who proposed the idea of Sea Floor Spreading? When?	2. Harry Hess in 1960
3. Who proposed the name "Plate Tectonics" to describe why plates move, and why volcanoes and earthquakes occur? When?	3. T J Wilson in 1968
4. What was the name of the super continent given by Alfred Wegner?	4. Pangea
5. Which landform results when two continents collide?	5. Mountains or mountain chains
6. What type of rocks would result from this intense heat and pressure from continental collision?	6. Metamorphic rocks would form where the mountains are made.
7. What might you see in some rocks formed in a mountain range from continental- continental plate collisions?	7. Evidence of folding in the rocks from the stress of compression
8. Which landform results when a divergent boundary forms on a continent?	8. A Rift Valley containing volcanoes
9. What type of rocks would form in a Rift Valley at a divergent boundary?	9. Volcanoes would cause igneous rocks to form.
10. What is another name for a rift valley on the ocean floor?	10. A mid ocean ridge.
11. What types of rocks would you find at a mid- ocean ridge?	11. Igneous Rocks. (usually basalt)
12. What is the name of the plate boundary where two plates slide past one another.	12. A transform boundary
13. A transform boundary is where two plates slide past each other forming earthquakes. Give an example of a transform boundary in California.	13. The San Andreas Fault
14. The San Andreas Fault is which type of fault and what type of stress is occurring?	14. It is a **strike- slip fault** because the plates move past each other by **shearing**.
15. Name Three locations where volcanoes can occur?	15. Converging boundary, diverging boundary, and a hot spot.
16. What is the name of the area around the Pacific plate known for its active volcanoes and earthquakes?	16. The Ring of Fire
17. How do scientists study the Earth's interior?	17. by studying seismic waves This is an indirect type of observation.
18. The Earth's mantle gets very hot and the hot rock rises, cools, then sinks. This is an example of which type of heat transfer?	18. Convection Currents
19. The Earth's inner core is hotter than the outer core, but it is solid. Why?	19. There is a huge amount of pressure due to the Earth's surrounding layers on the inner core.
20. Name the Earth's four layers from the outside in, and the inside out.	20: Crust, mantle, outer core, inner core Inner core, outer core, mantle, crust
21. Which layers of the Earth are made of the metals iron and nickle?	21. Inner core and outer core
22. Which layers of the Earth are made of rock?	22. mantle and crust
23. What do we call the layer of the Crust and upper mantle that makes up the continental and oceanic plates?	23. The lithosphere
24. What do we call the layer of the upper mantle that moves slowly and causes the tectonic plates above to move?	24. The asthenosphere
25. What causes the Asthenosphere to move?	25. Convection currents rising and sinking in the mantle.
26. What do you call a plate boundary where two plates come toward each other?	26. A convergent boundary