

- The equation for density is?  $D = \frac{\text{mass}}{\text{volume}}$
- If a rock had a volume of  $35\text{cm}^3$  and a mass of 80 g, what is the density of the rock?  $\frac{80\text{g}}{35\text{cm}^3} = 2.29\frac{\text{g}}{\text{cm}^3}$
- What is the volume of a box with  $L = 8\text{cm}$   $W = 4\text{cm}$  and  $H = 3\text{cm}$ ?  $96\text{cm}^3$
- In water,  $1\text{g} = 1\text{ml} = 1\text{cm}^3$
- When you find the volume of an object by putting it in water and seeing the change, this is called volume by displacement
- In a clear drinking straw, salt water is added so that the saltier water is over the water that is not as salty, What happens? salty water is denser and will sink. This causes the two liquids to mix.
- Why does a rock sink in water and a piece of wood float? (details please)  
rock is denser than water and wood is less dense.
- When I shake my bag of popcorn, what happens to the seeds, and why?  
seeds sink to the bottom of the bag because they are more dense than the popped corn.
- Put the following objects in order from least dense to most dense. Iron aluminum air water wood  
Air wood water Aluminum Iron
- Why do things float higher in the Dead Sea than in the regular ocean? (be specific)  
the Dead Sea is saltier and more dense than regular ocean. there is more buoyant force in the dead sea than the ocean
- Who had to figure out if the crown maker had cheated the king? Archimedes
- How did he figure out that the crown maker had cheated the king?  
solid gold is very dense and takes up the least volume. The crown had other less dense metal added. Since the crown had more volume than the gold, the crownmaker cheated.
- What is the buoyant force?  
the force that pushes up on an object because of the weight of the material, like water, that is displaced
- Who first came up with the idea that the continents had looked different in the far past than they do now? Alfred Wegener
- Give four pieces of evidence that he used to support his theory.  
similar rock layers, similar fossils, shape of the continents fit like a puzzle, glacier marks same on both continents
- Why does hot air rise?  
less dense than the air around it.
- When you have movement of air in a pattern around a room because of hot and cold air, this is called...  
convection current.
- What heats the mantle inside the Earth and causes movement? the Earth's core
- The movement inside the Earth is called... convection current
- Lithosphere is the upper mantle and crust that is broken into pieces called plates
- Soft layer of earth that has convection currents and causes plates to move is the mantle
- Large landmass or supercontinent is called Pangea
- New ocean floor is created at the divergent boundary
- The type of boundary in which plates move apart is called a divergent boundary.
- The type of Boundary in which plates collide is called a convergent boundary.
- The type of boundary that produces only earthquakes is a transform boundary.

27. The boundary that produces rift valleys and mid ocean ridges is the Divergent boundary.
28. The boundary in which two plates scrape past each other is the transform boundary.
29. Two types of crust are oceanic and continental
30. The boundary involved in sea-floor spreading is a divergent boundary.
31. Where are volcanoes produced?  
at subduction zones, above hotspots, and along divergent boundaries
32. The area in which one plate sinks underneath another is called a subduction zone
33. The oceanic crust is denser (heavier) than the continental crust
34. The oceanic crust supports the ocean
35. The continental crust supports the continents
36. The main driving force that moves the plates are the convection currents that are located in the Mantle.
37. This type of crust is dense, thin, made out of basalt, and can be subducted. oceanic
38. If the continents were put together, they would fit like a puzzle.
39. Rocks closer to the mid-ocean ridge are (younger or older) than rocks farther from the mid-ocean ridge.
40. Subduction occurs only at convergent boundaries with continental and oceanic crust.
41. Which type of boundary created the San Andreas Fault? Transform
42. An area in the middle of a plate that produces volcanoes. Hot spot
43. The Hawaiian Islands were formed at a hot spot
44. Area in which two plates interact plate boundary
45. What is the "Ring of Fire"? the area at the edge of the Pacific Plate, where many volcanoes are found
46. What releases pressure between the plates? earthquakes
47. What happens when two pieces of continental crust (lithosphere) collide? Mountains are formed
48. What is a hotspot? Thin place in the lithosphere where magma comes up and can break through, forming an underwater volcano and eventually an island
49. When plates move apart under water and leave a gap that is filled with magma, this is called sea floor spreading
50. When a string of islands are formed because of plates that are thin in areas where it is easy for magma to come through, these areas are called hot spots
51. Molten rock is called Magma before it erupts and is called Lava afterwards.
52. If a volcano is not active, it can be either dormant or extinct.
53. Earthquakes are caused by pressure released when rock breaks as plates
54. The magnitude of an earthquake is measure using the Richter scale. move past each other
55. The place on the surface above the focus of an earthquake is called the epicenter.
56. Earthquakes produce waves that travel through the earth. Primary waves are fastest.
57. The earthquake waves that are most destructive are surface waves
58. The youngest rocks on the ocean floor are located right at mid ocean ridges where sea floor spreading is going on. could just be
59. compression is the force that squeezes rocks together and tension is the force that pulls them apart.
60. Normal faults are caused by tensional forces. minutes old.