

Geophysics Notes

1. What are the ratios between Earth's mass/volume and the values for atmosphere, oceans, crust, mantle and core? (draw and label the diagram)
2. What are the earth's layers? (draw the diagram , label it and take notes about each layer)
3. What is plate tectonics?
4. Explain and draw the divergent behavior of the plates
5. Explain and draw the convergent behavior of the plates
6. Draw and explain the transform behavior of the plates
7. List the possible effects of each type of these behaviors
8. Draw and label the global tectonic plates (use colors)
9. Study the active volcanoes map and identify the location of the "ring of fire"
10. What is an earthquake?
11. What is the earthquake's focus?
12. What is the earthquake's epicenter?
13. What are the causes of earthquakes?
14. What is seismology?
15. Explain what the p-waves are.
16. What are the s-waves?
17. What are the surface waves?
18. Draw and label the diagram illustrating each type of seismic waves
19. Draw the diagram illustrating the wave fronts for the p-waves
20. Draw and explain how the seismographs are working
21. What is the Richter scale?
22. What are the factors that affect the damage done by the earthquakes?
23. What is the modified Mercalli scale?
24. Draw the diagram illustrating the most notable earthquakes and the amount of the energy released by them
25. Write some details about the Haiti (2010) and Chile(2010) earthquakes
26. Explain the refraction of the water waves around headlands
27. Explain what is different between the behavior of surface water waves and tsunamis
28. What are tsunamis? (speed, wavelength, amplitude)
29. What are the causes of tsunamis?
30. Draw and explain how a tsunami occurs
31. Explain how the wave watchdog system works
32. Give some details the Sumatra(2004) and Japan (2011) Tsunamis.