

# Unit 4 Study Guide

## Chapter 8

1. Know the **layers** of Earth and the **composition** of each.
2. What is **plate tectonics**?
3. What are the different **plate boundaries**?
4. Be able to identify **common features** and **geographic examples** of the plate boundaries.
5. Where is crust being **created** and where is crust being **destroyed**?
6. Where are **volcanoes** typically found?
7. What's the connection with **earthquakes** and plate boundaries?
8. What are some **evolutionary** and **ecological consequences** of plates moving?
9. What's the **rock cycle**?
10. Be familiar with type of rock and how each is **formed**.
11. What's the difference between **physical** and **chemical weathering**?
12. How does **surface area** factor into weathering?
13. What is **soil**?
14. What are **soil horizons**?
15. Know the characteristics of the major horizons.
16. What is a **soil profile**?
17. What are the **three categories** that **soil texture** or **composition** can be broken into?
18. What is **loam** then?
19. Make sure you can read a **soil texture triangle** – (worksheet on classroom.google.com for practice)
20. What texture has the highest **water-holding capacity**? What has the least?
21. What is **permeability**? **Porosity**?
22. What is **ore**?
23. Compare and contrast **surface mining** and **subsurface mining**.
24. What is **mountaintop removal**?

## Chapter 9

25. What **percent** of our water is **freshwater**? What's the rest?
26. How much of our freshwater is locked up in **glaciers and ice**?
27. What is an **aquifer**?
28. What's that famous aquifer you should know? Where is it?
29. What are the dangers of **overdrafting** aquifers?
30. What is **urbanization** doing to our aquifers? What is **increasing** and **decreasing**?
31. What's the largest freshwater lake?
32. What are **dikes** and **levees**?
33. Know the **pros** and **cons** of dams.
34. Be familiar with several dam/water diversion case studies
  - Three Gorges Dam
  - Hoover Dam
  - Salton Sea
  - Aswan High Dam
  - Mono Lake
  - Aral Sea
  - O'Shaughnessy Dam
  - Owens Valley
35. How do dams allow **migrating fish** to get past a dam?
36. How do dams, dikes, and levees affect **sediment deposition**?
37. What are **floodplains**?
38. Why have humans settled on floodplains?
39. What is **desalination**? What are the two methods?

40. So, what's the catch?
41. Where is desalination the dominant way of getting freshwater?
42. Known the basics of each type of **irrigation**.
43. Which is best at reducing water lost due to **evaporation**?
44. What's the **greatest use** of water **worldwide**? What's the least?
45. What's the greatest domestic use of water?
46. What is **xeriscaping**?
47. What is **gray water**?
48. What is **contaminated water**?

Now go quiz yourself with the questions on pages **290-291** and **318-323**!