

## Unit 3 Hydrosphere Study Guide

1. Define the following terms:

- a. **El Nino**
- b. **La Nina**
- c. **Convection**
- d. **Salinity**
- e. **Density**
- f. **Geyser**
- g. **Aquifer**
- h. **Spring**
- i. **Infiltration**
- j. **Saltwater intrusion**
- k. **Estuaries**
- l. **Inlet waterways**
- m. **Impermeable**
- n. **Watershed**
- o. **Thermal pollution**
- p. **point source pollution**
- q. **nonpoint source pollution**

2. How does temperature and salinity affect the density of ocean water?

3. How do these changes in temperature/salinity result in the movement of ocean water currents?

4. How do ocean currents impact the weather?
  - a. How do coastal climates differ from inland climates along the West Coast (California)? and along the East Coast (North Carolina)?
  
  - b. Describe the differences between El Nino and La Nina.
  
5. Describe the Water Cycle by defining the following terms:
  - a. **Evaporation**
  - b. **Transpiration**
  - c. **Condensation**
  - d. **Precipitation**
  - e. **Surface water**
  - f. **Subsurface (Groundwater)**
  - g. **Accumulation**
  
6. Describe how water moves through river systems (use the terms “river basins”, “aquifers”, and “watersheds”).
  
7. Describe how events such as floods and droughts can affect water levels and what impact this has on well water availability.
  
8. Describe ways in which humans use water.
  
9. What are some of the consequences of using water resources?
  
10. What are some of the effects of uncontrolled population growth on potable water (freshwater availability)?
  
11. In what ways can surface and groundwater get polluted?
  
12. Where does your water go when you are finished with it (ie. toilet water, shower water, laundry water)?

13. How do things make it into streams?

14. In what ways can human use of water impact aquatic life?

15. What is the difference between point source pollution and nonpoint source pollution?

16. What are some of the effects of building structures that alter the flow of water (ie. dams and artificial levees)?