1. Water Cycle

**Study Guide – Biogeochemical Cycles**

* 1. Understand the role of water in your ecosystem
     1. Why is water important to life
     2. What is there more of on the earth, salt water or fresh water?
  2. Define and understand the terms
     1. Evaporation
     2. Condensation
     3. Precipitation
     4. Runoff
  3. Understand the steps to the water cycle
  4. Trace the path of a water droplet from the ocean back to the ocean
  5. How do humans impact the water cycle?

1. Carbon Cycle
   1. Understand the role of carbon in the ecosystem
      1. Why is carbon important?
   2. Understand the need for carbon in photosynthesis
      1. Know the products and reactants of photosynthesis
      2. Understand what organisms perform photosynthesis
   3. Understand the need for carbon in cellular respiration
      1. Know the products and reactants of cellular respiration
      2. Understand what organisms perform cellular respiration
   4. Understand the steps to the carbon cycle
   5. Trace the path of carbon from CO2 back to CO2
   6. How do humans impact the water cycle?
2. Nitrogen Cycle
   1. Understand the role of nitrogen in the ecosystem
      1. Why is nitrogen important?
   2. What is Nitrogen fixation?
      1. What is atmospheric nitrogen? Can organisms use atmospheric nitrogen?
      2. How does it get to a useable form?
   3. Understand the steps to the Nitrogen cycle?
   4. Trace the path of Nitrogen from N2 back to N2
   5. How do humans impact the Nitrogen cycle?
3. Phosphorus Cycle
   1. Understand the role of phosphorus in the ecosystem
      1. Why is phosphorus important?
   2. What is erosion?
   3. Understand the steps to the phosphorus cycle
   4. Trace the path of carbon from rocks back to rocks.
   5. How do humans impact the phosphorus cycle?