Biology Honors Test 3 Study Guide

1. What are biogeochemical cycles?
2. Why do chemicals have to be recycled?

**Water Cycle:**

1. Understand the water cycle as a whole.
2. What is evaporation?
3. What is transpiration (evapotranspiration)?
4. What it condensation?
5. What is precipitation? Be able to name multiple types of precipitation.
6. What is runoff? What can runoff create environmental problems?
7. What is infiltration?

**Carbon Cycle:**

1. Understand the carbon cycle as a whole.
2. Be able to name the processes that release carbon into the atmosphere.
3. Be able to name the processes that remove carbon from the atmosphere.
4. What processes lock carbon underground?
5. What is CaCO3? What eventually happens to the CaCO3 in the carbon cycle?
6. What is the greenhouse effect? Why is the greenhouse effect a good thing?
7. Understand how CO2 and the greenhouse effect causes global warming.

**Biodiversity:**

1. What is biodiversity?
2. What are the three main types of biodiversity? Define them?
3. What is habitat fragmentation?
4. What is biological magnification?
5. What is an invasive species? Why are they such a major problem for the ecosystems they invade?

**Aquatic Ecosystems:**

1. What are the three major variables that influence aquatic ecosystems?
2. How does depth limit biodiversity? Why?
3. What is an ectotherm?
4. How does temperature limit biodiversity? Why?
5. What is salinity? How is it measured?
6. What is the salinity of the oceans away from the coastlines?
7. What is the difference between an osmoconformer and an osmoregulator?
8. What is a euryhaline species?
9. What is dissolved oxygen?
10. How does oxygen get into the water?
11. How do aquatic organisms get oxygen into their bodies?
12. What is eutrophication?
13. Understand how the pH scale works.
14. What does high or low pH usually indicate in a body of water?
15. What is acid rain? What causes it?

**Succession:**

1. What is primary succession?
2. What is a pioneer species?
3. What is the difference between primary succession and secondary succession?