

Name _____ Date _____ Hour _____

Biology

Guided Reading 2-3

Cycling of Matter

1. Define nutrient
2. Define biogeochemical cycle
3. Examine Figure 16, how are nutrients passed through the ecosystem?
4. What are some sources for water evaporation?
5. Examine Figure 17, Which processes take water from the environment? Which processes return water to the environment?
6. Think back to our discussion on toxins, how could toxic substances enter ecosystem using the water cycle?
7. Which elements are found in every living thing and are essential for life?
8. What happens in photosynthesis?

9. What process releases carbon dioxide back into the environment?

10. In what two other ways can carbon (and oxygen) be released?

11. Where is the largest concentration of Nitrogen? What's wrong with this source?

12. Who is responsible for nitrogen fixation?

13. When does nitrogen enter the food web? How does the nitrogen get to the consumers?

14. In what ways is nitrogen returned to the environment?

15. Describe what happens to phosphorus in the "short term" cycle.