

Learning objectives: Chapter 5

Chapter 5 Reading Guide: Biogeochemistry – Cycling of Nutrients in Ecosystems

Read all sections excluding 5.3, 5.9

1. Identify and describe the 3 components (cycles) within the Biogeochemical Cycle.
2. What are essential nutrients, and what are two different categories of these nutrients?
3. What chemicals constitute the largest component of the dry weight of plants?
4. What is the definition of a nutritional deficiency and how might you explain the concept with a graphic?
5. How do nutrients move through each component cycle in the Biogeochemical Cycle? What are the major inputs and outputs of each component cycle? (Sections 5.4-5.6)
6. How are nutrients taken up by plants, distributed, and lost from plants?
7. What are key factors affecting rates of litter decomposition?
8. Why is nitrogen such an important forest nutrient?
9. What are 4 major effects of forest management on nutrient cycling?
10. How does nutrient cycling change with forest succession?