

Chapter 3–3 Cycles of Matter

Essential Questions:

- How does matter move among the living and nonliving parts of an ecosystem?
- How are ***nutrients*** important in living systems?

A. Recycling in the Biosphere

1. Unlike energy, **matter** is **recycled** in ecosystems
2. Biogeochemical cycles
3. Matter is transformed, not used up

B. The Water Cycle

Water moves between earth & atmosphere



C. Nutrient Cycles

1. All chemical substances needed for life are **nutrients**
2. Nutrients are passed between organisms & environment in biogeochemical cycles
3. The Carbon Cycle – where is carbon stored in biosphere?
4. The Nitrogen Cycle – nitrogen “fixing” – bacteria on plant roots take N from atmosphere & put into soil
5. The Phosphorus Cycle

