

SECTION
13.5 | CYCLING OF MATTER
Study Guide

KEY CONCEPT

Matter cycles in and out of an ecosystem.

VOCABULARY

hydrologic cycle
biogeochemical cycle
nitrogen fixation

MAIN IDEA: Water cycles through the environment.

Fill in the chart with a description of each process that describes how water moves through an ecosystem in the hydrologic cycle.

Process	Description
1. precipitation	
2. evaporation	
3. transpiration	
4. condensation	

MAIN IDEA: Elements essential for life also cycle through ecosystems.

Complete the following sentences with the proper terms.

- Plants, animals, and most other organisms need _____ for cellular _____.
- Oxygen is released as a waste product by plants during the process of _____. Animals take in this oxygen and release it as _____ during the process of _____.
- In the carbon cycle, plants use energy from the Sun to convert _____ from the air into organic material that becomes a part of the plant's structure.

Section 13.5 STUDY GUIDE CONTINUED

8. Carbon is released to the atmosphere as carbon dioxide when you breathe during the process of _____ or through the _____ of dead organisms.
9. _____, or the burning of fossil fuels, also adds carbon dioxide to the atmosphere.
10. What is nitrogen fixation?

11. List five steps that occur during the phosphorus cycle.

Vocabulary Check

Use the following word origins to answer the questions below.

Word Part	Meaning
bio-	life
chem-	chemical
geo-	earth
hydro-	water

12. What is a biogeochemical cycle?

13. What is the hydrologic cycle?
