



Name \_\_\_\_\_

Period \_\_\_\_\_

Date \_\_\_\_\_

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.

5. Plants, animals, and most other organisms need \_\_\_\_\_ for cellular \_\_\_\_\_.
6. 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 \_\_\_\_\_.
7. 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.

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## 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?

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

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**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?

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13. What is the hydrologic cycle?

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