

## Biology Chapter 16: Ecosystems

### Chapter Objectives:

- **What is an ecosystem**  
Interactions of organisms and their environment
- **Energy flow in ecosystems**  
Movement of energy through ecosystems
- **Cycling of materials in ecosystems**  
Biogeochemical cycles  
The water cycle  
The carbon cycle  
The phosphorus and nitrogen cycles

Vocabulary		<i>At the end of this unit, you should be able to:</i>
1. Ecology	21. Decomposer	<ul style="list-style-type: none"> <li>• Distinguish an ecosystem from a community</li> <li>• Describe the diversity of a representative ecosystem</li> <li>• Sequence the process of succession</li> <li>• Distinguish between producers and consumers</li> <li>• Compare food webs with food chains</li> <li>• Describe why food chains are rarely longer than three or four links</li> <li>• Summarize the role of plants in the water cycle</li> <li>• Analyze the flow of energy through the carbon cycle</li> <li>• Identify the role of bacteria in the nitrogen cycle</li> </ul>
2. Habitat	22. Food web	
3. Community	23. Energy pyramid	
4. Ecosystem	24. Biomass	
5. Abiotic factor	25. Biogeochemical	
6. Biotic factor	cycle	
7. Biodiversity	26. Ground water	
8. Pioneer species	27. Transpiration	
9. Succession	28. Nitrogen fixation	
10. Primary		
succession		
11. Secondary		
succession		
12. Primary		
productivity		
13. Producer		
14. Consumer		
15. Trophic level		
16. Food chain		
17. Herbivore		
18. Carnivore		
19. Omnivore		
20. Detritivore		