

ECOSYSTEM WORKSHEET

I. VOCABULARY

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|------------------------|-----------------------|
| a. Abiotic | j. Tertiary consumers |
| b. Biotic | k. Omnivores |
| c. Ecosystem | l. Decomposers |
| d. Trophic levels | m. Detritus |
| e. Primary producer | n. Food Chain |
| f. Primary consumer | o. Food web |
| g. Herbivores | p. Biomass |
| h. Secondary consumers | q. Energy pyramid |
| i. Carnivores | r. Numbers pyramid |
| | s. Biomass pyramids |

II. Organisms interact with organisms they eat

1. Describe some ways organisms interact with other organisms
2. Describe some ways organisms interact with nonliving portions of their environment.
3. How are organisms interrelated?
4. What is the most important interaction between organisms?
5. How do green plants get their energy?
6. How do all other organisms get their energy?
7. What might happen to the balance of the food web if:
 - a. An organism in the ecosystem went extinct
 - b. If the number of one type of organism increased
 - c. If the number of one type of organism decreased

III. Energy Flow and nutrient cycling are two major processes of ecosystems

1. What are the two key processes in all ecosystems?
2. How does energy enter an ecosystem?
3. What group of organisms captures sunlight and converts it into chemical energy?
4. What process converts light energy into chemical energy?
5. How do decomposers obtain their energy?
6. Every time an organism uses energy, is it 100% efficient use or is some lost? Explain.
7. Is energy recyclable?
8. Are chemicals (nutrients) recyclable in an ecosystem?
9. Nutrients are recycled between what two parts of the ecosystem?
10. How do plants, algae, and some bacteria obtain their nutrients?
11. How do all other organisms obtain their nutrients?
12. How are nutrients returned to the abiotic environment?
13. Why are ecosystems dependent upon a continual supply of energy?