

Interactions and Interdependence

1. What is ecology? _____

2. What does the biosphere contain? _____

Levels of Organization

3. Why do ecologists ask questions about events and organisms that range in complexity from an individual to the biosphere? _____

4. Complete the table about levels of organization.

LEVELS OF ORGANIZATION

Level	Definition
Species	
	A group of individuals that belong to the same species and live in the same area
Community	
Ecosystem	
	A group of ecosystems that have the same climate and dominant communities

Biotic and Abiotic Factors

1. Complete the table about factors that influence ecosystems.

FACTORS THAT INFLUENCE ECOSYSTEMS

Type of Factor	Definition	Examples
Biotic factors		
Abiotic factors		

2. What do the biotic and abiotic factors together determine? _____

The Niche

3. What is a niche? _____

4. In what ways is food part of an organism’s niche? _____

5. Circle the letter of each sentence that is true about niches.
- a. Different species can share the same niche in the same habitat.
 - b. No two species can share the same niche in the same habitat.
 - c. Two species in the same habitat have to share a niche to survive.
 - d. Different species can occupy niches that are very similar.

Community Interactions

6. When does competition occur? _____

7. What is a resource? _____

8. What is often the result of direct competition in nature? _____

Name _____ Class _____ Date _____

9. What is the competitive exclusion principle? _____

10. What is predation? _____

11. When predation occurs, what is the organism called that does the killing and eating, and what is the food organism called? _____

12. What is symbiosis? _____

13. Complete the table about main classes of symbiotic relationships.

MAIN CLASSES OF SYMBIOTIC RELATIONSHIPS

Class	Description of Relationship
Mutualism	
Commensalism	
Parasitism	

14. The organism from which a parasite obtains nutritional needs is called a _____.

15. Circle the letter of each sentence that is true of parasites.

- a. They generally weaken but do not kill their host.
- b. They obtain all or part of their nutritional needs from the host.
- c. They neither help nor harm the host.
- d. They are usually smaller than the host.

Ecological Succession

16. What is ecological succession? _____

17. What is primary succession? _____

18. The first species to populate an area when primary succession begins are called _____

19. When a disturbance changes a community without removing the soil, what follows? _____

20. An area that was once referred to as a climax community may appear to be permanent, but what might cause it to undergo change? _____