

RAVEN CHAPTER 57 GUIDED NOTES: COMMUNITY ECOLOGY

Raven 9th edition

1. Define a community. Explain how a community is different from a population.

2. Define niche. (Note: Many students confuse niche with habitat. Be sure to distinguish between them)

3. What is the competitive exclusion principle? How does it relate to the difference between fundamental niche and realized niche?

4. Describe Gause's experiment with *Paramecia* and explain how it helped clarify his competitive exclusion principle.

5. Define and give an example of resource partitioning.

6. Describe several defense mechanisms to predation that have evolved in plants.

7. Give an example of how herbivores have evolved responses to plant defenses.

8. Describe several defense mechanisms to predation that have evolved in animals.

9. Define and give an example of the following animal defenses:

a. Cryptic coloration

b. Aposematic coloration

c. Batesian mimicry

d. Mullerian mimicry

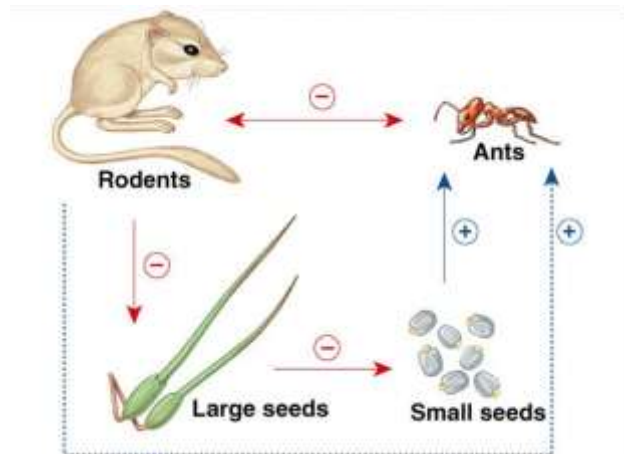
10. Define symbiosis.

11. Fill in the chart of interspecific interactions.

Interaction	Characterize the Relationship	Example
Competition		
Predation & Parasitism		
Mutualism		
Commensalism		

12. Explain how predators influence the balance of species in a community.

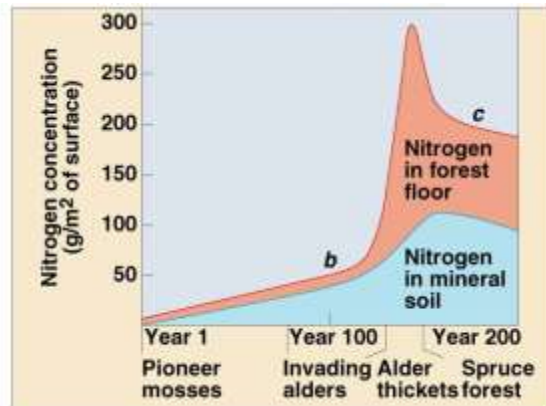
13. Explain what ecological concept this diagram illustrates.



14. Define a keystone species and explain why they are so important to a community. Give an example.

15. Define & describe ecological succession.

16. What causes ecological succession? Explain how this diagram illustrates these ecological principles.



17. What is the difference between primary and secondary succession?
