

Name _____

Community Ecology / Population Dynamics (Chp. 8)

While reading and studying the chapter, know the definitions of each of the vocabulary words below. **Answer the following questions in complete sentences on a separate sheet of paper.**

Vocabulary

Physical Appearance	Species Richness	Species Abundance
Niche Structure	Edge Effects	Theory of Island Biogeography
Native species	Nonnative species	Indicator species
Keystone species	Intraspecific competition	Interspecific competition
Resources partitioning	Predator-prey	Parasitism
Mutualism	Commensalism	Ecological succession
Primary succession	Secondary succession	Pioneer species
Successional species	Inertia	Constancy
Resilience	Precautionary Principle	

Chapter Review Questions:

1. Explain how factors such as latitude, depth, and pollution can affect biodiversity.
2. What two factors determine the species diversity found on/in an isolated ecosystem such as an island?
3. What is the theory of island biogeography? How do the size of an island and its distance from a mainland affect its species diversity?
4. Why are birds good indicator species? Explain why amphibians are considered indicator species and list reasons for declines in many of their populations.
5. Describe the keystone ecological roles of (a) flying foxes, (b) alligators, and (c) some shark species. What can happen in an ecosystem that loses a keystone species?
6. What is interspecific competition? What are four possible consequences when the niches of two species competing in the same area overlap to a large degree?
7. What is predation? Describe the predator-prey relationship, and give two examples of this type of species interaction. Why are sharks important species?
8. Give two examples of how predators increase their chances of finding prey by (a) pursuit and (b) ambush.
9. List six ways (adaptations) used by prey to avoid their predators, and give an example of each type.
10. Define and give two examples of parasitism, and explain how it differs from predation. What is the ecological importance of parasitism?
11. Define and give two examples of (a) mutualism and (b) commensalism.
12. Distinguish between primary succession and secondary succession. Distinguish among pioneer (or early successional) species, midsuccessional plant species, and late successional plant species.
13. Give three examples of environmental disturbances, and explain how they can affect succession. How can some disturbances be beneficial to ecosystems?
14. Does high species diversity always increase ecosystem stability? Explain.