

## Chapter 14 – Interactions in Ecosystems Study Guide

1. A group of organisms of the same species that live in the same area is called a (n) \_\_\_\_\_.
2. The Mantella frog and poison dart frog occupy similar niches in similar habitats in different parts of the world. Because of this, they are considered to be \_\_\_\_\_.
3. Hawks and foxes compete to eat field mice. This is a form of \_\_\_\_\_. (Hint: different species competing)
4. In a commensalistic relationship, one species benefits and the other \_\_\_\_\_.
5. To measure the population density, you must divide the number of individuals living in a defined space by the \_\_\_\_\_.
6. Nesting birds often space themselves evenly from other nests. This pattern of dispersion is called \_\_\_\_\_.
7. Which of the following will increase the size of a population? (Hint: moving in/out, births/deaths)
8. List four examples of density-dependent factors.
9. Hawaii's lush tropical forest arose from a process of \_\_\_\_\_.
10. Pioneer species are the first \_\_\_\_\_.
11. The reestablishment of a damaged ecosystem in an area where the soil is intact is called \_\_\_\_\_.
12. Some birds are known as honey guides because they may be followed by humans to wild beehives. When the humans take honey from the hives, the birds are able to feast on the honey and bees, too. This type of relationship is best described as \_\_\_\_\_.
13. Starfish live in saltwater ecosystems. Some species live in shallow tidal pools, while other live in the deepest parts of the oceans. This is a description of the \_\_\_\_\_ of the starfish. (habitat/niche)
14. When two species compete for the same resource, they sometimes divide this resource. This is an example of \_\_\_\_\_.
15. List the four factors that affect population growth.
16. List the four important characteristics of populations (how do they grow?).
17. There are 150 Saguaro cacti plants per square kilometers in a certain area of the Arizona desert. To which population characteristic does this information apply?
18. The movement of organisms into a given area from another area is called \_\_\_\_\_.
19. When organisms move out of a population, this is known as \_\_\_\_\_.
20. List two ways a population can decrease in size.

21. When individuals in a population reproduce at a constant rate, it is what type of growth?
22. The various growth phases which most populations go through are represented on a (an) \_\_\_\_\_ . (What type of curve?)
23. In a logistic growth curve, exponential growth is the phase in which the population \_\_\_\_\_ .
24. A biotic or abiotic resource in the environment that causes a population size to decrease is a \_\_\_\_\_ .
25. List four examples of limiting factors.
26. Demography is the scientific study of \_\_\_\_\_ .
27. List an example of a density-independent factor.
28. An organism's niche is \_\_\_\_\_ .
29. An interaction in which one organism captures and feeds on another organism is called \_\_\_\_\_ .
30. No two species can occupy the same niche in the same habitat at the same time is stated in what principle of ecology?
31. The series of predictable changes that occurs in a community over time is called \_\_\_\_\_ .
32. Primary succession can begin after \_\_\_\_\_ .
33. What is one difference between primary and secondary succession?