

## Chapter 14 Concept Review

### B I O L O G Y

**Directions:** Answer the following questions using your notes and textbook

1. habitat- all of the \_\_\_\_\_ and \_\_\_\_\_ factors in the area where an organism lives. (*where a species lives*)
2. \_\_\_\_\_ - composed of all the physical, chemical and biological factors that a species needs to survive, stay healthy, and reproduce. (*how it lives within the habitat*)
3. Competitive exclusion- when two species are competing for same \_\_\_\_\_, one species will be better suited to the niche, and other species will be pushed into another niche or become extinct.
4. Ecological Equivalents- species that occupy similar \_\_\_\_\_ but live in different geographical regions.
5. Competition and predation are two important ways in which organisms \_\_\_\_\_.
  - a. \_\_\_\_\_ - occurs when two organisms fight for the same limited resources.
  - b. \_\_\_\_\_ - process by which one organism captures and feeds upon another organism.
6. \_\_\_\_\_ is a close relationship between species (symbiosis- close ecological relationship between two or more organisms of different species that live in direct contact with one another)
  - a. \_\_\_\_\_ - both species benefit from one another
  - b. \_\_\_\_\_ - one receives an ecological benefit from another, while the other neither benefits nor is harmed.
  - c. \_\_\_\_\_ - similar to predation in that one organism benefits while the other is harmed
7. Population density is the \_\_\_\_\_ of individuals that live in a defined \_\_\_\_\_
8. Population dispersion- way in which individuals of a population are spread in an area or a volume. Can be \_\_\_\_\_, \_\_\_\_\_, or \_\_\_\_\_ dispersed
9. Changes in population's \_\_\_\_\_ are determined by immigration, births, emigration, and deaths.
10. Four factors affect the size of a \_\_\_\_\_.

- a. \_\_\_\_\_ - movement of individuals into a population from another population
- b. \_\_\_\_\_ - births increase number of individuals in population
- c. \_\_\_\_\_ - movement of individuals out of a population and into another
- d. \_\_\_\_\_ - size of population decreases when individuals die.

11. \_\_\_\_\_ growth- occurs when population size increases dramatically over period of time

12. \_\_\_\_\_ growth- begins with period of slow growth, followed by brief exponential growth before leveling off at a stable size.

13. \_\_\_\_\_ - maximum number of individuals of a particular species that the environment can support

14. \_\_\_\_\_ factor-factor that has the greatest affect on keeping down the size of a population

15. Density-\_\_\_\_\_ - affected by number of individuals in a given area

- a. \_\_\_\_\_ - compete for resources
- b. \_\_\_\_\_ - population of predator can be limited by available prey
- c. \_\_\_\_\_ and \_\_\_\_\_ - spread quickly through dense populations

16. Density-\_\_\_\_\_ limiting factors- aspects of environment that limit population growth regardless of density

- a. Unusual \_\_\_\_\_ -can affect entire food chain or web
- b. Natural \_\_\_\_\_ - volcanoes, tsunamis, tornados, hurricanes, etc.
- c. \_\_\_\_\_ activities- destruction of habitat, introduction of non-native species

17. \_\_\_\_\_ occurs following a disturbance in an ecosystem (succession- *sequence of biotic changes that regenerate a damaged community or create a community in a previously uninhabited area*)

18. \_\_\_\_\_ succession- development of ecosystem in areas that was previously uninhabited

19. Pioneer species- first organism to \_\_\_\_\_ into area like lichens and some mosses.

20. \_\_\_\_\_ succession- reestablishment of a damaged ecosystem where soil was left intact (after fire, hurricane, etc.)