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.)