Populations and Communities Study Guide

Vocabulary:

1. Organism-living things
2. Habitat-environment that provides the things the organism needs to live, grow and reproduce
3. Biotic factor-any living part of the environment with which an organism interacts
4. Abiotic factor-a nonliving part of an organism’s habitat
5. Photosynthesis-plants use the sun’s energy to convert water and carbon dioxide into sugars
6. Species-a group of similar organisms that can breed and produce fertile offspring
7. Population-all members of a particular species in a particular area
8. Community-all the different populations that live together in an area
9. Ecosystem-a community of organisms and the abiotic factors
10. Ecology-the study of how living things interact with each other and their environment
11. Estimate-an approximation of a number based on reasonable assumptions
12. Birth rate-number of births in a population in a certain period of time
13. Death rate-number of deaths in a population in a certain period of time
14. Emigration-movement of individuals out of an area
15. Immigration-movement of individuals into an area
16. Population density-number of individuals in an area of specific size
17. Limiting factors-an environmental factor that causes a population to decrease
18. Carrying capacity-largest number of individuals that an environment can support

Key Concepts

1. What four things do living things need?
   1. Food
   2. Water
   3. Shelter
   4. Other things
2. Give 3 examples of abiotic and biotic factors.
   1. Biotic-plants, animals, fungi, bacteria
   2. Abiotic-water, sunlight, oxygen, soil, temperature
3. What are the four different ways that you can determine population size?
   1. Direct observation
   2. Indirect observation-looking for nests or footprints
   3. Sampling
   4. Mark and recapture
4. What are the limiting factors that limit population size?
   1. Food
   2. Water
   3. Space
   4. Weather conditions