Interactions Among Living Organisms

A. Characteristics of populations

1. <u>Size</u> – number of individuals in a population

2. Number of individuals in a particular area is the density

3. Population <u>spacing</u> – how organisms are arranged in an area

a. <u>Evenly</u> spaced – consistent distance between organisms

b. Randomly spaced – individual location is independent of other individuals' locations

c. <u>Clumped spacing – organisms group together</u>

4. A biotic or abiotic factor that restricts the size of a population is called a <u>limiting factor</u>

5. <u>Carrying capacity</u> – the maximum population size that can live in an environment over time

6. <u>Biotic potential</u> – the size a population could reach if no limiting factors stopped its growth

B. <u>Symbiosis</u> – close interactions between species

1. When both species benefit, the relationship is termed <u>mutualism</u>

 Commensalism is a form of symbiosis that helps one species but has no effect on the other 3. When one species is harmed and the other benefits, the symbiosis is termed <u>parasitism</u>

4. <u>Predation</u> – occurs when one species hunts, kills and eats another

5. <u>Habitats</u> are where an organism lives

6. <u>Niche</u> – an organism's function in its ecosystem