**Grade 9 Ecology Notes**

**Biotic & Abiotic Influences**

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: all the living organisms that share a region & their physical & chemical environment.
* Examples: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* **Sustainable Ecosystem**: an ecosystem that is maintained through natural processes.
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_:** the ability to maintain natural ecological conditions without interruption or weakening.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: all of the different species that interact in an ecosystem
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: a group of individuals of the same species
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_:** living things, their remains, and features, such as nests, associated with their activities
* Examples:
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_:**the non-living physical and chemical components of an ecosystem
* e.g. rocks, oxygen, water, sunlight
* **Limiting Factor:** any factor that restricts the size of a population
  + e.g. biotic: availability of food
  + abiotic: access to water
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: the abiotic conditions within which a species can survive
* **Key abiotic factors:**
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: two individuals vying for the same resource
  + **Intraspecific competition**: a competition between individuals from the same species
  + **Interspecific competition:** the competition between individuals of different species.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: one individual feeds on another

Symbiotic Relationships

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: one individual lives on or in and feeds on a host organism
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**:**two individuals benefitting each other
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_: one individual benefits & the other neither benefits nor is harmed

Examples: