Assignment #:\_\_1\_\_\_ Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Ecology Guided Notes**

**What is Ecology?**

**Ecology**: the study of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of living organisms with one another and with their \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**What is an Ecosystem?**

**Ecosystem**: a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and their environment

**What Shapes an Ecosystem?**

Organisms are influenced by:

**Biotic Factors (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)** – include all the living things with which organisms interact

**Abiotic Factors (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**) – include \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and other \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Together \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ factors determine the survival and growth of an organism and the productivity of the ecosystem in which an organism lives

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_** – where an organism lives, more than one species can live in the same habitat

Includes both biotic and abiotic factors

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_** – consists of all the physical and biological conditions in which an organisms and the way in which the organism uses those conditions

Includes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, how it gets food

**Relationships between Organisms**

**Producer (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)** – a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ autotroph that serves as the basic food source in an ecosystem

**Consumer (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)** – an organism that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or organic matter instead of producing its own nutrients or obtaining nutrients from inorganic sources

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** – an organism that feeds by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_ from dead organisms

Primary Producer, Primary Consumer, Secondary Consumer

Class example:

Your example:

Energy Flow in an Ecosystem - \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_ 🡪 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 🡪 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Trophic Levels**

Trophic Levels – each step in a food \_\_\_\_\_\_\_\_\_ or food \_\_\_\_\_\_\_\_\_\_\_\_ is a \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_ always make up the \_\_\_\_\_\_\_\_ trophic level
* Each consumer depends on the trophic level \_\_\_\_\_\_\_\_\_\_\_\_\_\_ it for energy

Every time I \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ level only \_\_\_\_\_\_\_ of the \_\_\_\_\_\_\_\_\_\_\_\_ is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to the next level

What happens to the other 90%??

**Ecosystem Changes:**

-As an ecosystem \_\_\_\_\_\_\_\_, older inhabitants \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ die out and new organisms move in.

-Changes can occur from disturbances, long-term climate changes, introduction of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ species, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ interactions

**Diversity:**

The greater the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ there is… it creates an \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ chance that at least \_\_\_\_\_\_\_\_\_\_\_ living organisms will survive in the face of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ changes in the environment

Increase \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ = Increased \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_