Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Topic\_\_Ecosystems\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Turn in at the end of the period. It is homework and due the following day if you do not finish in class.

**Warm Up:** Discuss with your Table Partner all the things you need for survival. What kinds of ecosystems might produce these necessities?

**Keep up with the notes and questions as the presentation goes along.**

What is an ecosystem?

* An ecosystem is all of the \_\_\_\_\_\_\_\_\_\_\_ living in an area together with their physical environment. All the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of an ecosystem are constantly interacting in their \_\_\_\_\_\_\_\_\_\_\_\_\_\_ environment at any given time.
* Each component relies on the \_\_\_\_\_\_\_\_\_\_\_ for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ survival.
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are connected to each other because things can move from one ecosystem to another.

List and take notes on the 4 basic components to an ecosystem below:

1) **Biotic & Abiotic Factors**: Living and \_\_\_\_\_\_\_\_-living things within an \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Biotic factors are the living and \_\_\_\_\_\_\_\_\_\_\_ living parts to an ecosystem. This includes dead organisms and waste products.

Abiotic factors are the non-living parts to an ecosystem like \_\_\_\_\_\_\_\_\_, water, rocks, sand, \_\_\_\_\_\_\_\_\_\_\_\_\_, and temperature.

Notes: Scientists organize living things into \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ categories and levels for easier comprehension.

2) **Organisms:** an \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ living thing. You are an organism, so is your table partner. A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ bacterium is also an organism.

Notes: Humans are all the same \_\_\_\_\_\_\_\_\_\_\_\_\_, while all black widow spiders are part of the same species.

3) **Populations:** all the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the same species that live in the same \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ at the same time.

Notes: All the field mice in the same corm field make up a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The same species of field mice in a corn field 2 states \_\_\_\_\_\_\_\_\_\_\_\_ are a different population. Members of a population breed with each other as opposed to breeding with \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of another population.

* **Species:** a group of organisms that can mate to produce \_\_\_\_\_\_\_\_\_\_\_\_\_ offspring.

4) **Communities:** Groups of \_\_\_\_\_\_\_\_\_\_\_\_\_ species that live in the same place and interact with each other.

Notes: Communities differ by the types and numbers or species they have. Typically the dominant plant (Fur trees around here) is what the community is named after.

* Ex: A Douglas fir community will have animals like squirrels and raccoons that live and feed on those trees.

All \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ live in particular places. The place an organism lives is called its \_\_\_\_\_\_\_\_\_\_\_\_\_. Every \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ has specific biotic and \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_ that an organism needs to survive. Organisms tend to be well suited to their natural \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ .

Using what you now know about ecosystems and the components they need. Respond to the following situation.

* You and your partner are golf course designers and you have agreed to design a golf course in the outskirts of Sammamish. Analyze and describe below the possible repercussions of the golf course on the surrounding ecosystem. Consider all the components of a local ecosystem.
* Discuss with your partner and respond below: How would you design the golf course to have the least amount of impact on the surrounding environment? Consider all the components of a local ecosystem.