**April Notes: Day 1 Ecology**

Name: Period: Date:

**What is Ecology?**

* is the scientific of the between organisms and their with the

**What is an ecosystem?**

* A area in which live is called a , such as a forest or desert.
* An includes all the things and the things in a given .

**What are the living things in an ecosystem?**

* Every living thing in an ecosystem is called a **factor**.
* Biotic factors are anything that the 8 life .
* Biotic factors also what function or job ( ) that an organism does in that or the it has with other organisms
* Examples: plants, animals, bacteria, predator/prey, mates, autotrophs.

**What are the nonliving things in an ecosystem?**

* All nonliving things in an ecosystem are called **factors**.
* Examples: air, water, temperature, soil, pH, and shelter.

**Why is abiotic factors important?**

* Without factors- living things could not live.
* The (abiotic) is needed for photosynthesis
* (abiotic) is needed to breathe
* (abiotic) is needed to drink
* and (both abiotic) are needed for enzymes to work properly

**What is a limiting factor?**

* A factor is that will affect the of a .
* Limiting factors can be or .
* The of will affect the of a of . ( )
* The availability of will affect the amount of . ( )
* The amount of in a pond will affect the population of animals that drink from it. (abiotic)
* The lack of will affect the of organisms living in the area. ( )

**Levels of Organization in Ecology**

1. **An**  - (smallest) is a single that performs all the life processes.

Example: A Giraffe

Levels of Organization in Ecology

2. - a group of of the same species that live in the same area.

Example: All the Bongos at the Savannah watering hole.

3. - (next largest) a group of that live in a defined area.

Example: The populations of Zebras + the Bongos + the Giraffe and the Beisa Oryx at the Savannah watering hole.

4. - (larger) All the things that live in a place together with their environment.

Example: All the living things (animals and plants) at the savannah watering hole and the Non living things (the soil, air, water, temperature)

5. - (largest) All the ecosystems on the Earth.

Example: All the living AND non-living things (air, water, and land) where life exists on the planet.



**What is biodiversity?**

refers to the many different of organisms in an area.

**What is the biodiversity in Prospect Park?**