Station 1a.

Levels of Organization

Examine the six vocabulary words defined on page 1 of your binder. While these words have different meanings, there is a relationship between each. Based on the definition of each word, a triangle can be used to represent relationships. The shape of the triangle helps to identify these connection between words. **Copy this triangle onto your answer sheet.**

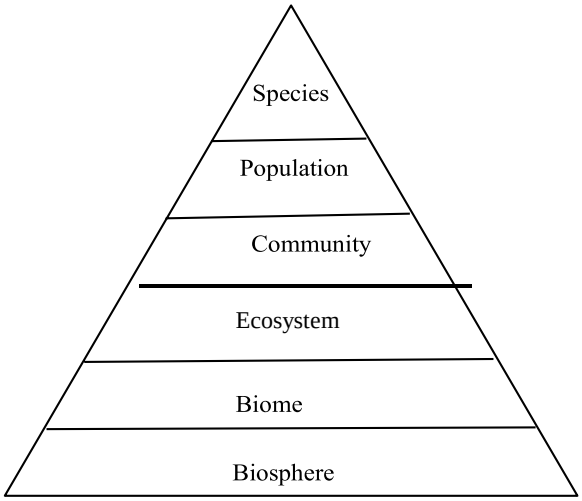

Figure 1.

To further your understanding of these relationships, consider Figure 2. on your answer sheet. There are two words placed in this triangle that correspond to two words in Figure 1. **Examine both figures and fill three appropriate words.**

Answer Question #1 based on Figures 1 and 2 on your answer sheet.

Station 1b.

Factors

Ecosystems consist of living and non-living components. Organisms are the organic or living part of the ecosystem. The physical environment comprises the non-living part. The living parts of an ecosystem are called the biotic factors and the non-living parts the abiotic factors.

Examine the list of words below. Determine if they describe biotic factors, abiotic factors, or both and place them in the Venn Diagram on your answer sheet.

- animals	- water	- biome	- temperature
- plants	- atmosphere	- biosphere	- pollution
- rocks	- species	- ecosystem	- predators
- sunlight	- population	- community	- bacteria

Answer Question #2 based on the Venn Diagram and your understanding of the Kenwood Ecosystem Game.

All biotic and abiotic factors are interrelated. In nature you will find that if one factor is changed or removed, it impacts the availability of other resources within the system.

Based on the passage above, answer Question #3 on your answer sheet.

Station 2

Organism Classification

Directions: Use the information below and the picture to answer the questions on your answer sheet.

At the core of every organism's interaction with the environment is its need for energy. Living things need energy for growth, reproduction, and their own metabolic processes. Yet no organism can create energy – organisms can only use energy from other sources.

Certain organisms get their food from sunlight or chemicals and convert it into a form that they can use. These organisms are called autotrophs because they make their own food. Autotrophs are also called primary producers because they are the first producers of energy-rich compounds that are later used by other organisms. Examples of these organisms are plants.

Organisms that depend on other organisms for energy and nutrients are called heterotrophs. Another term for these organisms is consumers because they have to consume other organisms for energy. There are different types of consumers based on the type of organisms that they eat. For example, carnivores only eat other animals. Decomposers only eat the decayed remains of organisms. Herbivores only eat other primary producers, or plants. And omnivores eat other animals as well as plants.

The classification for consumers, however, is even more complex. An organism that eats a plant, or producer, is known as a primary consumer. An organism that eats another organism that eats a plant is called a secondary consumer. Organisms that eat secondary consumers are known as tertiary consumers.