

ECOSYSTEMS

PREDATORS, PREY, & SCAVENGERS



An **ecosystem** is an environment where **living** (biotic) and **nonliving** (abiotic) things interact and affect each other.

Everything on earth is dependent on radiant energy. **Radiant energy** from the sun

reaching the earth is converted into different forms of energy as it flows through an ecosystem. Each species in an ecosystem lives in a **habitat**, the part of an environment in which an organism lives and has a **niche** which describes how it fits into the ecosystem. **All organisms need energy.**

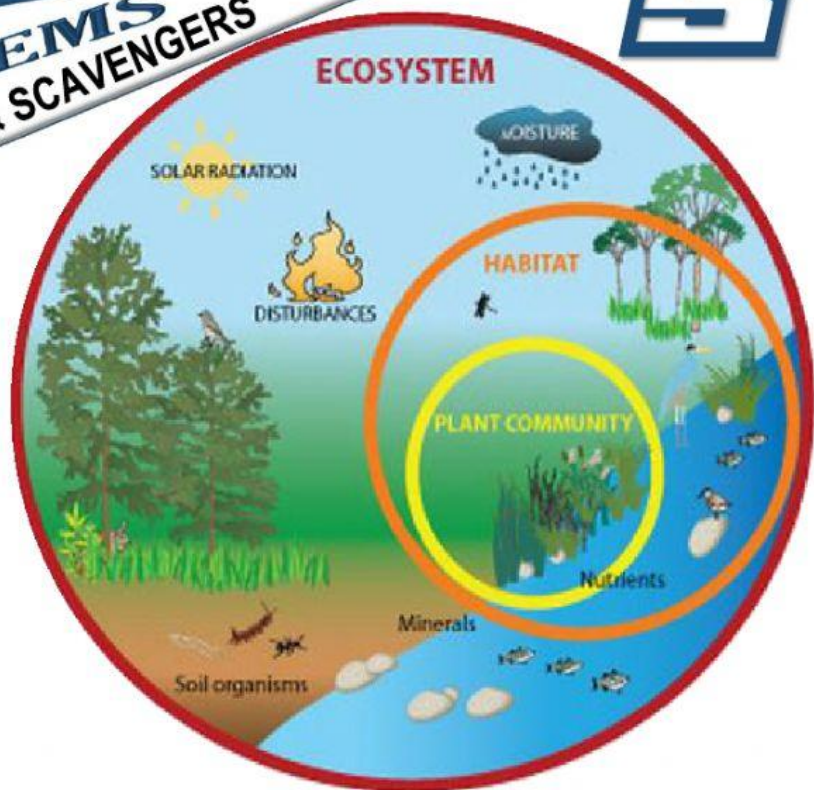
An animal that feeds on other living animals is called a **predator**. They are consumers that eat other consumers. E.g.: wolves, coyotes, frogs, eagles, owls, sharks, insects.

The animals predators eat are called **prey**. Some predators are also prey. Insects that eat smaller insects may be eaten by birds. Those birds may be eaten by larger birds or other mammals such as foxes.

Ecosystems also include animals called **scavengers**. These consumers eat the remains of animals that have died. E.g.: vultures, jackals, hyenas.

The interactions between predators and prey affect the populations of those animals. A large number of preys can feed a large number of predators. When the population of prey decreases, however, it can no longer feed as many predators. The population of predators then decreases.

The movement of energy from organism to organism can be shown in a **food chain**. A **food web** shows the overlapping food chains in an ecosystem. It shows more clearly how energy moves. Some energy is lost each time energy passes from one organism to another.



Answer all of the following questions.

1. What is an ecosystem?
2. Read each definition carefully. Choose the correct word that matches each of the following definitions. Not all of the words will be used.

parasite	scavenger	herbivore	decomposer	carnivore
predator	consumer	producer	prey	food chain

- a. An animal that feeds on other living animals.
 - b. Consumers eat the remains of animals that have died
 - c. Animals that eat other animals (or meat).
 - d. A fungus that breaks down decaying matter.
 - e. An animal that lives on other animals
 - f. The animals predators eat are called?
3. How does the population of prey affect the population of predators?
 4. What do plants and animals do with the surplus of energy?