

Name _____

Date _____

Science Ecosystem

- An **ecosystem** is an environment where living and nonliving 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. The path by which energy flows is called a **Food Chain**. Food chains consist of three main components: Producers, Consumers, and Decomposers. Animals that feed on other living animals are called **predators**. They are the consumers that eat other consumers. The animals that predators eat are called **prey**.
- A **Food Web** shows the overlapping food chains in an ecosystem. It shows clearly how energy moves. Some energy is lost each time energy passes from one organism to another.
- 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, and hyenas*. The interactions between predators and prey affect the population 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.

A. Fill in the blanks. (1 mark each)

1. A/An _____ is an environment where living and nonliving things interact and affect each other.
2. The movement of energy from organism to another can be shown in a _____.
3. The animal which predators eat is called _____.
4. A _____ shows the overlapping food chains in an ecosystem.

B. Write true or false for the following statement. (1 mark each)

5. Ecosystems include scavengers, predators, and prey. _____

6. Predators are producers. _____

7. Radiant energy comes from the sun. _____

C. Answer the following questions.

8. Identify the predator and prey for this scenario below. (2)

A snapping turtle in a pond eats a small perch.

Predator - _____ prey - _____

Use the diagram to answer the questions below.

9. Name the living things in the food web that are producers. (2)

10. Name the living things in the food web that are consumers. (4)

11. Which living things does the snake eat? (2)

