Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Pd. \_\_\_\_\_\_\_

Notes – Energy in Ecosystems: Food Chains and Webs

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is vital for all living things.

Each organism is an ecosystem must obtain \_\_\_\_\_\_\_\_\_\_\_\_\_ in some way.

Each organism can be classified by the way it gets its energy:

1.

2.

3.

**Producers** - an organism that makes its \_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_. Procducers use the \_\_\_\_\_\_’s energy to convert water and \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_ into \_\_\_\_\_\_\_\_\_\_\_\_. This process is called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Producers are the source of \_\_\_\_\_\_ food in an ecosystem.

Examples:

**Consumers** – organisms that get their food by \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_. There are several kinds of consumers:

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - eat plants
2. Carnivore - eat animals
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ - eat both plants and animals

**Decomposers** – organisms that break down \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_ and wastes of living things. They \_\_\_\_\_\_\_\_\_\_\_\_ raw materials in an ecosystem. They are also called the “\_\_\_\_\_\_\_\_ \_\_\_\_ \_\_\_\_\_\_”!

Examples of Decomposers:

Name at least one example of a producer, consumer and a decomposer in the first picture example.

Name at least one example of a producer, consumer and a decomposer in the second example.

Energy moves through an ecosystem as one organism eats another.

Sunlight 🡪 \_\_\_\_\_\_\_\_\_\_\_\_\_\_ 🡪 Consumer 🡪 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

When one organism eats another organism, it obtains its \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

A \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_ shows the movement of this \_\_\_\_\_\_\_\_\_\_\_\_\_ through an ecosystem.

Leaf 🡪 Caterpillar 🡪 Finch 🡪 Sparrowhawks

Which is the producer? \_\_\_\_\_\_\_\_\_\_\_\_\_\_ , absorbs energy from the sun

Which is the primary consumer? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, eats plants only (herbivores)

Which is the secondary consumer? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, eats primary consumers (carnivores)

Which is the tertiary consumer? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, eats secondary consumers (top carnivore)

Most producers and consumers are part of many \_\_\_\_\_\_\_\_\_\_\_\_\_ food chains.

A \_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_ consists of many \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ food chains in an entire ecosystem.

It shows how \_\_\_\_\_\_\_\_\_\_\_\_\_ the feeding relationships in an ecosystem really are!

Food webs show that organisms are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ with each other.

If there is even \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_ to one part of the web, it can have \_\_\_\_\_\_\_\_\_ consequences.

What happens to our previous example if there were no caterpillars?