



# CSI: SCIENCE

## Curriculum Support Information



### Terminology (make flashcards):

**Environment:** All of the living (biotic) and nonliving (abiotic) things surrounding an organism

**Ecosystem:** A community and its physical environment together

**Population:** All the individuals of the same kind living in the same ecosystem

**Community:** All the populations of organisms living together in an environment

**Producer:** A living thing, such as a plant, that can make its own food

**Consumer:** A living thing that can't make its own food and must eat other living things

**Herbivore:** An animal that eats only plants, or producers

**Omnivore:** An animal that eats both plants and other animals

**Carnivore:** An animal that eats only other animals

**Decomposer:** A living thing that feeds on the wastes of plants and animals

**Habitat:** An environment that meets the needs of an organism

**Niche:** The role of an organism in its habitat

**Food chain:** A series of organisms that depend on one another for food

**Prey:** Consumers that are eaten

**Predator:** Consumers that eat prey

**Food web:** A group of food chains that overlap

**Energy pyramid:** A diagram showing how much energy is passed from one organism to the next in a food chain

**Basic needs:** Food, water, air, and shelter that an organism needs to survive

**Adaptation:** A body part or behavior that helps an organism survive

**Camouflage:** A color or shape that helps an animal hide

**Mimicry:** A similarity of one species to another that keeps the species safe

**Instinct:** A behavior that an animal begins life with that helps it meet its needs

**Hibernation:** A dormant, inactive state in which normal body activities slow

**Migration:** The movement of animals from one region to another and back

**Endangered:** A population of organisms that is at risk of becoming extinct

**Extinction:** The death of all the members of a certain group of organisms

## Ecosystems

### Students will:

- Identify roles of producers, consumers, and decomposers
- Illustrate food chains and food webs
- Predict how changes in an environment will affect a community
- Predict the effects on a population if there are too many or a scarcity of some animals or plants
- Identify ways adaptation can help organisms survive
- Identify factors leading to extinction

### Fourth Grade 1 of 5

### Classroom Cases:

- The following pictures give you one example each of a producer, consumer, and decomposer. There are MANY more!



Producer

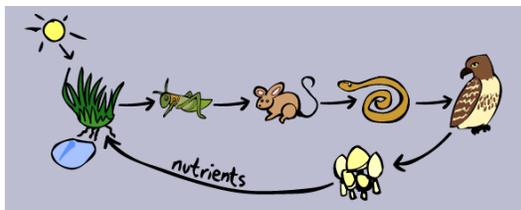


Consumer

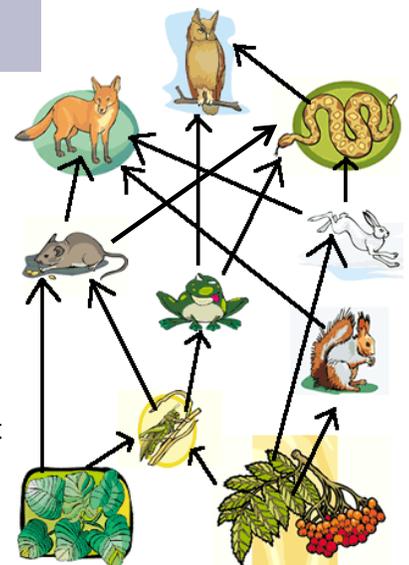


Decomposer

- Below is an example of a food chain. It ALWAYS starts with the sun and a producer. The arrow shows the flow of energy.



- To the right is an example of a food web. It is different from a food chain because the organisms overlap in a food web. In the food chain, we just see that mice eat grasshoppers and snakes eat mice. In the food web, we can see that mice eat leaves and grasshoppers and that the foxes and the snakes eat the mice. Food webs are much more detailed and complete.



### Further Investigations (On the website)

<http://mspetersonsroom.weebly.com>. You can help your child conduct the Insta-Labs.

Pg. 303 – Eeek! Oh System!

Pg. 317 – Who's an Omnivore?

Pg. 333 – Chain of Life

Pg. 342 – Upsetting the Balance

Pg. 363 – All Thumbs

Pg. 377 – Observing Change



### Book 'Em:

- *What Do You Do When Something Wants To Eat You?* by Steven Jenkins
- *A Log's Life* by Wendy Pfeffer
- *Soaring With The Wind: The Bald Eagle* by Gail Gibbons
- *Migration* by Monica Hughes
- *Claws, Coats and Camouflage: The Ways Animals Fit Into Their World* by Susan E. Goodman
- *Saving Manatees* by Stephen R. Swinburne