

NAME: _____ DATE: _____

Who Eats What?

Food webs illustrate feeding relationships among a group of organisms. A line between two organisms indicates that one eats the other.

*The Freshwater Food Web handout illustrates a typical food web you might find in a stream or pond in Dutchess County. There are roughly three levels in this food web. Plants occupy the lowest level of the web. Scientists refer to plants as **producers** because they produce food by converting energy from the sun into plant tissue. Many small aquatic animals graze on this plant material. These animals, called **herbivores**, occupy the second level of the food web. Some second-level animals consume dead plant and animal material (detritus). They are called **detritivores**. The top level of the food web consists of **carnivores** who consume other animals.*

DIRECTIONS: Answer these questions based on the Freshwater Food Web handout:

- 1) Name at least 5 herbivores.
- 2) Name at least 3 detritivores.
- 3) The food web on the handout shows a food web with three general levels. However, there is one 4-step food chain depicted. Name the organisms that are involved, in order from the bottom level to the top level.
- 4) At each level in the food web, animals can convert about 10% of what they consume into new body tissue. The rest is excreted or used for tasks that require energy, such as moving and respiration (breathing).
 - If an herbivore gains 1 gram of weight, about how many grams of plant material did it eat?
 - How many grams of plant material would a carnivore eat to gain about 1 gram of weight?
- 5) What species might increase in size and abundance if a sewage outfall puts additional particulate organic matter into the water? Why?

A Freshwater Food Web

