Producers, Consumers, & Decomposers

A Pre-Visit Lesson to *Today's Menu: Food Chains*

Objectives: To identify and explain the roles of a producer, a consumer, and a decomposer.

Curricular Area: Science

Skills: Communication
Cooperation

Time: One class period

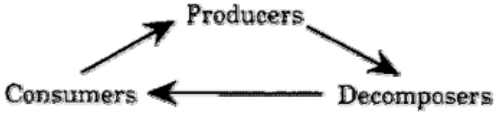
Background Information:

* Producer—Plants have chlorophyll and can produce their own energy in the form of simple sugars through photosynthesis. Some examples of producers include: vines, shrubs, grass, trees, ferns, etc.
* Consumer—Animals must consume something else, either plants or other animals, to get their energy. If consumers only eat plants, they are called herbivores. If they only eat animals, they are called carnivores. And if they consume both plants and animals, they are called omnivores. Some examples of consumers include: mice, dogs, fish, humans, bees, hummingbirds, etc.
* Decomposer—Organisms that break down and eat dead animals and plants. Decomposers break down all of the dead producers and consumers into nutrients that new plants can use to survive. Examples of decomposers include: earthworms, fungi, bacteria, etc.

Materials: Paper
Pencil

Procedure:

1. Divide students into groups, and instruct the groups to brainstorm everything that they know about producers, consumers, and decomposers.
2. Once the groups are finished, allow time to discuss what each group came up with.
3. Continue the discussion by giving the students the formal definitions of producers, consumers, and decomposers.
4. Next, using their official definitions, instruct student groups to come up with three examples of producers, three examples of consumers, and three examples of decomposers.
5. When finished, students will share their examples. The teacher will write down all of their examples and will help correct any misconceptions the students may have about producers, a consumers, and decomposers.
6. To test the students' knowledge of the relationship between producers, consumers, and decomposers, have students play an adaptation of the game "Rock, Paper, Scissors." Consumers get their energy from producers, so you could say they are dominant over producers. Producers are able to utilize the nutrients made by decomposers, so producers are dominant over decomposers. When consumers die, decomposers use the energy in their bodies, so decomposers are dominant. Your students will show with their hands what they are. If they choose producer, they hold their hand up and wave it like a tree. If they choose consumer, they make their hand in the shape of an animal's mouth. If they choose decomposer, they hold their hand flat to represent the decomposers that are found in the soil.



Extension:
Bring students to the computer lab to play the following online games about producers, consumers, decomposers, and the food chain.

http://www.sheppardsoftware.com/content/animals/kidscorner/games/producersconsumersgame.htm

http://www.sheppardsoftware.com/content/animals/kidscorner/games/foodchaingame.htm