



Food Chain Theatrics: Insect Explorations Pre-Trip Activity

Objectives

Students will:

- Act out roles of the important members of a food chain, including the sun, producers, and consumers.
- Identify insects' importance in food chains.

Vocabulary

- Food chain – the transfer of food energy from the source in plants through a series of animals, with repeated eating and being eaten
- Producer – an organism, such as a plant, that can make its own food
- Consumer – an organism that eats other organisms

Materials

- A few copies of the play's script, if you don't plan to narrate it yourself
- Paper and pencils

Procedure

1. Tell students that you are going to have a play right here in your classroom and that you need some volunteers. (All students should have a role, if possible.)
 - a. Select someone to be the *sun*. This person will say, "Shine, shine, shine," and use his or her arms as if throwing out sun rays.
 - b. Select many students to be the plants or *producers*. Their part is to say, "Produce, produce, produce!" As they chant their line together, have them get down on their knees and "grow" towards the sun with their arms. (Remind the plants that they cannot walk around.)
 - c. Select a few students to be *consumers*, such as insects. Their job is to say, "Consume, consume, consume!" They should come up to the producers and pretend to munch on them as they say their part.
 - d. Choose a few students to be the *narrators*. (You may choose to narrate yourself, especially if you have young students.) Give the narrators their lines, and decide who will read each part. (See the script at the end of the activity.)
2. After a brief rehearsal, quiet down the students and begin the play. Remember to cheer for yourselves when the play is finished.
3. Have students return to their seats and ask them to name the different members of the play's



food chain and describe their roles. Review the vocabulary words, and have students give examples of producers (plants, algae, some microscopic organisms) and consumers (insects, rabbits, coyotes, humans). You may also discuss the different levels of consumers and mention scavengers, such as vultures that eat dead animals, and decomposers, such as fungi and bacteria that break down dead material so it can be used again.

4. Explain that the sun and producers are the basis of every food chain. Most food chains (except those in large bodies of water) also include insects. Ask students to think of some food chains that have insects. Discuss what would happen if there were no insects.
5. Tell students that when they visit Armand Bayou Nature Center, they will be searching for insects at a prairie and a pond. Ask students to predict the kinds of insects they might see there. (You may keep a record of their predictions and compare them to what you actually see.) Draw one or two example food chains for each ecosystem.
6. Have students draw their own food chains that include insects. You may set a requirement for the number of consumers in the food chain. Have students label their food chain members “producer” or “consumer”. Remind them to include the sun.
7. Wrap up by reminding students of insects’ importance to food chains. Tell them to be on the lookout for insects eating and being eaten when they visit the nature center.

Extensions

- Put on your food chain play for another class.
- Have students act out the food chains they draw.
- Discuss and draw food webs.
- Discuss prey and predators.



Food Chain Theatrics Script

(Bolded words are lines of the food chain members. The director – that is, teacher – should point to each group of members to remind them when it is time to say a line.)



One bright, beautiful day the sun shone down on the earth and went, **“Shine, shine, shine!”**



Beneath the brilliant blue sky, green plants known as producers took in the dazzling sunshine. They began to turn it into food energy and went, **“Produce, produce, produce!”**



Meanwhile, some consumers had woken up and were hungry. They found some perfectly pleasing producers to eat and went, **“Consume, consume, consume!”**



All day long, this went on with the sun: **“Shine, shine, shine!”** producers: **“Produce, produce, produce!”** and consumers: **“Consume, consume, consume!”**

(Have the food chain members repeat their roles a few times to emphasize the point that this process goes on and on.)



The food chain’s members each had an important part in creating a healthy ecosystem!

This play was based on an activity designed by the Perkiomen Watershed Conservancy of Pennsylvania.

