

Food for Thought On-Site Summary

Grade 4

The students learned, in the *Pre-Visit Activity*, that all organisms need energy to survive. They also learned that in order to get that energy they must either obtain the energy directly as a producer or indirectly as a consumer. The students further learned that there are several types of consumers, herbivores, carnivores, and omnivores. The interactions of all the organisms in an ecosystem create the energy flow for that ecosystem.

In this activity, the students will use the development of these concepts in order to create a living food chain. They will make their discoveries around the pond, stream, wetland, and waterfall ecosystems, and they will attempt to locate, identify and draw at least three levels of a food chain, including a primary producer, an herbivore, and a first order carnivore. The students will begin to develop an understanding of how energy flows through an ecosystem, and begin to develop an understanding of some of the relationships between various organisms. Students will also construct reasonable explanations and draw conclusions using given information and prior knowledge, and will be able to demonstrate relationships through line drawings.

TEKS CONNECTIONS:

Science TEKS - Fourth Grade:

4.8 (A) – Students will identify characteristics that allow members within a species to survive and reproduce.

4.2 (E) – The students will identify the Sun as the major source of energy for the Earth and understand its role in the growth of plants, in the creation of winds, and in the water cycle.

WORDS TO KNOW:

Autotroph	Herbivore
Carnivore	Heterotroph
Consumer	Omnivore
Ecosystem	Food Web
Food Chain	Producer

FUN FACTS:

- Consumers are heterotrophs.
- Producers are autotrophs.
- Scavengers are omnivores.
- The further you go up the food chain there is less energy actually available for the consumer to use.
- Photosynthesis is the only means by which living organic materials can be created by the sun.



Above information adapted from "Food for Thought On-Site Activity," Elm Fork Education Center & Denton ISD, 1998.