

# Food Chain Canopy

**Grades:** 3 and 4

**Length:** 60 minutes

## Objectives

Describe and construct a simple food chain.

Recognize the different feeding relationships within the food web.

## Background

This lesson can be used as preparation or reinforcement to other Badlands lessons. During subsequent lessons, attention will be given to the importance of food chains and the overall interconnectedness of the food web. Examples will be used of the plants and animals that live in Badlands National Park and the surrounding mixed-grass prairie ecosystem. Each living thing has survival needs. Plants need the energy of the sun and water to grow. Plant-eaters need the plants. Animal-eaters need the plant-eaters. Age-appropriate vocabulary and pictures will be used to teach these important concepts. Badlands National Park is a place that American people have set aside in order to preserve a place where these plants and animals can live undisturbed by human encroachment.

## Modifications

Food chains can be limited to only two or three links.

Vocabulary (carnivore, herbivore, omnivore, food chains, food webs) can be introduced.

## Materials

- ◆ Construction paper
- ◆ Scissors
- ◆ Glue or tape
- ◆ Pictures of animals, plants, people and food

**Procedures**

1. Review with students that all animals must eat food to stay alive. We eat food, are we animals? Ask everyone to think of his or her favorite food. Go around the room and have each student share their favorite food. Note certain ingredients as the students list food. For example, if a student says pizza, you might write cheese, flour, and/or tomatoes on the board.
2. Your list should illustrate that animals need plants and other animals to survive.
3. Cut strips of colored construction paper, one color for each category: GREEN = plants, BLUE = plant-eaters, RED = meat-eaters, and BROWN = decomposers. Have students cut out pictures of draw them on the strips to indicate which strip represents which type of organism.
4. Let the students link the strips into food chains. Examples are:

Grass	--->	Prairie Dog	--->	Eagle
Trees	--->	Porcupine	--->	Coyote
Plants	--->	Mule Deer	--->	Bobcat
Seeds	--->	Chicken	--->	Human
Grass	--->	Grasshopper	--->	Squirrel
5. When these are completed, make a larger ring out of yellow construction paper. This represents the sun. Ask everyone if they think the sun needs to be added to the chains (yes).
6. Have the students link their chains to the big sun link. Display them in your classroom, perhaps from the ceiling.
7. When finished, ask the students what would happen if they cut one of the links. Ask them how the loss of grass would effect a meat-eater, even though it doesn't necessarily eat grass. This should demonstrate how each link is necessary to the chain. Cut one that you made to illustrate.

**Resources**

Earth Child 2000 by Kathryn Sheehan and Mary Waidner

Badlands National Park ([www.nps.gov/badl/exp/home.htm](http://www.nps.gov/badl/exp/home.htm))