



Corn in The Food Web

Fourth Grade



Objectives:

- * Students learn nutrients in corn.
- * Students learn how corn fits in the food web.
- * Students develop vocabulary.

Materials:

Activity 1: “Food Web Game”

- * popcorn (popped from 2 cups dry popcorn).
- * web member name tags (construction paper with yarn to hang around necks of students).
- * plastic sandwich bags.

Activity 2: “Mural / Diorama

- * shoe box or paper geometric shape display
- * magazines (featuring plant and animal pictures)
- * paper, crayons, markers, glue, scissors, clay

Lesson:

Share Nutritional Information:

In addition to vitamin C, corn has folate, thiamin and phosphorus. Yellow-kerneled corn also has a supply of vitamin A in the form of beta carotene.

Share Food Web And Vocabulary Information:

A **food web** begins with a plant (**producer**) such as corn. The sun helps the plant make food through **photosynthesis**, which places the sun at the top of the web. Animals (**consumers**) eat plants (**herbivore**), some eat other animals (**carnivore**) and some eat both animals and plants (**omnivore**), all are linked to the food web.

Example 1:

The sun provides light for photosynthesis, **the corn plant produces grain, the mouse eats the grain, the snake eats the mouse, the hawk eats the snake.**

Example 2:

The sun helps to grow the corn which is eaten by a pig and the pig is eaten by humans.

Review Discussion:

- * What is a food web?
- * What are some examples of corn eaters?
- * What are some examples of livestock that eat corn?
- * What are some examples of meat eaters?
- * What effect might pollution have on the links in the food web?
- * How can weather affect the food web?

Activity: “Food Web Game”

- * Students make the preparation and implementation for the game.
- * Pop a minimum of 2 cups of dry popcorn.
- * Number of students determines roles to play (1 sun, 12 - 15 corn plants, 6 - 12 plant / grain eaters, 3 - 7 meat eaters).
- * Students prepare name tags for web members (tags are made with construction paper and yarn).
- * Students spread out around the classroom or outside, wearing their name tags.
- * The sun begins by holding the 12-15 plastic bags of popped popcorn. To stimulate the sun (feeding) the plant, sun student distributes one bag to each corn plant.
- * The plants now eat half the bag of popcorn to produce the energy for growth.
- * Each plant / grain consumer takes a bag from 2 plants and eats half the remaining popcorn.
- * Each meat eater consumer takes a bag from 2 plant / grain consumers and eats the rest of the popcorn.

Activity Assessment:

Students should make an illustration of a Food Web and explain how it works. Display students work on the board.

Popcorn For All Consumers and Producers In the Food Web



