MINNESOTA ZOO
Changing how you see the world

Food Chains
Grades 1-3
Pre-visit Activity

MN Graduation Standards supported:

Grade 1.Strand IV.B
Students will observe plant and animal life cycles.

Grade 1 Strand IV.F
Students will understand that organisms have basic needs.

Grade 2 Strand IV.F
Students will investigate feeding relationships among organisms.

Vocabulary:

Habitat: place or type of place where an organism or community of organisms live and thrive.

Community: populations of different plants and animals living and interacting in an area at a particular time.

Introduction:

This is a game called "Food Chain Leap Frog". The game is played just like Leap Frog. You eat food to get energy. This energy helps you grow, run, jump, and play. All animals get energy from food. Most people eat lots of different meats and vegetables. Animals that do this are called "omnivores). Some animals only eat meat. They are called "carnivores". For example: adult frogs are carnivores because they eat insects. Some animals only eat plants. They are called "herbivores". For example: baby frogs "tadpoles" only eat plants. Every type of organism has a job within a community/habitat. The sun provides energy for plants, plants provide food energy that helps other species survive.

Objective:

At the end of this lesson, the students will:

1. Be able to recognize specific animal roles within a community.

Procedure:

1. Gather the following materials: Pictures of the sun, animals, and plants (enough for groups of 4 children to have one each). These should be age appropriate to your setting. You may want to just include one type of habitat or one that you are studying.
2. (For example- a forest habitat may include pictures of the sun, an oak tree with acorns, squirrels and and owl.)
3. Discuss each picture with your class and discuss what the organism is and what type of things they would eat. These should be somewhat obvious to them. Do this until each picture has been discussed. Choose 4 students to simulate the Leap frog Game.
4. Remind students that a "food chain" is how energy is passed through a community. A Food Chain follows just one path as animals find food.

Vocabulary continued

Organism: any living thing, such as a plant, animal, fungus, bacteria, capable of growth and reproduction.

Omnivore: plant and meat eater
Food Chain: order in which energy is passes through a natural system.
(sunlight-green plant-herbivore-carnivore-decomposer..)

Herbivore: plant eater

Carnivore: meat eater

OPTIONAL VOCABULARY:
Producers: such as plants, create food energy and oxygen

Consumers: eat others, either producers or consumers.

Decomposers: eat dead plants and animals.

Links:
www.ecokids.com
This is a great website that has a Food Chain simulation game. Great idea for labtime or whole group.

Procedure Continued:

4. Have four students stand in front and hand them each a picture related to each other in a food chain. They should hold up and show the class their picture. One of the students will have a picture that says ENERGY. Ask for predictions on how their food chain will look. (For example: grass – deer – human or banana – monkey – leopard.)
5. Have the students you have chosen crouch down like a frog. The fourth student will be the energy that passes through each organism. So, student#4 "Leapfrog" leaps over the plant, then leaps over the herbivore and then leaps over the carnivore, showing how they are all connected.
6. Now, divide your class into groups of 4-5 students (depending on the chain you have chosen) and move to a spot in the room.
7. Hand each group their cards, making sure one of them is the ENERGY card and have them discuss each of their cards together before they get into their Leapfrog Chain.
8. Observe how students are solving their chain.
9. Have the students perform their Food Chain Leap Frog for the whole class to observe or choose one or two groups to perform. Discuss

EXTENSIONS:

1. After this activity you may want to introduce and discuss how issues such as overpopulation, hunting, polluted water, etc. would effect each community.

2. You may also want to briefly discuss consumers, decomposers, producers as a whole group.