Name _____
Date _____
Period ___

Lab Activity Report
Ecology – Food Chains

Background:
Food chains and food webs are used to show the movement of energy through organisms in a community. Food chains usually have 3-5 organisms in them, food webs can contain several related food chains.

Purpose:
In this activity, you will make a food chain and a food web from an assortment of organisms.

Biology Content Standard:
Ecology 6 f. *Students know* at each link in a food web some energy is stored in newly made structures but much energy is dissipated into the environment as heat. This dissipation may be represented in an energy pyramid.

Hypothesis:
Do you think all of the organisms will be a part of the food chain? Of the food webs?
_____
_____

Materials:
12 index cards
2 sheets of white paper
Reference materials/Internet

Procedure:
1. Write the name of the following organisms on 12 index cards: tree, grass, rabbit, mouse, cricket, snake, owl, shrub, elk, mountain lion, hawk, and frog.
2. Mix up the cards. Randomly select 6 of them.
3. Using as many of the 6 cards as possible, arrange the organisms into a food chain.
4. If necessary, use reference materials or the Internet to determine what food(s) each animal eats.
5. Draw the food chain onto a clean sheet of white paper. (Animal's picture & name of animal). ALTERNATE METHOD: You can cut out the picture of the animal and glue it to a clean sheet of paper as part of your food chain.
6. Use arrows to show the flow of energy. The arrow points upwards from the food to the animal that is eating it, to demonstrate the movement of energy.
7. Return the cards to the pile. This time, use all 12 cards to create a food web.
8. Draw the food web on another clean sheet of white paper. (Remember: Animal's picture & name of animal). Use arrows to show the flow of energy.
9. Turn in the food web and food chain with this lab report.

Conclusions:

1. What is a food chain?

   _____
   _____

2. What is a food web?

   _____
   _____

3. Why does the arrow in a food chain point towards the animal that eats the food?

   _____
   _____

4. Compare: What does a food chain have in common with a food web?

   _____
   _____

5. Contrast: How is a food chain different from a food web?

   _____
   _____

6. Identify: How many organisms were in the first food chain?

   _____
   _____

7. Classify: Which organisms on your cards were producers?

   _____
   _____

8. Classify: Which organisms on your cards were consumers?

   _____
   _____

9. Was your hypothesis correct or incorrect? Explain.

   _____
   _____

Organisms Reference Sheet

Shrub

Tree

Grass

Elk

Rabbit

Mouse

Mountain Lion

Owl

Snake

Cricket

Hawk

Frog