Name _____ Class _____ Date _____

Quick Lab

MODELING

Making a Food Web

One organism consumes another for energy and raw materials. A food chain shows the sequence in which energy passes from one organism to another as it flows through a community. In this lab, you will draw food chains that might be found in a woodland community and show how the food chains are connected to form a food web.

OBJECTIVES

Depict three food chains within a woodland community.

Combine the food chains into a food web.

MATERIALS

- paper
- pen or pencil

Procedure

1. Closely observe **Figure 1**, which shows a portion of a woodland community. List all the organisms that you see.

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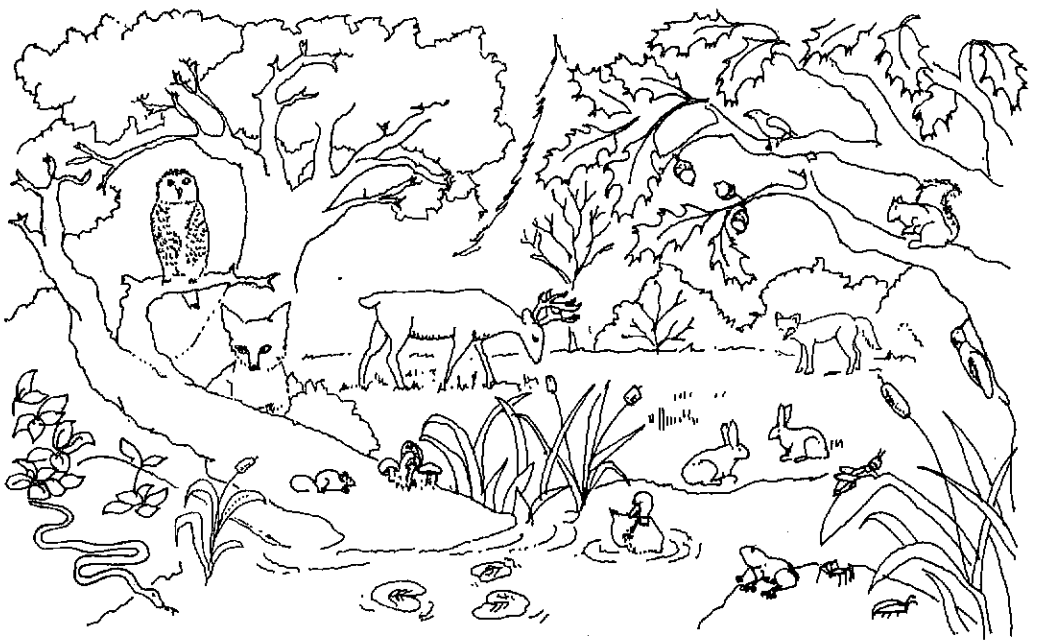
FIGURE 1 A WOODLAND COMMUNITY



2. Add to your list other organisms that might be present in this community but are not shown.

3. On a separate sheet of paper, write the name of one organism from your list that is capable of photosynthesis.

4. Draw a short arrow leading from this organism to the name of a second organism that might eat it. These are the first two links of a food chain.

5. Extend your chain to three links by adding an arrow and a third organism that might consume the second.

6. Extend your food chain to four links.

7. Make two more food chains consisting of four links each.

8. Construct a food web by drawing arrows to show how organisms in the three food chains are linked to one another. Make as many connections as possible.

Analysis and Conclusions

1. **Analyzing Data** How are food chains and food webs alike? How are they different?

2. **Evaluating Models** How is a diagram of a food web more helpful than a written description of the same information?

3. **Drawing Conclusions** If all the green plants were removed from the woodland community, how might the flow of energy be affected? Explain your answer.

4. **Drawing Conclusions** If the top-level consumers were eliminated from a food web, would the populations in the levels below them increase without bounds? Why or why not?