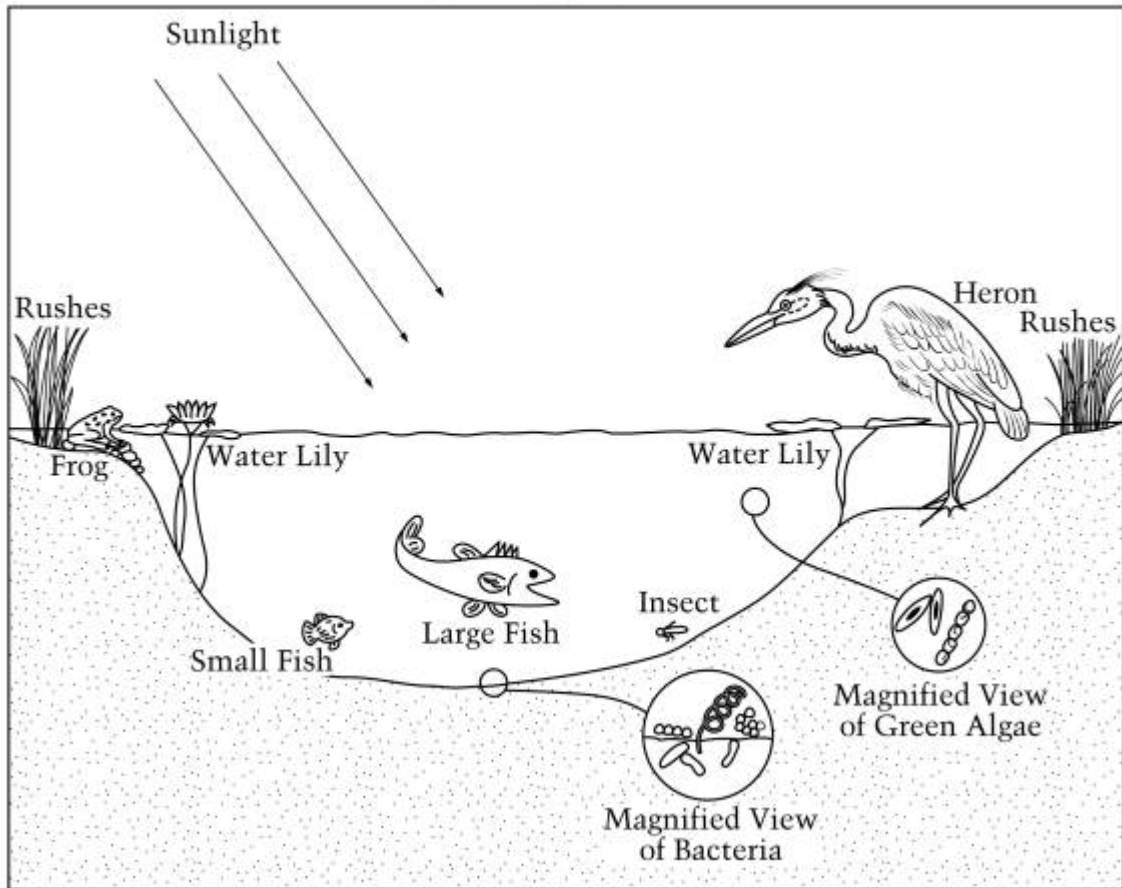
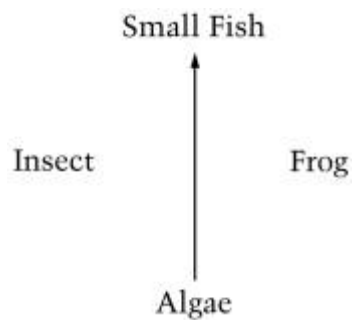


The picture below shows a pond ecosystem. Use this picture and what you know about the things in it to answer the questions in this section.

POND ECOSYSTEM



1. You will now finish a diagram of a food web in the pond. The food web shows what eats what in the pond system. Draw arrows in the diagram below from each living thing to the things that eat it. (The first arrow is drawn for you.)



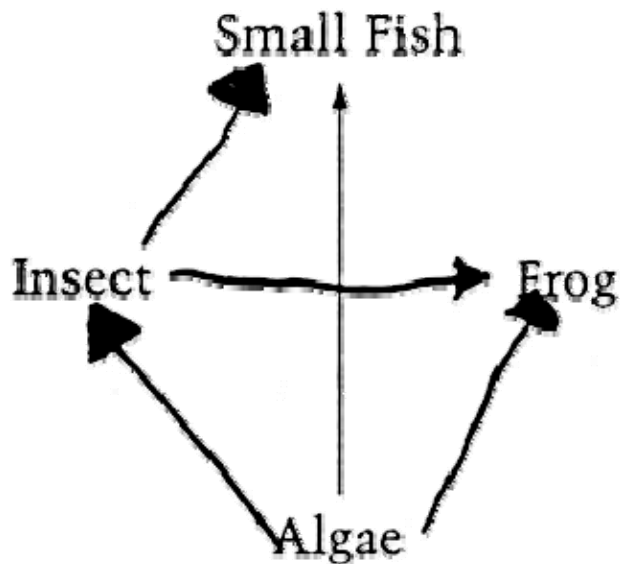
Question 1

Scoring Guide

Score & Description
<p>Complete</p> <p>Student demonstrates a thorough understanding of the relationships in the food web by drawing in 4 correct arrows and no incorrect arrows.</p> <p>Credited responses include:</p> <ul style="list-style-type: none">• Frog eats insect - arrow from insect to frog• Frog eats algae - arrow from algae to frog (a juvenile frog eats algae)• Insect eats algae - arrow from algae to insect• Small fish eats insect - arrow from insect to small fish
<p>Partial</p> <p>Student demonstrates some understanding of the relationships in the food web by drawing in 1, 2 or 3 correct arrows and no incorrect arrows.</p>
<p>Unsatisfactory/Incorrect</p> <p>Student demonstrates little or no understanding of the relationships in the food web by drawing all incorrect arrows, or both correct and incorrect arrows.</p>

Complete - Student Response

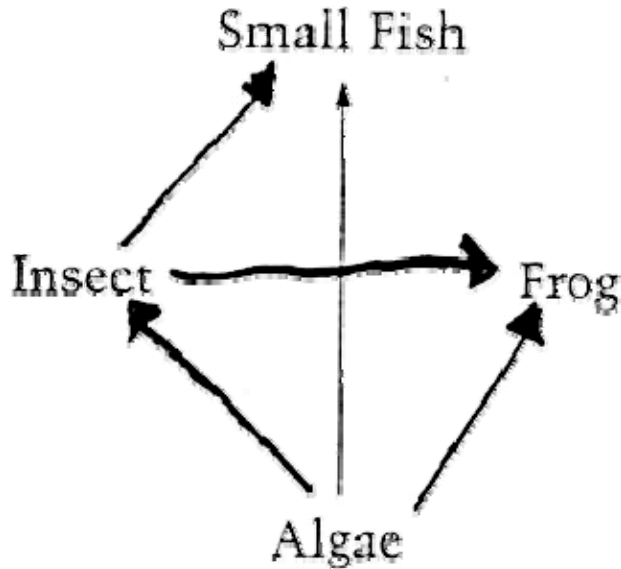
1 You will now finish a diagram of a food web in the pond. The food web shows what eats what in the pond system. Draw arrows in the diagram below from each living thing to the things that eat it. (The first arrow is drawn for you.)



Scorer Comments:

Student response shows four correct arrows and no incorrect arrows.

- 1 You will now finish a diagram of a food web in the pond. The food web shows what eats what in the pond system. Draw arrows in the diagram below from each living thing to the things that eat it. (The first arrow is drawn for you.)

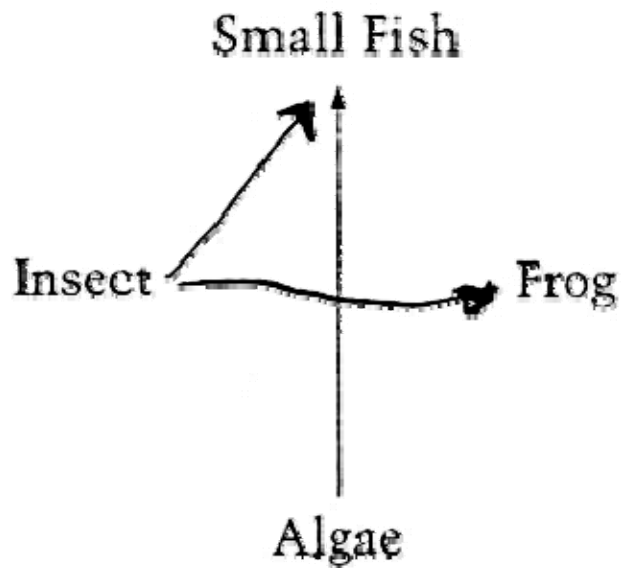


Scorer Comments:

Student response shows four correct arrows and no incorrect arrows.

Partial - Student Response

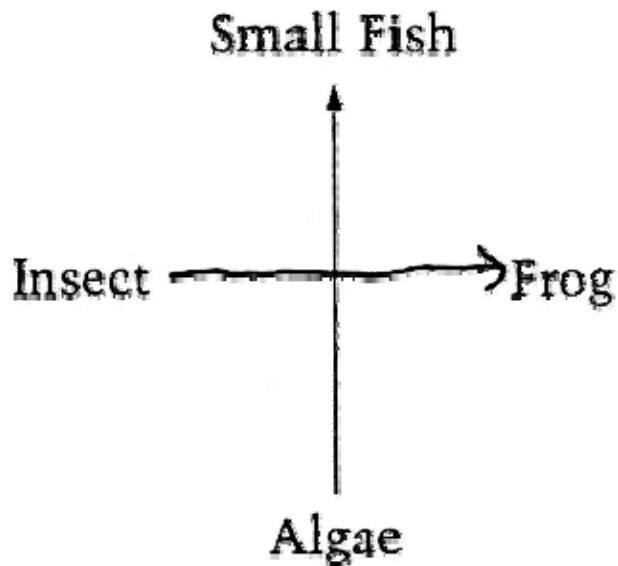
- 1 You will now finish a diagram of a food web in the pond. The food web shows what eats what in the pond system. Draw arrows in the diagram below from each living thing to the things that eat it. (The first arrow is drawn for you.)



Scorer Comments:

Student response shows two correct arrows and no incorrect arrows.

- 1 You will now finish a diagram of a food web in the pond. The food web shows what eats what in the pond system. Draw arrows in the diagram below from each living thing to the things that eat it. (The first arrow is drawn for you.)

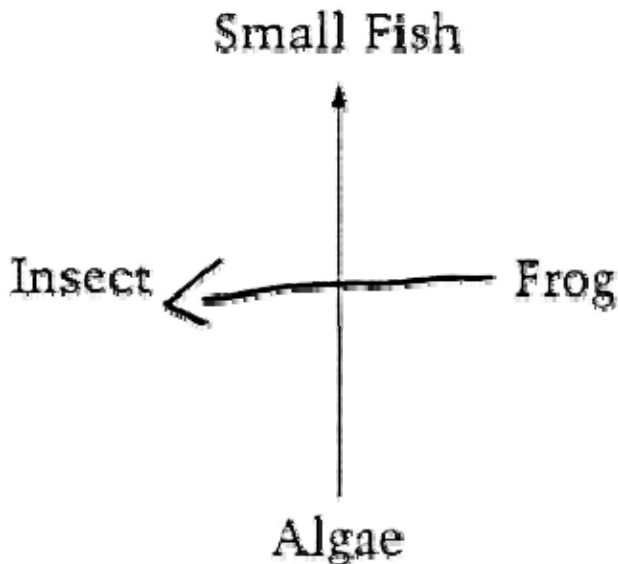


Scorer Comments:

Student response shows one correct arrow and no incorrect arrows.

Unsatisfactory/Incorrect - Student Response

- 1 You will now finish a diagram of a food web in the pond. The food web shows what eats what in the pond system. Draw arrows in the diagram below from each living thing to the things that eat it. (The first arrow is drawn for you.)

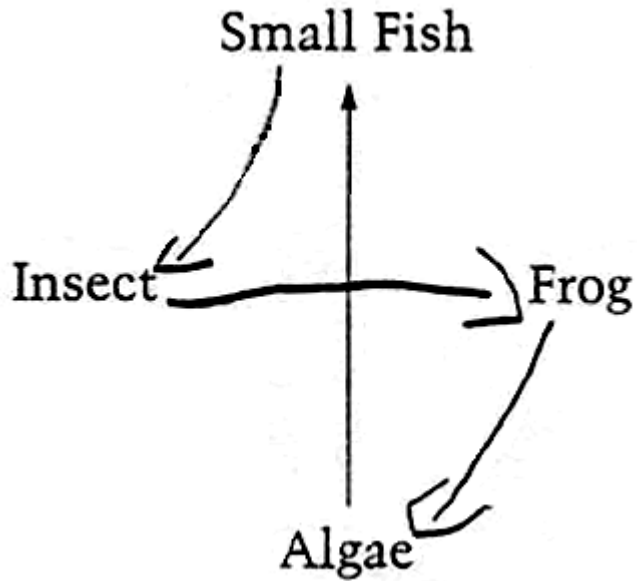


Scorer Comments:

Student response shows one incorrect arrow only.

- 1 You will now finish a diagram of a food web in the pond. The food web shows what eats what in

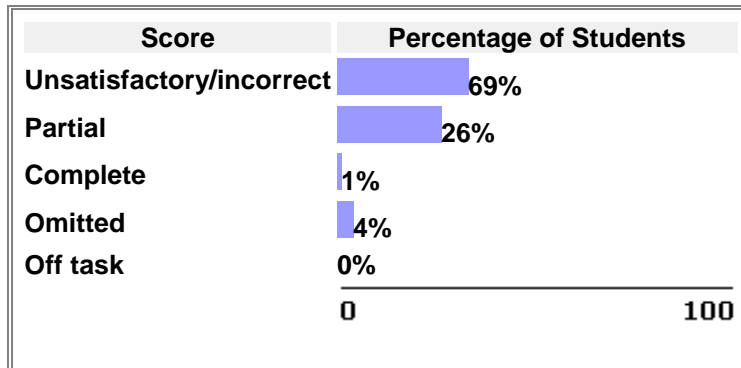
the pond system. Draw arrows in the diagram below from each living thing to the things that eat it.
(The first arrow is drawn for you.)



Scorer Comments:

Student response shows one correct arrow (frog eats insect), and two incorrect arrows.

2000 National Performance Results



Note:

- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

The Fields of Science: *Life Sciences* (Sub content classification: *Ecology*)
Knowing and Doing Science : *Conceptual Understanding*

The Fields of Science

Life Sciences

This question measures basic knowledge and understanding of the following:

Knowing and Doing Science

Conceptual Understanding

Conceptual understanding includes the body of scientific knowledge that students draw upon when conducting a scientific investigation or engaging in practical reasoning. Essential scientific concepts involve a variety of information, including facts and events the student learns from both science instruction and experiences with natural environment; and scientific concepts, principles, laws, and theories that scientists use to explain and predict observations of the natural world.