

Food Production

20. Which of the following statements describes the sequence of events when fertiliser leaches into a loch?

- A Algal bloom develops → algae die → oxygen concentration increases
- B Algal bloom develops → algae die → oxygen concentration decreases
- C Oxygen concentration increases → algal bloom develops → algae die
- D Algae die → oxygen concentration decreases → algal bloom develops

(b) State the term which describes the use of a predator as an alternative to pesticides.

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24. Pesticides sprayed onto crops can get into food chains. The following statements refer to stages in this process.

J Pesticides are absorbed by plants.

K Pesticides build up in animals.

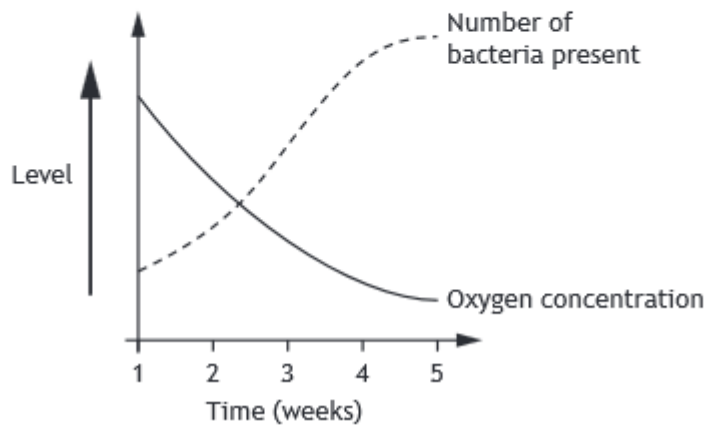
L Plants are eaten by animals.

Identify the order of steps by which pesticides could reach lethal levels in the bodies of animals.

	<i>Step 1</i>	<i>Step 2</i>	<i>Step 3</i>
A	J	K	L
B	L	J	K
C	L	K	J
D	J	L	K

- (b) Later in the year the gardener noticed that the algae in his pond had increased and now covered the surface of the water. He sampled the pond water over 5 weeks and measured its oxygen concentration and number of bacteria present.

The results are shown in the graph.



- (i) What name is given to the increased growth of algae in the pond? 1

- (ii) Explain why the increased growth of algae resulted in an increase in the number of bacteria. 1

- (iii) Using the information in the graph, explain why the increase in number of bacteria resulted in the population of goldfish in the pond decreasing. 1

