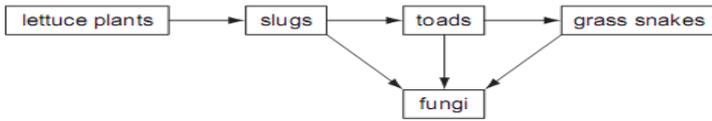


PPQ Units 19.1-19.3 : food chain and ecosystems

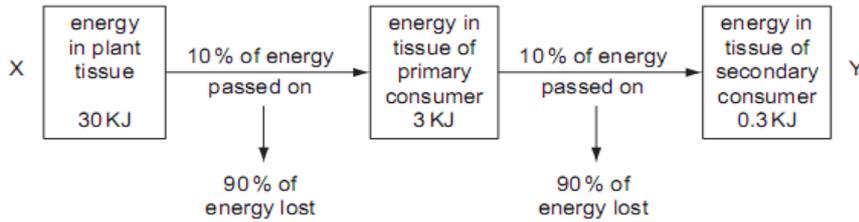
1. The diagram shows a food chain.



Which organisms are the producers?

- A grass snakes
- B lettuce plants
- C slugs
- D toads

2. The diagram shows energy flow through a food chain.



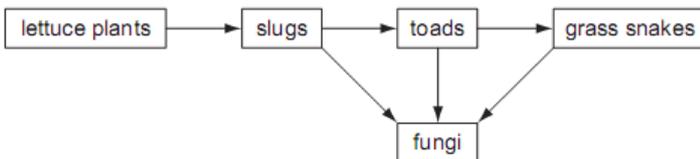
By which processes is energy lost between X and Y?

- A digestion and excretion
- B digestion and photosynthesis
- C excretion and respiration
- D photosynthesis and respiration

3. What is an advantage of a short food chain?

- A A few producers can support a large number of consumers.
- B It is easier for consumers to find food.
- C Less energy is lost in the food chain.
- D Less food is required by the consumers.

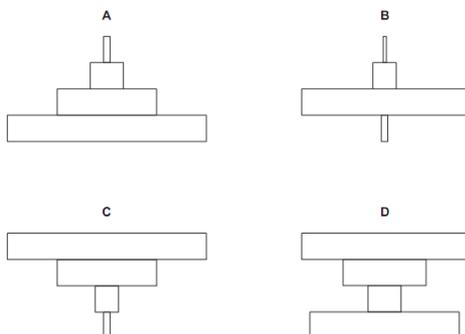
4. Fungi are decomposers.



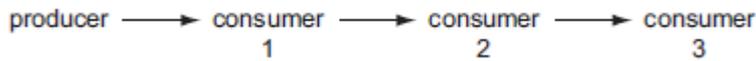
Why are they important in the food web?

- A They provide food for snakes.
- B They control the numbers of toads.
- C They provide energy for plant growth.
- D They release minerals essential for plant growth.

5. A single tree is food for a large population of caterpillars. Several small birds eat the caterpillars. The small birds are eaten by a bird of prey. Which is the pyramid of biomass?



6. The diagram shows a food chain.



A disease reduced the number of consumer 2.

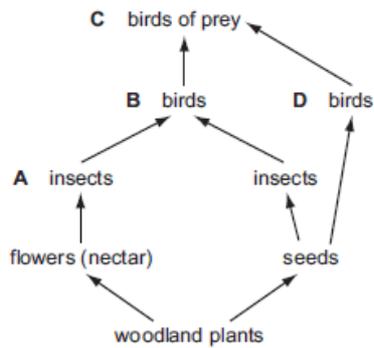
What effect would this be likely to have on the numbers of consumer 1 and consumer 3?

	consumer 1	consumer 3
A	+	+
B	+	-
C	-	+
D	-	-

key
 + = increase in numbers
 - = decrease in numbers

7. The diagram shows some food relationships in a woodland area.

Which of the labelled animals are in competition with seed-eating insects for their food?



8. Fig. 9.1 shows part of a food web for the South Atlantic Ocean.

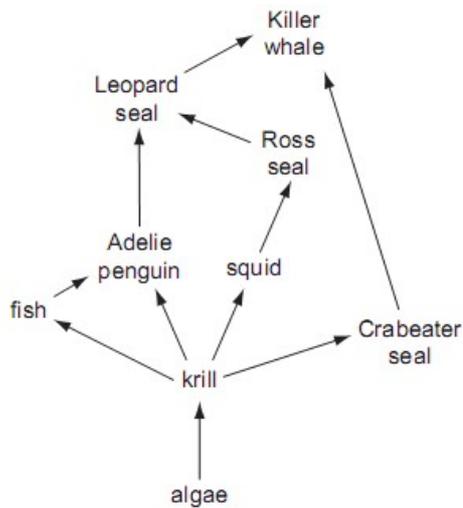


Fig. 9.1

(a) (i) Name the top carnivore in this food web.

..... [1]

(ii) Name a member of this food web that is both a secondary and a tertiary consumer.

..... [1]

(b) Use the information from the food web to complete the food chain of five organisms.

algae → → → → [2]

(c) In the future the extraction of mineral resources in the Antarctic might occur on a large scale. This could destroy the breeding grounds of the Ross seal.

(i) State and explain what effects this might have on the population of Leopard seal.

..... [2]

(ii) State and explain what effects this might have on the population of fish.

..... [4] [Total: 10]