

Exercise walk-through

Food chains and food webs ■ 19.2

eXercise

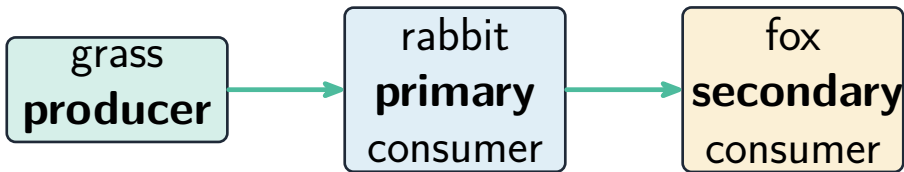
You must be able to

- define producer, consumer, herbivore, carnivore, decomposer
- read a food chain/web and the direction of energy flow
- explain the effect of overharvesting and introduced species

Method — Food chains and webs

- **producer:** makes its own food; **consumer:** feeds on others; **decomposer:** feeds on dead matter.

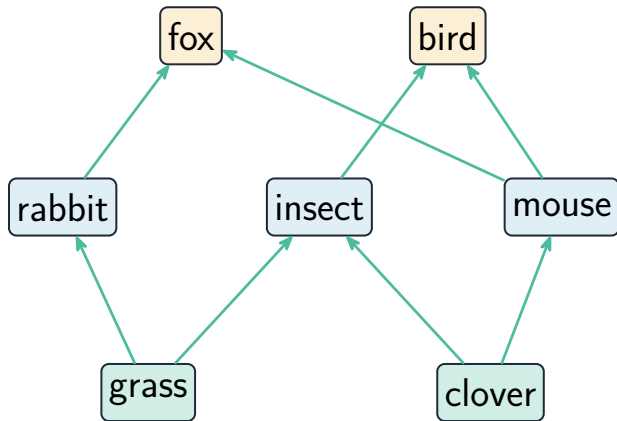
Method — Food chains and webs



each arrow shows energy flowing to the next organism

A food chain: grass → rabbit → fox

Method — Food chains and webs



A food web of several linked chains

Practice 2.1 ■ 1 mark

Define a producer.

Solution 2.1

Worked steps

an organism that makes its own food (usually by photosynthesis) **B1**.

Practice 2.2 ■ 1 mark

State what the arrows in a food chain show.

Solution 2.2

Method: Food chains and webs

Worked steps

the direction of energy flow (from one organism to the next) **B1**.

Exam-style 3.1 ■ 1 mark

In the chain grass $\rightarrow$ rabbit $\rightarrow$ fox, the rabbit is a:

- A** producer
- B** primary consumer
- C** secondary consumer
- D** decomposer

Solution 3.1

Method: Food chains and webs

- A producer
- B primary consumer** 
- C secondary consumer
- D decomposer

Worked steps

B. The rabbit eats the producer, so it is a primary consumer.

Exam-style 3.2 ■ 2 marks

A food web links several chains.

- (a) Explain what could happen to the other organisms if all the rabbits were removed.
- (b) State one way humans can damage a food web.

Solution 3.2

Method: Food chains and webs

Worked steps

- (a) animals that ate rabbits (e.g. foxes) would have less food and may decrease **M1**; plants the rabbits ate may increase **A1**.
- (b) overharvesting (e.g. overfishing) or introducing a foreign species **B1**.