# Feeding relationships in my garden /25

Read the information below about organisms in my garden.

**Grevillea**

Grevillea are native plants often found growing in gardens. The grevillea in my garden flowers mostly in spring. It has red flowers and produces nectar.

**Ladybirds**

Ladybirds visit the grevillea in my garden and feed on aphids.

**Ants**

Ants crawl up the stem to feed on nectar in the flowers.

**Honeyeaters**

Honeyeaters visit the grevillea to feed on the nectar, aphids and bugs.

**Aphids**

Aphids are parasitic bugs that pierce the stem and suck the sap.

1. Draw a food web that contains all of the organisms in my garden mentioned above. **(6 marks)**

ladybirds

aphids

honeyeaters

ants

1/2 mark for each correct arrow—3 1/2 marks

1 mark for arrows in right direction

1/2 mark for all organisms included

grevillea

1. What is the original source of energy for the food web? \_\_\_\_the Sun\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**(1 mark)**

1. What group of organisms are missing from the description of organisms in my garden?

Decomposers

**(1 mark)**

What is the role of these organisms?

To break down dead, decaying organisms

**(1 mark)**

1. Make a food chain from the food web that contains four organisms. **(3 marks)**

grevillea🡪aphids🡪ladybirds🡪honeyeaters

1/2 mark for each correct organism

1 mark for arrows in the correct direction

1. Make a food chain from the food web that contains three organisms. **(2½ marks)**

a. grevillea 🡪aphids 🡪 ladybirds

b. grevillea 🡪aphids 🡪 honeyeaters

c. grevillea 🡪ants 🡪 honeyeaters

1. For each food chain, complete the following table. **(3½ marks)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Producer | 1st order consumer | 2nd order consumer | 3rd order consumer |
| Food chain 1 | grevillea | aphids | ladybirds | honeyeaters |
| Food chain 2a  2b  2c | grevillea  grevillea  grevillea | aphids  aphids  ants | ladybirds  honeyeaters  honeyeaters | honeyeaters |

½ mark for each correctly classified organism

1. Write the definition of producers and consumers? **(2 marks)**

|  |  |
| --- | --- |
|  | Role |
| Producers | Organisms that make their own food |
| Consumers | Organisms that need to consume other organisms to obtain energy |

1. Identify the herbivores, omnivores and carnivores in the food web. **(3 marks)**

|  |  |
| --- | --- |
| Herbivores | ants, aphids |
| Omnivores | honeyeaters |
| Carnivores | ladybirds |

1. If there was a great increase in the numbers of ladybirds, explain what you think would happen to the numbers of honeyeaters. **(3 marks)**

The number of honeyeaters would increase (1 mark), as there is more food (1 mark). Eventually the numbers would return to balance as the ladybirds’ food (aphids) would decrease due to the increase in ladybirds. (1 mark)

**End of task**