

## Answer key

Date: \_\_\_\_\_

### Chapter 3, lesson C: Producers and Consumers ( 3.C)

1. Which of these are producers in a food chain?

Circle the **two** correct answers.

grass

dragonfly

owl

snake

tomato plant

2. Complete the sentences. Choose from the following words.

carnivores

herbivores

omnivores

Cows and deer eat only plants. They are herbivores.

Tigers and lions eat only other animals. They are carnivores.

Bears and monkeys eat plants and animals. They are omnivores.

3. The following is some information about a food chain in a garden.

- Aphids feed on plants.
- Ladybirds eat aphids.
- Birds eat ladybirds.

Use the information to complete the food chain.

Draw arrows to show the transfer of energy.



4. Chen is learning about food chains.

He draws a diagram to represent the food chain in an area.

A → B → C

a. Which living thing is a predator?

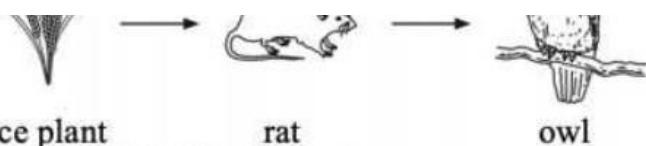
C

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b. What would happen to the number of prey in the area if there were no predators?

Prey increase at first, then may decrease later due to lack of resources. Without predators, nothing is eating the prey, so they can reproduce and their population grows quickly. But after some time, the large number of prey will start to run out of food and space. This can later because the prey population to become unhealthy, compete for resources, and eventually decrease.

c. Look at this food chain.



a. Identify the prey and predator in this food chain.

prey: rat

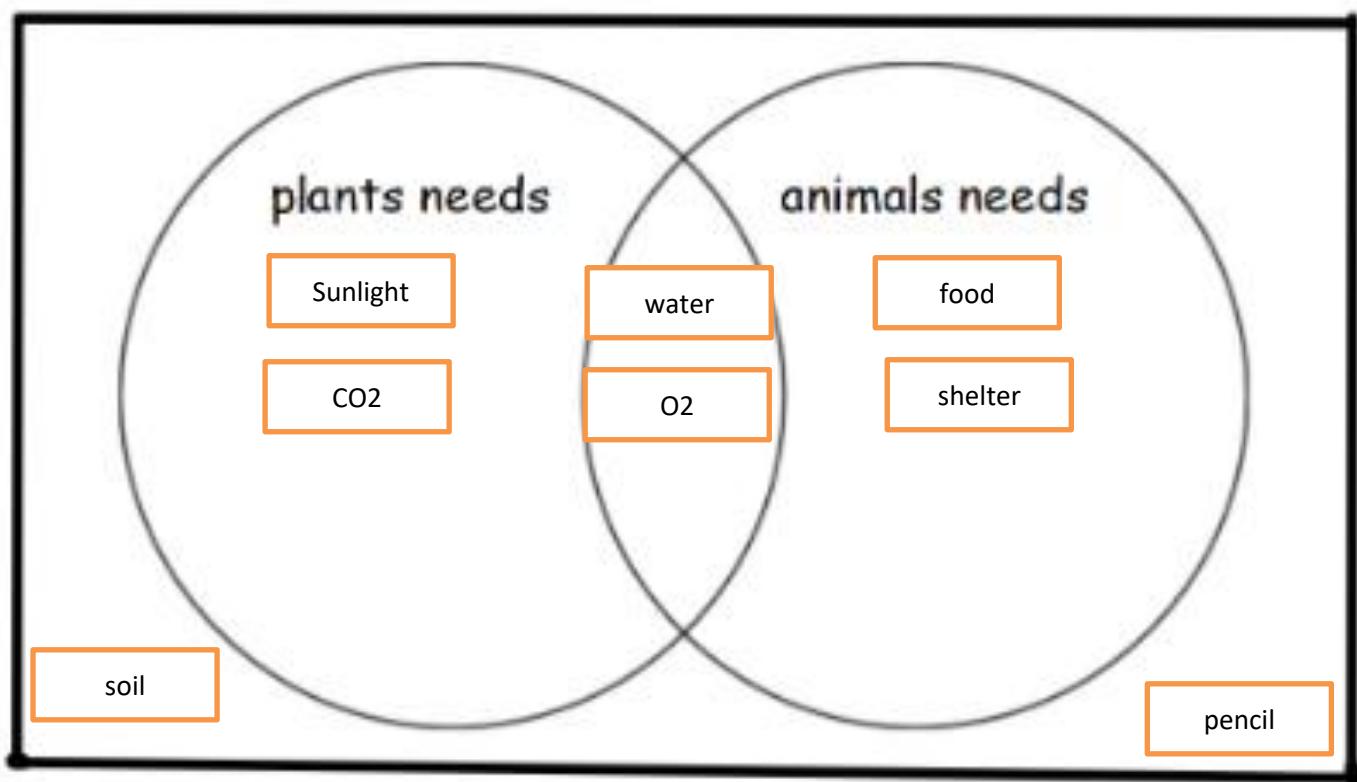
predator: owl

b. The rat and owl depend on the rice plant directly or indirectly for energy. Describe how.

The rat depends on the rice plant directly for energy, while the owl depends on the rice plant indirectly because it depends on the rat for energy and the rat depends on the rice plant.

6. Use this **Venn diagram** to sort these words in their correct places according to the needs of plants and animals.

water	shelter	soil	sunlight	food	oxygen (air)	pencil	carbon dioxide (air)
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Plants don't need soil itself; they need what the soil provides, such as nutrients, water, and support. Some plants grow in water.

7. Where do these living things get their energy from?

**Circle** the correct answer.

- Plants get their energy from \_\_\_\_\_

eating other animals or plants

sunlight

- Animals get their energy from \_\_\_\_\_

eating other animals or plants

sunlight

6. Fill in the blanks.

prey : animals that are hunted and eaten by predators

energy : what we need to live and carry out our daily activities

photosynthesis : a process by which plants make their own food in the presence of light

herbivores : animals that eat only plants

carnivores : animals that eat only other animals

producers : living things, such as plants, which make or produce their own food

omnivores : animals that eat both plants and animals

predators : animals that hunt and eat other animals

Consumers : living things that obtain their energy by feeding on other living things