

Food Chain

A food chain is a way to demonstrate the relationships between living things in an ecosystem. It shows the path that energy takes from the sun, through producers and consumers to decomposers. Every living thing needs energy to survive, whether that energy comes directly from the sun or via another living thing. The three things in a food chain are **producers**, **consumers** and **decomposers**. Let's read more about these three groups.

Producers

A producer is a living thing that makes its energy from the sun. It absorbs sunlight and turns it into energy which it stores. A perfect example of a producer is a vegetable or fruit plant. These plants absorb sunlight through their leaves and store the energy in the branches, trunks and other parts of the plant. They can also absorb some nutrients from the soil to help them survive. One important part of the plant that stores the energy from sunlight is the fruit or the part of the plant that is eaten. This part of the plant is what is most helpful to consumers.



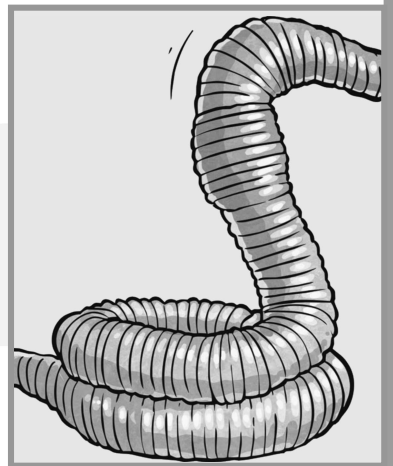
Consumers

A consumer is a living thing in the food chain that relies on producers or other consumers for energy. These consumers are usually insects, animals and humans. Insects, such as grasshoppers, eat producers and absorb their energy. Consumers can also eat other consumers. Animals, such as lions, wolves and dingoes, often consume other consumers below them in the food chain. These may be other animals or insects. In the same way, these consumers absorb the energy from their prey. This energy can then be passed on to other consumers or decomposers.



Decomposers

A decomposer is a living thing in the food chain that absorbs the energy from both consumers and producers by breaking down the material that used to be another living thing. Worms, ants and some other bugs are good examples of decomposers. These living things consume dead plants and animals, absorbing their energy to survive and producing nutrients that go into the soil. Plants use these nutrients and the energy from the sun to make energy of their own to start the cycle again.

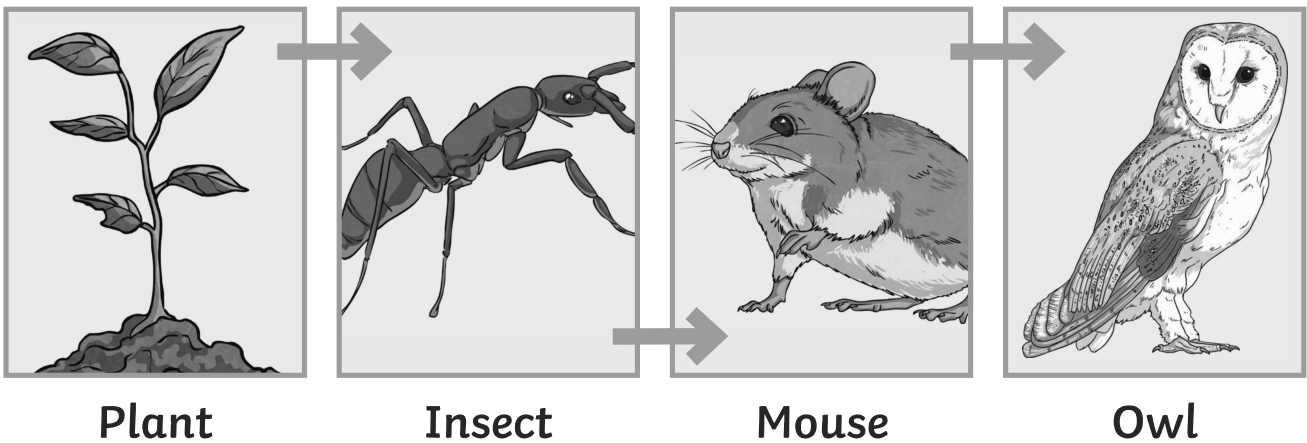


The Sun

These three groups rely on the sun for energy. Producers get their energy directly from the sun. Consumers and decomposers get their energy from other living things below them in the food chain that get their energy from the sun. So, without the sun, living things would not survive.

The Food Chain

The food chain that contains every living thing on earth is very complicated. We can make a more simple version of the food chain by selecting just one living thing in each link. Here is an example of a simple food chain:



Food Chain - Questions

After reading the information about food chains, read the questions below and answer the questions from the text.

1. What are the three things in a food chain?

2. What do all three things need in order to get their energy to survive?

3. Where do producers get their energy directly from?

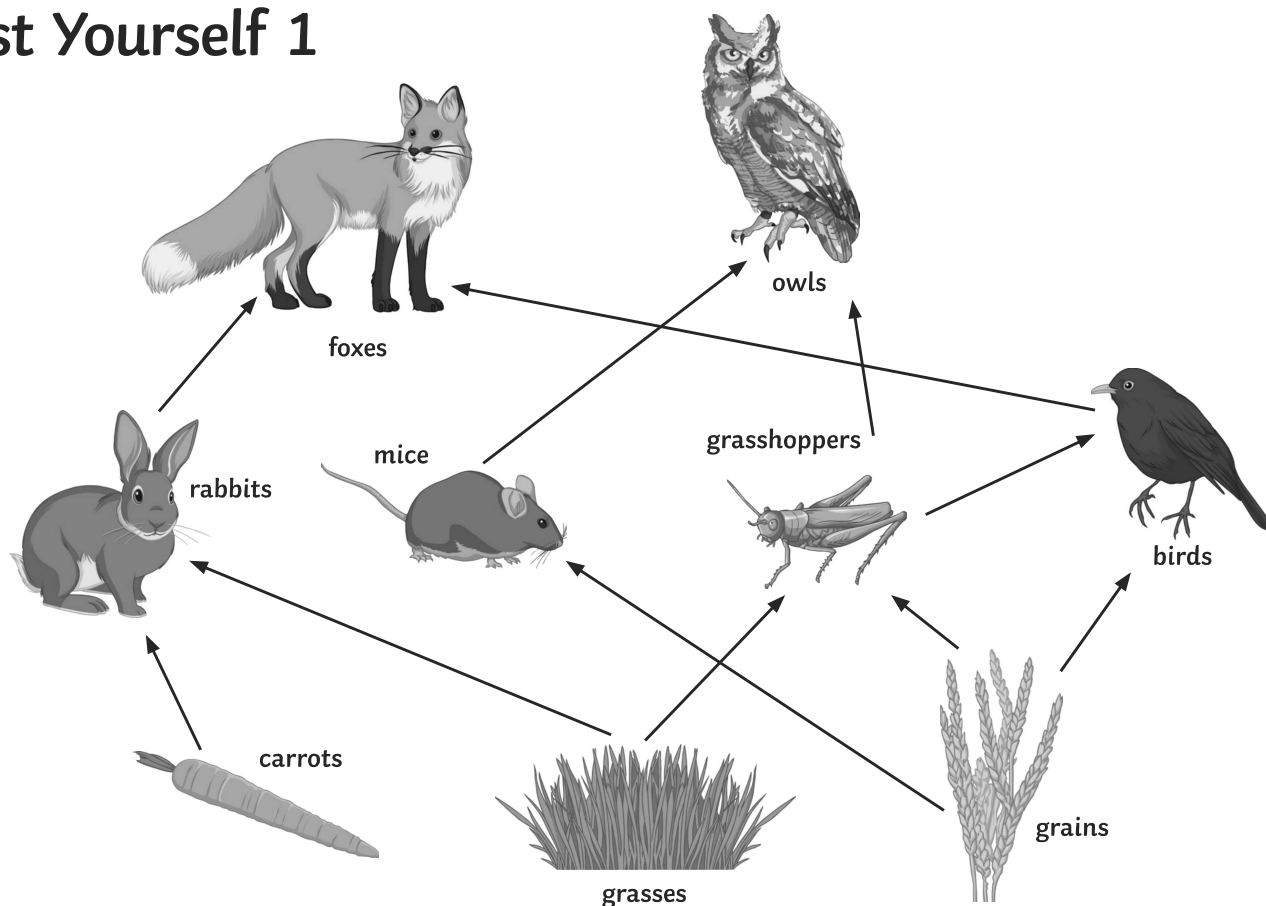
4. What are two places consumers can get their energy from?

5. What role does the sun play in the food chain?

6. What is the role of a decomposer in the food chain?

7. Draw and label an example of a simple food chain, including the names of living things and whether they are producers, consumers, or decomposers.

Test Yourself 1



Using the food web shown above, answer the following questions.

- Name a producer: _____
- Name a herbivore: _____
- Name a carnivore: _____
- What is a consumer? _____
- Draw a food chain that has 4 stages.

- What would happen to the number of grasshoppers if the number of mice decreased?

- What would happen to the number of the rabbits and foxes if a disease killed a lot of carrots?

