

Energy Explorers: Food Chains

Learning objective: To identify and describe the roles of producers, predators, and prey within a food chain.

Read each question carefully and use your knowledge of habitats and food chains to write your answers. Remember to use the correct scientific vocabulary.

Bea the honeybee is busy studying how energy moves through nature. She knows that all food chains start with a plant that uses sunlight to make its own food. Animals then eat the plants or other animals to get the energy they need to grow and move.

Word bank: Producer · Consumer · Predator · Prey · Energy · Herbivore · Carnivore

1. In a simple food chain, what do we call the living thing that makes its own energy from sunlight? Give an example of one. (2 marks)

2. Explain the difference between a predator and prey. Use an example to support your answer. (2 marks)

3. Look at this chain: Grass → Rabbit → Fox. Which animal is the herbivore, and which animal is the carnivore? (2 marks)

4. Why is it important for the arrows in a food chain to point from the food to the eater? What do these arrows represent? (2 marks)

5. If all the plants in a forest were removed, what would happen to the animals that rely on them for food? Explain your reasoning. (2 marks)

Draw: Draw a food chain that you might find in a UK garden or woodland. Include at least four living things and remember to draw the arrows pointing in the correct direction.



Extension challenge: Nova the owl has noticed that some animals, like foxes, are omnivores. Research what an omnivore is and write a short paragraph explaining how this changes a food chain compared to an animal that only eats plants or only eats meat.