

Energy in the Meadow

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

Read the text carefully and answer the questions below. Remember to use full sentences.

Bea the honeybee loves to visit the sunny meadow. In this habitat, everything is connected by food chains. Every food chain starts with a producer, which is usually a green plant. In our meadow, the bright yellow dandelions use sunlight to create their own energy. Next comes the consumer. A hungry caterpillar might eat the dandelion leaves to grow big and strong. Because the caterpillar eats the plant, it is a primary consumer.

Soon, a clever blue-tit bird arrives. The bird is a predator, and the caterpillar is its prey. The bird eats the caterpillar to gain the energy it needs to fly and keep warm. This transfer of energy keeps the meadow ecosystem healthy and thriving. If one part of the chain disappears, it can cause a problem for the other animals. Bea the honeybee watches this all day, buzzing from flower to flower, helping the plants grow so the cycle can begin again. It is a wonderful, natural puzzle where every living thing has an important job to do to survive.

Word bank: producer · consumer · predator · prey · energy · habitat

1. According to the text, what do food chains usually start with? (1 mark)

2. Name one animal that is a consumer in the meadow food chain. (1 mark)

3. Why does the blue-tit bird need to eat the caterpillar? (2 marks)

4. What might happen to the bird if all the caterpillars in the meadow disappeared? (2 marks)

5. Do you think the dandelion is the most important part of the food chain? Explain your answer. (2 marks)

Draw: Draw a food chain showing a dandelion, a caterpillar, and a bird. Use arrows to show the direction the energy travels.



Extension challenge: Research what happens to a food chain if a new predator is introduced to an area. Write three sentences about what you find.