

Year 4 Science Assessment: Food Chains and Habitats

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

Read each question carefully. Use the word bank to help you with your answers. Ensure you use scientific vocabulary where possible.

Bea the honeybee is busy in the meadow. She collects nectar from sunflowers, which use sunlight to make their own food. Nearby, a hungry frog waits on a lily pad to catch a passing dragonfly. Higher up, a kestrel watches the meadow, searching for a field mouse to eat. Every living thing in the meadow is connected by what it eats.

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

1. Using the passage, identify one producer and explain why it is given this name. (2 marks)

2. Define the difference between a predator and prey. Use an example from the passage to support your answer. (3 marks)

3. Max the monkey says that all food chains start with an animal. Is Max correct? Explain your answer. (3 marks)

4. Draw a simple food chain using the following organisms: Grass, Rabbit, Fox. Use arrows to show the direction of energy flow. (3 marks)

5. What would happen to the population of rabbits if all the foxes in an area disappeared? Explain the impact on the food chain. (4 marks)

6. Imagine you are an ecologist like Bea. Describe a food chain you might find in a pond. Explain the role of each organism and what would happen if the producer was removed from this habitat. (10 marks)

Draw: Draw a diagram of a woodland food chain that includes at least four different living things. Make sure your arrows point in the correct direction to show the transfer of energy.



Extension challenge: Total: /25