New Life in the Meadow: Understanding Reproduction

Learning objective: To understand the processes of sexual and asexual reproduction in plants and animals.

Read the text carefully and answer the questions below using full sentences. Use evidence from the text to support your answers.

Bea the honeybee spends her days buzzing through the meadow, witnessing the cycle of life. Reproduction is the vital process by which living things create new offspring, ensuring their species continues. In most animals, reproduction is sexual. This requires two parents to contribute genetic information, resulting in offspring that share characteristics with both, yet remain unique.

Plants have diverse strategies. Many flowering plants rely on pollination, where pollen is transferred to produce seeds. This is a form of sexual reproduction. However, some plants, like strawberries, use asexual reproduction. They send out 'runners' that root into the soil to grow a new, identical plant. This method only requires one parent and does not involve seeds or fertilisation. Whether it is a lion cub learning to hunt or a new sapling pushing through the earth, the goal remains the same: to pass on life to the next generation. By studying these patterns, we can better understand how nature sustains itself. From the smallest blade of grass to the largest mammals, the cycle of life is a fascinating, never-ending journey.

Word bank: reproduction · offspring · sexual · asexual · fertilisation · pollination · genetics

1. According to the text, what is the main purpose of reproduction? (2 marks)

2. How does the way a strawberry plant reproduces differ from the way a flowering plant reproduces? (2 marks)

3. Why might offspring produced through sexual reproduction look different from their parents? (2 marks)

4. Based on the text, what can you infer about the role of a single parent in asexual reproduction compared to sexual reproduction? (2 marks)

5. Do you think asexual reproduction is a better survival strategy for a plant than sexual reproduction? Justify your opinion. (3 marks)

Draw: Draw a diagram showing two types of reproduction: a bee pollinating a flower (sexual) and a strawberry plant growing a runner (asexual). Label the parts clearly.

Extension challenge: Research one other animal or plant that uses asexual reproduction and write a short paragraph explaining how it works.