

The Incredible Life Cycle of Plants

Learning objective: To understand the life cycle of flowering plants, including pollination, fertilisation, and seed dispersal.

Read the passage below about how plants grow and reproduce. Answer the questions in full sentences, using evidence from the text to support your ideas.

Bea the honeybee loves visiting colourful flowers in the meadow. As she lands on a bright petal to collect nectar, she accidentally brushes against the stamen, picking up sticky yellow pollen. When Bea flies to another flower of the same species, some of that pollen rubs off onto the carpel. This important process is called pollination. Once the pollen reaches the ovary, fertilisation occurs, and the plant begins to develop seeds. After the seeds are formed, the plant must move them away from the parent to ensure they have enough space, light, and water to grow. This is known as seed dispersal. Some plants use the wind to blow their seeds far away, while others grow tasty fruit to encourage animals to carry the seeds to new locations. Once a seed lands in suitable soil, the process of germination begins, and a new plant starts to sprout. Through this cycle, plants ensure their species continues to thrive in the wild, creating a beautiful and green world for everyone to enjoy.

Word bank: pollination · fertilisation · dispersal · germination · stamen · carpel

1. According to the text, what are the two specific parts of the flower that Bea the honeybee brushes against to help with pollination? (2 marks)

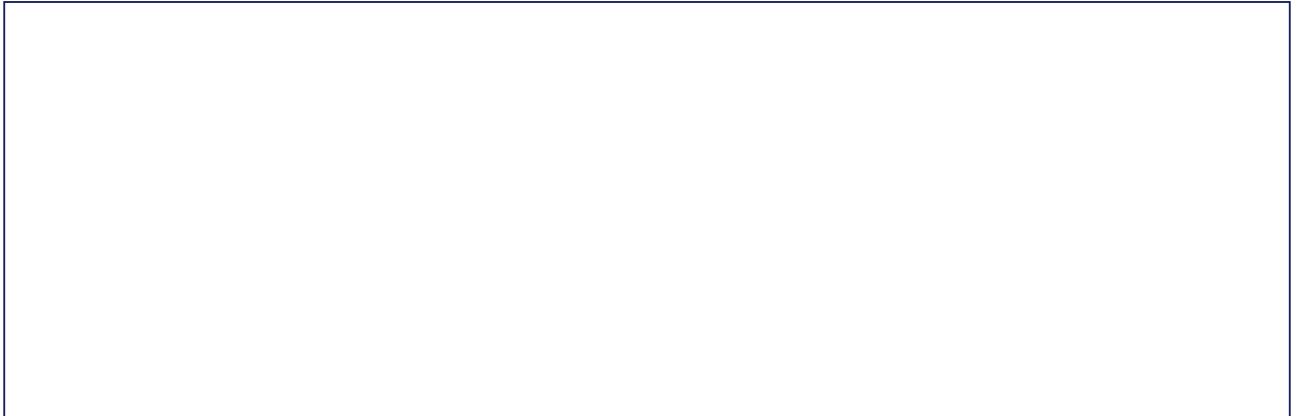
2. What is the primary reason why plants need to disperse their seeds away from the parent plant? (2 marks)

3. Why is the relationship between Bea the honeybee and the flowers described as helpful for the plants? (2 marks)

4. Based on the description of seed dispersal, why might a plant choose to grow a sweet, tasty fruit around its seeds? (2 marks)

5. Do you think the life cycle of a plant would be successful if there were no insects like Bea to help? Explain your reasoning. (3 marks)

Draw: Draw a diagram showing the life cycle of a flowering plant, including labels for pollination, seed dispersal, and germination.



Extension challenge: Research two different methods of seed dispersal, such as 'wind' and 'water', and write a short paragraph explaining how these methods work differently to help plants spread their seeds.