

Springtime Science with Bea the Bee

Learning objective: To understand the life cycle of plants and the role of pollinators during the spring season.

Read the passage below carefully and answer the questions that follow in full sentences.

As the days grow longer in spring, the natural world wakes up from its winter slumber. Bea the honeybee is busier than ever, buzzing from flower to flower as the temperature rises. This is a vital time for plant life cycles. Seeds that have been dormant in the soil begin the process of germination, using warmth and moisture to sprout tiny roots. Soon, vibrant blossoms appear, displaying bright petals designed to attract pollinators like Bea. Inside these flowers, the stamen produces pollen, which must travel to the carpel to fertilise the plant. Bea helps this process; as she drinks sweet nectar, golden pollen sticks to her fuzzy body and is carried to the next flower she visits. This clever teamwork ensures that plants can produce seeds for the next generation. Meanwhile, leaves are busy using sunlight to create energy through photosynthesis, helping the plant grow tall and strong. Spring is not just a beautiful season of colour; it is a complex, scientific marvel of growth, reproduction, and essential cooperation between plants and insects.

Word bank: pollination · germination · nectar · photosynthesis · sepal · stamen · carpel

1. According to the text, what two things do seeds need to begin the process of germination? (2 marks)

2. What part of the flower produces the pollen? (1 mark)

3. Why do you think flowers have evolved to have such bright petals? (2 marks)

4. How does the relationship between Bea and the flowers benefit both of them? (2 marks)

5. The author calls spring a 'scientific marvel'. Do you agree with this description? Explain your reasoning using evidence from the text. (3 marks)

Draw: Draw a diagram of a flower and label the stamen, the carpel, and the petals, showing Bea the bee visiting the flower.



Extension challenge: Research one other insect that acts as a pollinator and write a short paragraph explaining how it helps plants grow.