

Botanical Explorers: The Life Cycle of a Flowering Plant

Learning objective: To identify and describe the functions of different parts of flowering plants, including their role in the life cycle, such as pollination and seed dispersal.

Join Bea the Honeybee on a botanical expedition! Use your scientific observation skills to draw and label the anatomy of a flowering plant. Ensure your diagram is clear, accurate, and includes all the specific structures listed in the word bank.

Draw: Draw a large, detailed scientific diagram of a flowering plant in the center of your page. Use a sharp pencil to draw a cross-section of the flower, showing the stamen and carpel clearly. Surround the plant with a natural garden setting, including a small illustration of Bea the honeybee approaching the flower. Use a ruler to draw straight lines from your labels to the specific parts of the plant.



Label words: Roots · Stem · Leaves · Flower · Petals · Sepals · Stamen · Carpel

Steps:

1. Label your drawing to show which part of the plant is responsible for transporting water and nutrients from the soil to the leaves.
2. Explain why the petals of a flower are often brightly colored. How does this feature assist the plant in its life cycle?

3. Compare and contrast the function of the roots and the leaves. Why is the plant unable to survive if one of these parts is removed?
4. Justify your answer: If a plant was kept in a dark cupboard for two weeks, what might happen to its growth, and why?
5. What might happen to the reproduction process of a flowering plant if there were no insects like Bea to visit the flowers?
6. Describe the journey of a seed after it has been dispersed from the parent plant. What conditions are necessary for it to germinate?