Bea’s Botanical Garden: How Plants Grow

Learning objective: To understand the requirements of plants for life and growth and the functions of different parts of a plant.

Read the passage carefully, then answer the questions below. Use full sentences for your answers.

Bea the honeybee loves to buzz around the garden, observing how plants thrive. Every plant has a special job to do to stay healthy. The roots act like hidden anchors, keeping the plant steady in the soil while soaking up water and essential nutrients. Above the ground, the stem acts like a strong straw, transporting that water up to the leaves and flowers. The leaves are the plant’s solar panels; they capture sunlight to create energy, a clever process that helps the plant grow big and strong. Bea knows that plants have basic needs, just like us. They require sunlight, water, air, and space to spread their roots. Without these, a plant cannot complete its life cycle. Some plants grow from tiny seeds that need just the right amount of warmth to start their journey, a process known as germination. Once the plant is fully grown, it produces flowers to attract visitors like Bea. By moving from flower to flower, Bea helps the plant reproduce, ensuring that new seeds can be spread to grow even more beautiful plants next season.

Word bank: photosynthesis · nutrients · stems · germination · roots · pollination

1. According to the text, what are the two main jobs of the plant's roots? (2 marks)

2. What does the stem do to help the rest of the plant? (2 marks)

3. Why does the author compare leaves to 'solar panels'? (2 marks)

4. What might happen to a plant if it were kept in a dark cupboard with no light? (2 marks)

5. Do you think Bea is important to the garden? Explain your answer using evidence from the text. (2 marks)

Draw: Draw a diagram of a flowering plant and label the roots, stem, leaves, and flower. Draw Bea the honeybee flying nearby!

Extension challenge: Research what 'photosynthesis' means and write one sentence explaining how it helps a plant survive.