Grade 4 Science Assessment: The Life Cycle of Plants

Learning objective: To demonstrate understanding of plant life cycles, reproduction, and the functions of plant parts.

Read each question carefully. Use full sentences where required. Ensure your scientific vocabulary is accurate.

Bea the honeybee is busy visiting a meadow of wildflowers. As she lands on a bright petal, she brushes against the stamen, collecting yellow dust. She carries this to the next flower, helping the plant to reproduce. Meanwhile, Nova the owl watches from a nearby tree, observing how the seeds are scattered by the wind to grow in new places.

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

1. Name two ways that seeds can be dispersed, as mentioned or implied in the passage. (2 marks)

2. Explain the role of the stamen and the carpel in the process of plant reproduction. (3 marks)

3. What is the main purpose of the petals on a flowering plant? (2 marks)

4. Describe the process of germination. What conditions does a seed need to begin this process? (4 marks)

5. Max the monkey is looking at a plant and says it needs sunlight to make its own food. What is this process called, and where in the plant does it mainly happen? (3 marks)

6. If a packet of sunflower seeds costs £1.50 and you buy 4 packets, how much have you spent? If you have £10.00, how much change do you receive? (2 marks)

7. Write a short report (approx. 100 words) describing the full life cycle of a flowering plant. Include the following stages: pollination, fertilisation, seed formation, dispersal, and germination. (9 marks)

Draw: Draw a labelled diagram of a flowering plant. Clearly label the roots, stem, leaves, and the reproductive parts of the flower.

Extension challenge: Total: /25. Research task: Find out why some plants have evolved to have nectar. How does this benefit both the plant and the insect?