

Springtime Science Assessment: Life Cycles and Growth

Learning objective: To demonstrate an understanding of the life cycles of plants and animals, and how living things change as they grow during spring.

Read each question carefully. Use the word bank to help you with scientific terminology. Ensure your answers are clear and written in full sentences where required.

Spring is a season of rapid change in the natural world. As the temperature rises and daylight hours increase, plants begin to grow, and many animals begin their reproductive cycles. Bea the honeybee is particularly busy during this time, moving from flower to flower, while Nova the owl watches the woodland creatures emerge from their winter dormancy.

Word bank: germination · pollination · life cycle · reproduction · metamorphosis · sepal · stamen · embryo

1. Explain the process of germination in a seed. What two things does a seed usually need to start this process? (2 marks)

2. Bea the honeybee plays a vital role in the life cycle of flowering plants. Describe what happens during pollination. (3 marks)

3. Many insects, such as butterflies, undergo a complete change in their body form during their life cycle. What is the scientific term for this process? (2 marks)

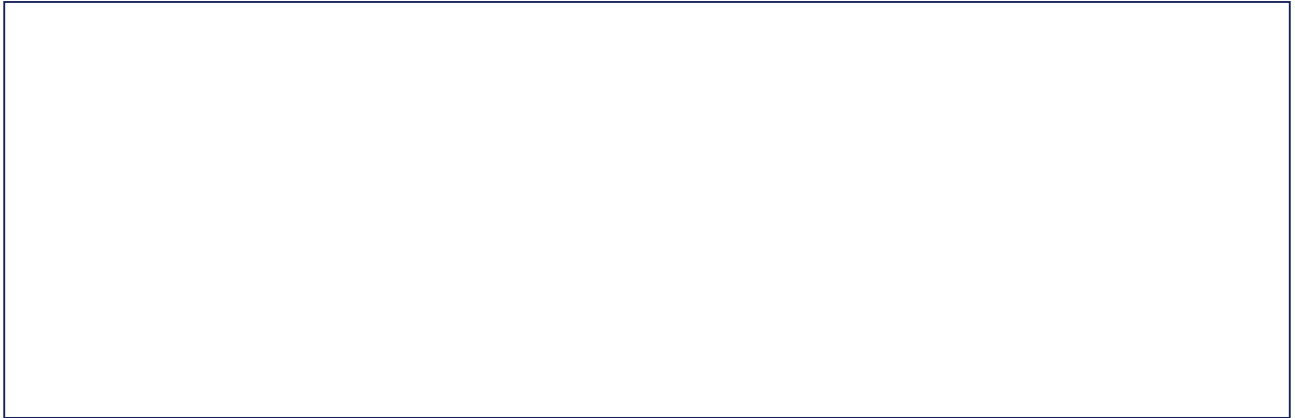
4. Compare the life cycle of a mammal (like a lion) to the life cycle of an amphibian (like a frog). Give one key difference in how they develop. (3 marks)

5. Nova the owl is observing a bird nesting in spring. Describe the stages of a bird's life cycle from the egg to an adult. (4 marks)

6. Explain why spring is the most common time for many animals to give birth or hatch their young. Consider the availability of food and the changing weather conditions. (6 marks)

7. A store sells packets of sunflower seeds for £1.50 each. If a class buys 5 packets to study plant growth, what is the total cost? (5 marks)

Draw: Draw and label a diagram showing the life cycle of a flowering plant, starting from the seed and ending with a mature plant that produces new seeds.



Extension challenge: Total: /25