

Nova's Guide to Life Cycles

Learning objective: To describe the differences in the life cycles of a mammal, an amphibian, an insect, and a bird.

Read the passage carefully and answer the questions below using full sentences.

Nova the owl is fascinated by how different creatures grow. She explains that all animals follow a life cycle, but the stages change depending on the species. Mammals, like the gentle lion, have young that are born live. The mother provides milk, and the offspring grow until they reach adulthood. In contrast, birds like Nova herself lay hard-shelled eggs in nests, keeping them warm until they hatch.

Amphibians follow a more complex path. They often start as jelly-like eggs in water, hatching into larvae that breathe through gills. As they grow, they undergo a transformation called metamorphosis, developing lungs to live on land. Insects have their own unique methods too. Some, like the honeybee, go through four distinct stages: egg, larva, pupa, and adult. Others, like grasshoppers, skip the pupa stage entirely. Whether it is a tiny insect or a large elephant, every animal must go through a life cycle to ensure their species continues. Nova loves watching these cycles in nature, noting how each stage is perfectly adapted to help the creature survive in its own habitat.

Word bank: metamorphosis · mammal · amphibian · gestation · reproduction · larva · nymph

1. According to the passage, what are the four stages of a honeybee's life cycle? (2 marks)

2. How do mammals and birds differ in how they bring their young into the world? (2 marks)

3. Why do you think amphibians need to undergo metamorphosis to move from water to land? (2 marks)

4. Based on the text, what is the main difference between the life cycle of a grasshopper and a honeybee? (2 marks)

5. Nova says every life cycle is 'perfectly adapted'. Do you agree that all life cycles are equally successful? Explain your reasoning. (3 marks)

Draw: Draw a diagram showing the life cycle of an amphibian or an insect. Label the different stages clearly as Nova would do in her notebook.



Extension challenge: Research one animal not mentioned in the text (such as a reptile or a fish). Write a short paragraph comparing its life cycle to the mammals mentioned by Nova.