

Year 5 - Science - Unit 4 - Living Things and their Habitats



Knowledge I already have

In Year 2. I:

- noticed that animals, including humans, have offspring which grow into adults.

In Year 3, I:

- explored the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.



Future Knowledge

In Year 5, I will learn:

- about reproduction in humans
- about reproduction in plants, including flower structure, wind and insect pollination, fertilisation, seed and fruit formation and dispersal, including quantitative investigation of some dispersal mechanisms.

New Knowledge

By the end of this unit, I will be able to:

- describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.
- describe the life process of reproduction in some plants and animals.







Scientific Enquiry

Research Using Secondary Sources

 I will use secondary sources and, where possible, first-hand observations to find out about the life cycle of a range of animals. I will present my understanding of the life cycles of different animals in different ways e.g. as a comic strip, a report, stop animation.

Pattern Seeking

- I will compare the gestation times for mammals and look for patterns e.g. in relation to the size of animal or length of dependency after birth.
- I will look for patterns between the size of an animal and its expected life span.

Observing Over Time:

- I will grow and observe plants that reproduce asexually e.g. strawberries, spider plants, potatoes. I will explain how plants reproduce asexually.

Key Ideas & Vocabulary

As part of their life cycle, plants and animals reproduce. Most animals

reproduce sexually. This involves two parents where the sperm from the male fertilises the female egg. Animals, including humans, have offspring which grow into adults. In humans and some animals, these offspring will be born live, such as babies or kittens, and then grow into adults. In other animals, such as chickens or snakes, there may be eggs laid that hatch to young which then grow to adults. Some young undergo a further change before becoming adults e.g. caterpillars to butterflies. This is called a metamorphosis.

Plants reproduce both sexually and asexually. Bulbs, tubers, runners

and plantlets are examples of asexual plant reproduction which involves only one parent. Gardeners may force plants to reproduce asexually by taking cuttings. Sexual reproduction occurs through pollination, usually involving wind or insects.

bulb	



A mass of food storage from which a plant grows.

cuttings



A plant section originating from the stem, leaf or root, capable of developing into a new plant.

fertilisation



A process needed for reproduction involving two animal or plant parents.

life cycle



A series of stages a living thing goes through in its life

metamorphosis



A process some animals go through to become adults (e.g. caterpillar to butterfly).

offspring



The young of a person, animal or plant. Some are born live, some hatch from eggs laid.

reproduction

The process by which living things produce offspring.