

Science – Living Things and Life Cycles – Spring Term 2

Prior Knowledge

- Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers.
- Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.

Key Vocabulary

Pollination	Pollination is the transfer of pollen from the anther of one flower to the stigma of another flower of the same species.
fertilisation	Fertilisation is the process of the male and female sex cells joining together.
Asexual reproduction	Asexual reproduction occurs when only one parent produces offspring that are nearly identical to the parent itself.
Sexual reproduction	Sexual reproduction occurs when two parents produce offspring that are similar to them but not identical
Living organism	Something that is alive is a living organism. It can move, use energy and reproduce.
Life cycle	The series of changes a living thing goes through from its beginning to its end is called its life cycle.
Metamorphosis	Metamorphosis is the process of a living thing completely changing in appearance from one stage of its life to the next.
monotreme	A monotreme is a mammal that lays eggs to reproduce.
marsupial	A marsupial mammal gives birth to partly developed young, which then mature in the mother's pouch.

Core Knowledge

- All living things have a life cycle – they are born, grow, reproduce and eventually reach the end of their lives. Reproduction happens when male and female sex cells join to create offspring. The life cycle can vary slightly between different species.
- Sexual reproduction in plants usually happens when the pollen from the anther of one flower reaches the stigma of another flower. It then travels to the ovary and joins with an ovule, forming a seed that can grow into a new plant.
- Asexual reproduction in plants happens when a parent produces new plants that are almost identical to itself, without the need for fertilisation. This can occur through bulbs, tubers or runners.
- Most mammals (including humans) are placental, meaning the foetus develops inside the body until it is ready to be born. However, some mammals are monotremes, which lay eggs, and others are marsupials, which carry their babies in a pouch after birth.
- Birds and most reptiles hatch from eggs.
- Amphibians and insects hatch from eggs and often go through metamorphosis, changing in appearance as they grow into adults.

Diagrams

