

Sithney C.P. School Knowledge Organisers



Science: Biology

Ecosystems: Living Things and their Habitats

What you should already know:

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

Key learning:

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.



Key Vocabulary:

Life cycle: This shows how organisms are born, how they grow and how they reproduce.

Reproduction: As part of their life cycle plants and animals reproduce. There is sexual and asexual reproduction.

Sexual Reproduction: Both the male and female are needed. Most animals reproduce sexually.

Asexual Reproduction: Only one parent is needed. This occurs mostly in plants and bacteria.

Metamorphosis: A major change from one form to another in the life cycle of some animals when they change from young to an adult.

Fertilisation: In animals: When the male sperm reaches the female egg. In plants: When the male pollen reaches the female ovule.

Germination: is usually the growth of a plant contained within a seed; it results in the formation of the seedling.

Pollination: The transfer of pollen grains from the male anther of a flower to the female stigma.

Tuber: A swollen underground stem or root of a plant from which new plants can grow.

Cutting: A piece, such as a roof, stem or leaf cut from a plant and used to grow another plant of the same type.

Bulb: A round root of some plants from which the plant grows.

Runner: A long stem of a plant that grows along the ground in order to put down roots in a new place.

