



Previous Knowledge from Year 4

Recognise that living things can be grouped in a variety of ways. Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. Recognise that environments can change and that this can sometimes pose dangers to living things.

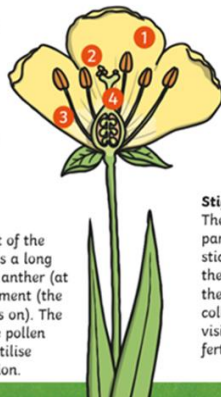
Parts of a Flower

Pollen

Pollen looks a bit like dust and is a bit sticky. It can be blown by the wind or moved around by insects within the same flower or to another flower. The flower makes pollen in the anther, which is the top part of the stamen – the male part of the flower.

Stamen

This is the male part of the flower. The stamen is a long part made up of the anther (at the top) and the filament (the 'stalk' the anther sits on). The stamen produces the pollen that then goes to fertilise plants for reproduction.



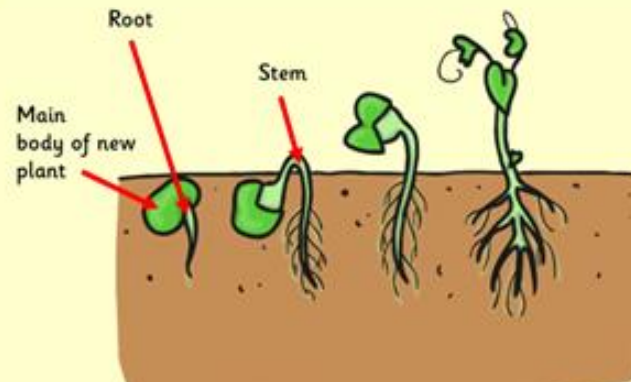
Petals

Petals make flowers look beautiful. They are brightly coloured to attract insects and bees to the flower in order to pollinate. Without the pollinators, new flowers could not be made.

Stigma

The stigma is the female part of the flower. It is the sticky part at the top of the pistil that stands up in the centre of the flower. It collects pollen from visiting insects, ready for fertilisation to happen.

Germination



The Life Cycle of a Bird

Independent adult usually seeks company from the opposite sex and mates.



Eggs are laid by the mother and the mother and father care for the egg until it hatches.



Mother and father feed the young bird until it is old enough to fly and find its own food.



Insects in Pollination

- Insects don't pollinate on purpose; it's just something that happens as they collect nectar from flowers to feed on. Insects are incredibly important when it comes to pollination. Here are some facts to prove it:
- 84% of crops in Europe are pollinated by insects. This is worth £12.6 billion a year.
- Honey bees account for 80% of all insect pollination.
- Nearly all chocolate relies on midges pollinating the cocoa plant, which might make them seem slightly less annoying!



The Life Cycle of an Insect (Incomplete Metamorphosis)

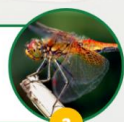
Eggs are laid by the female insect. Sometimes this is in water.



Egg hatches into a nymph. This varies depending on species. Nymph looks like small adult. In some cases, it lives in water.



The nymph grows into the adult form, sometimes shedding skin. Adults sometimes fly. Adult females lay eggs.



The tail disappears and it starts to eat insects instead of plants. It takes 2-4 years to become an adult, when it can lay eggs.



The female lays a mass of eggs which are fertilized by the male.



The tadpole grows front legs and its tail shortens. It uses nutrients in its tail as food. It jumps out of the water on to land.



After 2-25 days the tadpole hatches from the egg.



The tadpole grows fins and a stronger tail. Then, it develops lungs and hind legs.



It swims and eats plants. It breathes through gills.



When first hatched, the larva or nymphs of a Dragonfly, live in the water for around a year.

Did you know, a group of frogs is called an army



Key Vocab	
Amphibian	a cold-blooded vertebrate animal of a class that comprises the frogs, toads, newts, salamanders, and caecilians.
Asexual animals	Asexual reproduction is reproduction without mating. In this form of reproduction, a single organism or cell makes a copy of itself.
Birds	A bird is an animal with wings, feathers, and two legs. Birds, from chickens to crows, are also warm-blooded and lay eggs.
Differences	When two or more species have life cycles that are not the same
Germination	Germination is the process by which a plant grows from a seed.
Insect	Insects are creatures that have bodies with three segments that are protected by a hard shell. They have three pairs of legs and a pair of antennae. Most insects have two pairs of wings, too.
Mammals	Mammals include humans and all other animals that are warm-blooded vertebrates (vertebrates have backbones) with hair. They feed their young with milk and have a more well-developed brain than other types of animals.
Pollination	Pollination is the process that allows plants to reproduce. In some cases, the wind and rain blows pollen between plants, which causes pollen to transfer to the female reproductive part of the plant
Reproduction	The Biological process by which new individual organisms – “offspring” – are produced from their parents.
Sexual Life Cycles	A life cycle is a series of stages a living thing goes through during its life.
Similarities	The word similarities means the comparison of 2 or more things that have something in common.
Stamen	the part of a flower that produces pollen and is made up of an anther and a filament.
Stigma	A stigma is a part of a flower that gets pollen from pollinators such as bees. The stigma is part of the female reproductive part of a flower,

Who is Jane Goodall?



Jane Goodall is a British scientist who has studied chimpanzees for many years.

She is considered to be the world expert on chimpanzees and their behaviour.

Goodall was born in 1934 in London. When she was a child, her father gave her a chimpanzee toy, which began her lifelong love of animals.

She found that the chimpanzees had strong family bonds that would last for the whole of the chimpanzees' lives. She observed family members hugging, kissing, patting each other on the back, and even tickling each other!