#### Knowledge Organiser L

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Glossary				
1	anther	the part of the stamen that contains the pollen of a flowering plant		
2	asexual	not requiring both reproductive organs		
3	conception	the initial development of an embryo or young		
4	domains	three groups of organisms		
5	fertilising	the action of combining male and female gametes		
6	gametes	either a female or male cell in both plants and animals		
7	gestation	the period between conception and birth		
8	grafting	inserting a twig or shoot as a graft		
9	invertebrate	an animal without a backbone		
10	kingdoms	four main groups of organisms: protists, fungi, plants and animals		
11	life cycles	the series of changes in an organism including reproduction		
12	organisms	an individual animal, plant, or single-celled life form		
13	ovule	the female cell in a plant		
14	pollination	the transfer of pollen from stamen to stigma, ovule or flower		
15	sexual	the involvement and fusion of both gametes		
16	species	a set of animals or plants with similar characteristics		
17	stamen	the part of the plant containing the pollen		
18	stigma	the part of a plant that receives the pollen		
19	vertebrate	an animal with a backbone		
20	viviparous	animals that give birth to live young		

## Who are Jane Goodall and David Attenborough?

Dr. Jane Goodall, born in 1934, ventured into the realm of the unknown at the age of 26. Gaining an understanding of our closest relatives the chimpanzees, Dr. Jane Goodall has not only shown us the urgent need to protect chimpanzees from extinction; she has also redefined species conservation.



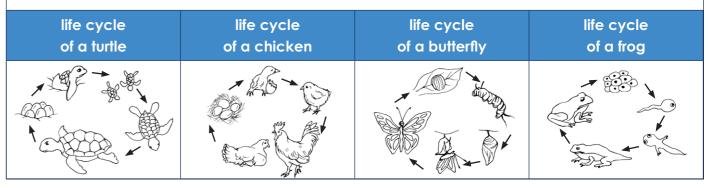
Born 8 years earlier-Sir David Attenborough is best well known for his fascinating TV series' about our world, animals and the environment we live in. As part of his very early TV series for the BBC, Attenborough used to collect animals and transport them to London Zoo. He soon realised that animals in nature was a lot better!



# Life cycles in animals, including gestation periods

Life cycles in animals varies depending on animal class (amphibian, fish, reptile, bird, mammal) but even further to some **species** — for example, some reptiles give birth to eggs, while others give birth to live young. Gestation is the time between conception and birth; in viviparous animals.

The length of **gestation** varies drastically among animals, with hamsters: 16-23 days up to elephants: 18-22 months! Invertebrates' life cycles vary drastically as well — between jellyfish to arthropods and worms to mollusks!



## **Pollination and Reproduction**

**Pollination** of plants happens in many ways: birds, bats, insect, wind, mammals and sometimes water.

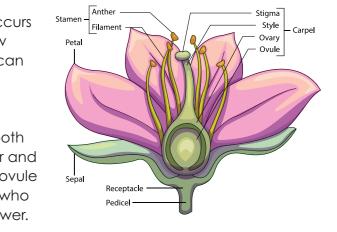
**Reproduction** can happen in two different ways: asexually and sexually. Asexual reproduction occurs when the parent plant is used to generate a new plant. Grafting, layering and **micropropagation** can be methods to achieve this.

#### What is inside a flower?

Most flowering plants have flowers which have both male and female parts. In this picture, the anther and stamen are male parts and the style, ovary and ovule are female parts. The petals help attract insects who move the pollen from this flower to a different flower.

	Types o	of
Flowering		
	Flowering plants produce, seeds, fruits and flowers. A flower's petals are mostly brightly coloured to attract insects and other animals for pollination.	





# plant

### Nonflowering



Nonflowering plants are divided into two main categories: those that reproduce with dust like particles called spores and those that use seeds to reproduce.