

Knowledge Organiser: Life Cycle

Key Vocabulary

adult	A fully grown animal or plant.
develop	To grow and become stronger.
life cycle	The changes living things go through to become an adult.
offspring	The child of an animal.
reproduce	When living things make a new living thing of the same kind.
young	Offspring that has not reached adulthood.
live young	Offspring that has not hatched from an egg.

All living things **reproduce** and have **offspring**.

Some animals give birth to **live young**. Their offspring normally look like them when they are born.

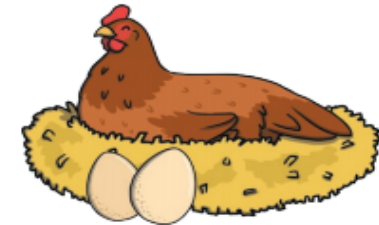


Other animals have offspring which do not look like them, e.g. fish and amphibians.

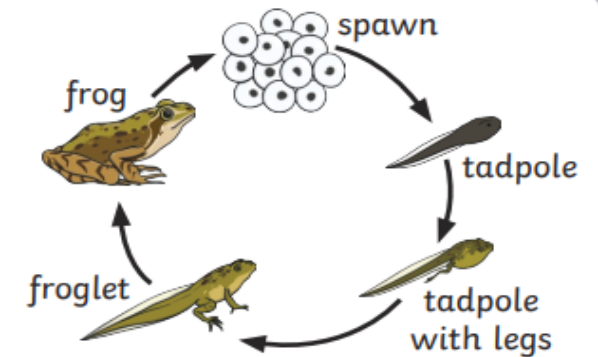
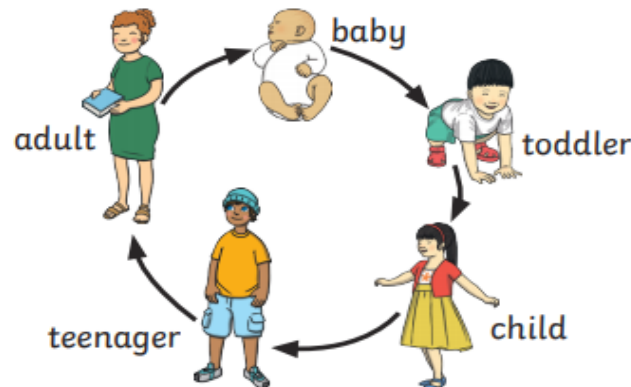


Some animals lay eggs which hatch into live young. This **young** then develops into an **adult**.

When these eggs hatch, some animals look like their adult, e.g. birds and reptiles.



All young animals change at different stages as they grow into adults.



Key Vocabulary

asexual reproduction	One parent is needed to create an offspring, which is an exact copy of the parent.
fertilise	The action of fusing the male and female sex cells in order to develop an egg.
gestation	The length of a pregnancy.
life cycle	The journey of changes that take place throughout the life of a living thing including birth, growing up and reproduction .
metamorphosis	An abrupt and obvious change in the structure of an animal's body and their behaviour.
pollination	The transfer of pollen to a stigma to allow fertilisation .
reproduction	The process of new living things being made.
sexual reproduction	Two parents are needed to make offspring which are similar but not identical to either parent.

Humans develop inside their mothers and are dependent on their parents for many years until they are old enough to look after themselves.



Amphibians such as frogs are laid in eggs then, once hatched, go through many changes until they become an adult.



Some animals, such as butterflies, go through **metamorphosis** to become an adult.



Birds are hatched from eggs and are looked after by their parents until they are able to live independently.



Some living things, such as plants, contain both the male and female sex cells. In others, such as humans, they contain either the male or female sex cell.

Reproduction in mammals

Mammals use **sexual reproduction** to produce their offspring.

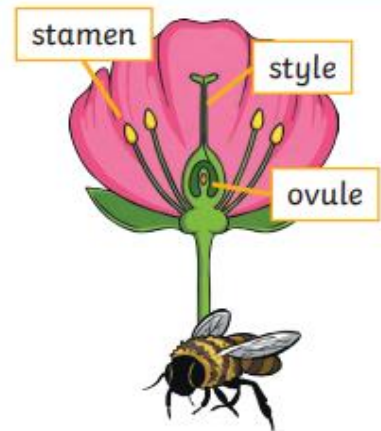
- The male sex cell, called the sperm, **fertilises** the female sex cells.
- The **fertilised** cell divides into different cells and will form a baby with a beating heart.
- The baby will grow inside the female until the end of the **gestation** period when the baby is born.



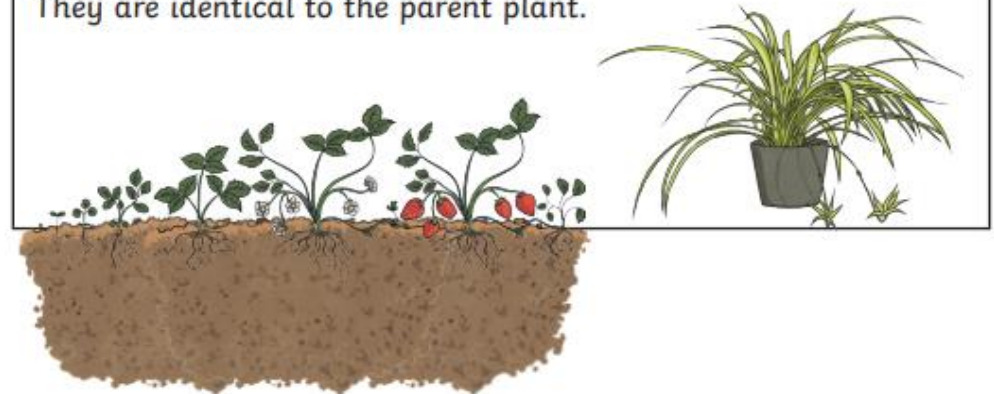
Echidnas and platypus are mammals but they lay eggs rather than giving birth to live young.

Plants

Most plants contain both the male sex cell (pollen) and female sex cell (ovules), but most plants can't **fertilise** themselves. Wind and insects help to transfer pollen to a different plant. The pollen from the stamen of one plant is transferred to the stigma of another. The pollen then travels down a tube through the style and fuses with an ovule.



Some plants, such as strawberry plants, potatoes, spider plants and daffodils use **asexual reproduction** to create a new plant. They are identical to the parent plant.

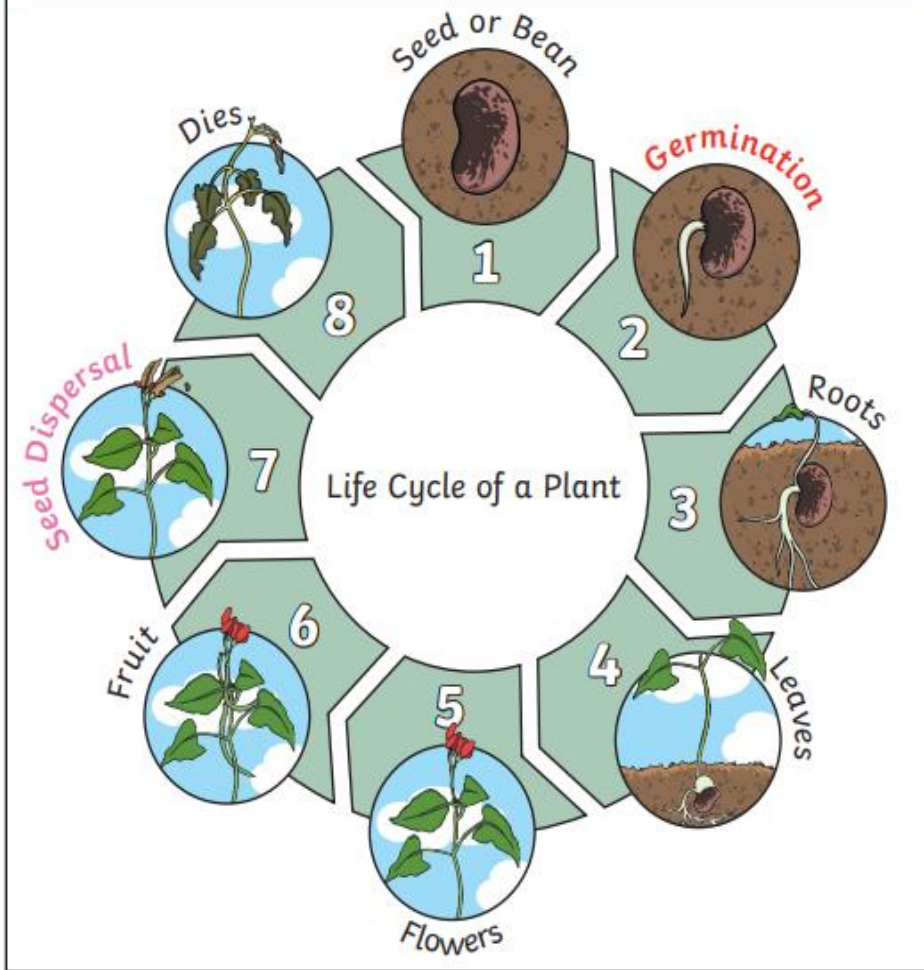


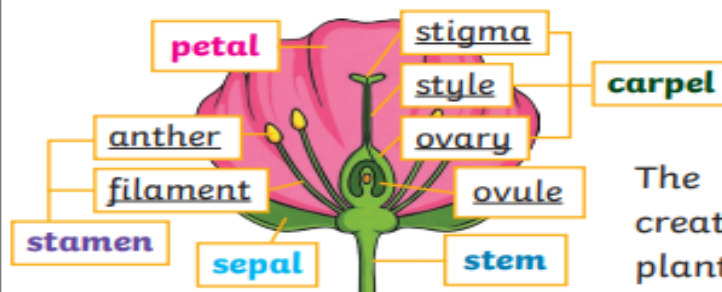
Key Vocabulary

germination	When the conditions are right, the seed soaks up water and swells, and the tiny new plant bursts out of its shell. This is called germination .
sprout	When a plant sprouts , it grows new shoots .
shoot	A shoot grows upwards from the seed or plant to find sunlight .
seed dispersal	Seed dispersal is when the seeds move away from the parent plant. They can be moved by the wind or animals.



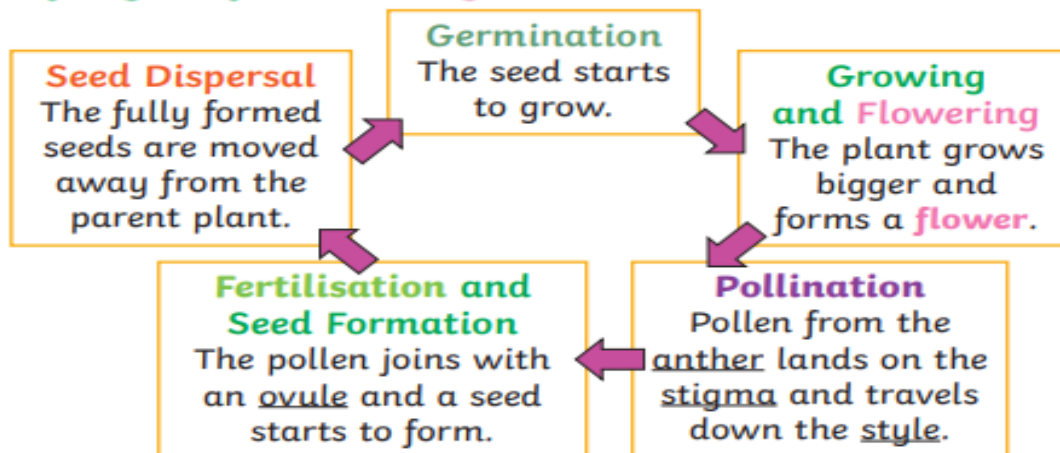
Key Knowledge





The **flower's** job is to create seeds so that new plants can be grown.

Life Cycle of a Flowering Plant



Seed Dispersal

Seeds can be dispersed by:

