
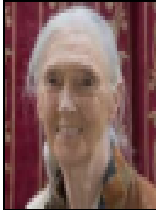




Year 5 - Living Things and Habitats

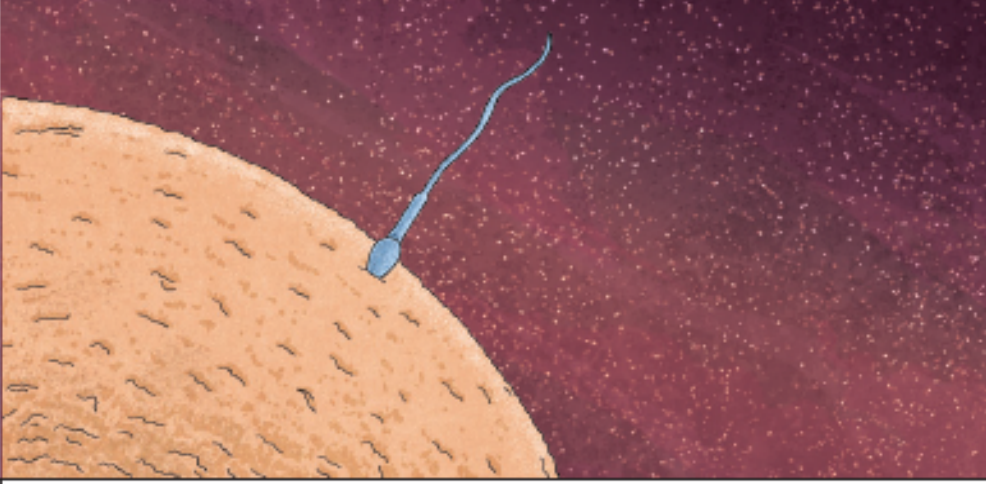
Key Vocabulary	
asexual reproduction	One parent is needed to create an offspring, which is an exact copy of the parent.
fertilise	The action of fusing the male and female sex cells in order to develop an egg.
gestation	The length of a pregnancy.
life cycle	The journey of changes that take place throughout 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.

Naturalists and Animal Behaviourists	
Naturalists	Animal Behaviourists
A natural scientist, or naturalist, studies animals and plants by observation, rather than by experimenting.	Animals behaviourists make scientific studies of everything that animals do, from observations to experimentation.
One example of a naturalist is Sir David Attenborough, who is known for presenting information and findings about animals through innovative and engaging television programmes.	One example of an animal behaviourist is Dr Jane Goodall, who is best known for her 55-year study of the behaviour of chimpanzees. She is the founder of a conservation institute.
Other naturalists include: -Charles Darwin -Alfred Russel Wallace -Steve Irwin	Others include: -Karl von Frisch -Konrad Lorenz -Nikolaas Tinbergen.
	

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.

Plant Life Cycles


Plants are able to reproduce in two ways – **sexual reproduction** and **asexual reproduction**.

Sexual reproduction in plants is cyclical, following this process:

- Germination** -The plant begins to grow from a seed. Roots form under the soil and a stem, leaves and flower shoots above the surface.
- Pollination** – Pollen produced by the flower is carried by insects or blown by the wind to another flower.
- Fertilisation** – The pollen reaches another flower and makes its way to the ovary, where it is fertilised.
- Dispersal** – The seeds are scattered by animals or the wind.

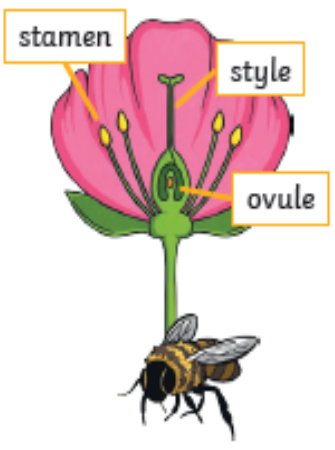
Asexual reproduction involves plants producing an identical copy of themselves.

This can happen in a number of different ways. Some plants are able to produce bulbs (e.g. daffodils and snowdrops). Others, like potatoes produce tubers. Tubers lie below the soil, and grow into plants the next year.

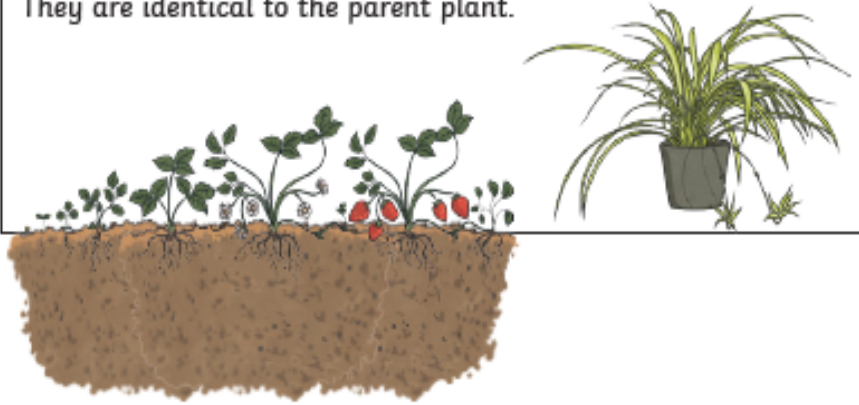


Plants


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.



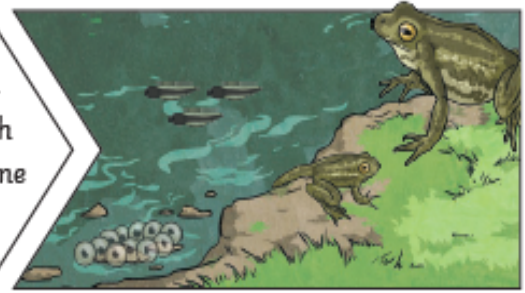
Some plants, such as strawberry plants, potatoes, spider plants and daffodils use **asexual reproduction** to create a new plant. They are identical to the parent plant.




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.

