

Key Vocabulary	
asexual reproduction	One parent is needed to create an offspring, which is an exact copy of the parent.
sexual reproduction	Two parents are needed to make offspring which are similar but not identical to either parent.
reproduction	The process of new living things being made.
life cycle	The journey of changes that take place throughout the life of a living thing including birth, growing up and reproduction .
germination	The stage where a plant begins to emerge from a seed.
pollination	The transfer of pollen to a stigma to allow fertilisation.
flower	The (typically) attractive part of a plant that contains seeds where pollination takes place.
seed dispersal	The spreading of seeds from a plant so that it can grow elsewhere.
bird	A warm-blooded animal with wings that lays eggs and has feathers.
amphibian	A cold-blooded animal that lives in water when young but breathe air when adults.
mammal	A vertebrate animal that typically has live babies, breathes air and has hair or fur.
insect	A small creature, typically with a hard exoskeleton, six legs and wings.
larva	The young form of an insect that usually looks different to an adult.
pupa	The stage of an insect when it is between being a larva and an adult, this is usually when the insect is hibernating.

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** (a big change) 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.



Famous environmentalists

David Attenborough is a British environmentalist, meaning he uses much of his time trying to protect the environment and the natural world. Attenborough has been a television presenter for many decades, and has taught generations of people about nature.

Famous environmentalists

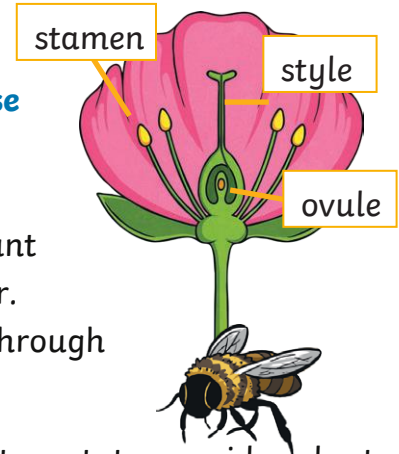
Jane Goodall is an environmentalist who has spent her life living with and helping chimpanzees. She has won awards for her work in protecting animals and caring for wildlife.



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 Questions:

1. What is the difference between a bird and an amphibian?
2. Can you name the three main stages of an insect's life cycle?
3. What is an environmentalist?
4. What is the purpose of a flower?
5. How does pollen travel from one plant to another?