

Prior Learning to Reactive

- Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal (Year 3)
- Notice that animals, including humans, have offspring which grow into adults (Year 2)

Scientific Skills

Observing and comparing the life cycles of plants and animals in their local environment with other plants and animals around the world (in the rainforest, in the oceans, in desert areas and in prehistoric times), asking pertinent questions and suggesting reasons for similarities and differences

Comparing how different animals reproduce and grow/

Observing changes in an animal over a period of time (for example, by hatching and rearing chicks)

Trying to grow new plants from different parts of the parent plant, for example, seeds, stem and root cuttings, tubers, bulbs.

Key vocabulary

Anther	The part of the stamen that produces and re-lease the pollen
Filament	The slender part of a stamen that supports the anther
Dissect	To carefully cut something up in order to examine it.
Stigma	The part of the flower that receives pollen during pollination
Stamen	The male fertilizing organ of a flower, typically consisting of a pollen-containing anther and a filament
Embryo	An unborn animal or human being at the very early stages
Fertilisation	The act of fusing the male and female sex cells in order to develop an egg
Gamete	The name for the two types of male and female cell that join together to make a new creature.
Metamorphosis	An abrupt and obvious change to the structure of an animal's body and its behaviour

Key learning

Mammals, amphibians, birds and insects all have different life cycles.

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

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

Insects go through a more dramatic change in their life cycle as they experience either complete or incomplete metamorphosis to become an adult.

The mammalian life cycle begins when a male's sperm cell fertilizes a female's egg. They grow inside their mother and are born live. Once born, they continue to grow and develop until adulthood.

Plants reproduce either sexually or asexually. In sexual reproduction, 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. Wind and insects help to transfer pollen to a different plant.

Some plants such as strawberry plants, potatoes, spider plants and daffodils use asexual reproduction through bulbs, runners or tubers. The new plant is identical to the parent plant.

