

Year 5 Science - Biology - Investigate living things

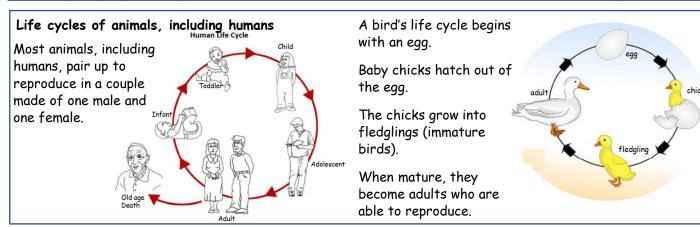


What should I already know?

- I can identify and name a variety of common animals that are birds, fish, amphibians, reptiles, mammals and invertebrates and compare their structures.
- I know that animals, including humans, have offspring that grow into adults.
- I can identify and name a variety of common wild and garden plants.
- I can describe the basic structure of a variety of common flowering plants, including trees.
- I know how seeds and bulbs grow into mature plants.

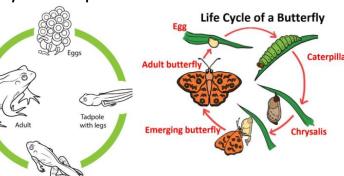
Key facts: All living things need to reproduce to ensure that their species does not die out.

The way living organisms grow and behave in the time between birth and death is a called a life cycle.



Life cycles of amphibians and insects

- Amphibians, such as a frog's life cycle starts with eggs called frogspawn.
- They hatch into tadpoles, which start to develop legs.
- The tadpoles grow into froglets with four legs that can breathe air.
- The froglets grow into adult frogs with no tail.



- A butterfly starts life as an egg, which hatches into a caterpillar.
- Eventually the caterpillar forms a chrysalis.
- Inside the chrysalis, it undergoes metamorphosis.
- It emerges as an adult butterfly.

 Both animals go through metamorphosis.

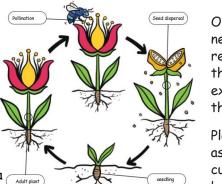
Key vocabulary	
Life cycle	A series of changes that an animal or plant goes through from the beginning of its life until its death.
Life processes	There are seven life processes that tell us that living things are alive.
Reproduction	When an animal or plant produces one or more offspring similar to itself.
metamorphosis	Metamorphosis is a process some animals go through to become adults. It is a series of physical changes.
pollination	A transfer of pollen to a flower or plant to allow fertilisation.
Sexual reproduction	A process which involves a female and male parent to produce offspring.
Asexual reproduction	Only one parent is needed to reproduce offspring. These offspring are exact copies of their parent.
Organism	An individual living thing.

Sexual and asexual reproduction

Complex life forms such as humans, reptiles, and mammals reproduce sexually.

Plants can reproduce sexually and asexually.

Sexual reproduction in plants involves pollen from one flower fertilising the egg of another to produce a seed, through pollination.



Only one parent is needed in asexual reproduction and the offspring are exact copies of their parent.

Plants can reproduce asexually through cuttings, tubers, bulbs and runners.