

# Living things and their habitats

## Year 5 Science Summer

### What we should know at the end of the unit:

There are differences in the life cycles of a mammal, an amphibian, an insect and a bird.

The life process of reproduction in some plants and animal is different.

Mammals have a three stage life cycle: the gestation period, grows and develops independence and the adults mate to reproduce.

Many amphibians have a five stage life cycle, e.g. the frog: the female lays eggs fertilised by the male, breathes in water through gills, grows fins and develops lungs, grow front legs and can breathe out of the water, and starts to eat insects and plants.

Most insects have a four stage life cycle: eggs laid by female insect, eggs hatch into lava, the pupa is formed and the adult breaks out of the pupa and matures.

Birds have a three stage life cycle: eggs laid by the mother and cared for until hatching, the bird is fed until independent and the adult mates to reproduce.

### What we are going to learn (LOs):

To compare the life cycles of different animals.

To define what a mammal is and describe its life cycle.

To define an amphibian and describe its life cycle.

To define what insects are and describe the different types of life cycle, including the process of metamorphosis.

To define what a bird is and describe its life cycle.

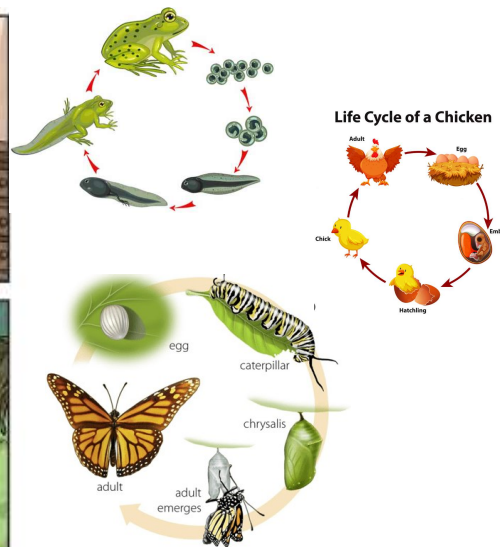
### Key vocabulary

<b>Life cycle</b>	the stages a living thing goes through in its life
<b>Reproduction</b>	the process by which a living organism creates a likeness to itself
<b>Asexual reproduction</b>	offspring gets genes from one parent so they are clones of their parents
<b>Sexual reproduction</b>	offspring get genes from both parents so they inherit a mix of features from both
<b>Genes</b>	carry information that determine your traits (features and characteristics)
<b>Offspring</b>	a person's child or children
<b>Inherit</b>	receive from one's parents
<b>Amphibian</b>	a cold-blooded vertebrate animal e.g. frogs, toads, newts
<b>Mammal</b>	a warm-blooded vertebrate animal, has hair or fur and give birth to live young.

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

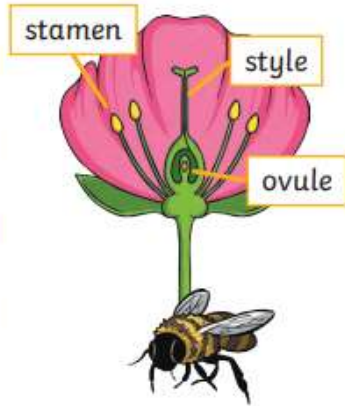


Amphibians such as frogs are laid in eggs then, once hatched, go through many changes until they become an adult.



## 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.



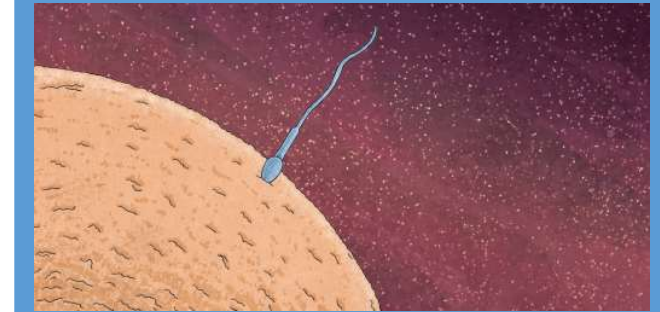
Some plants, such as strawberry plants, potatoes, spider plants and daffodils use **asexual reproduction** to create a new plant. They are identical to the parent plant.



## REPRODUCTION IN ANIMALS

For most animals which live on the land, offspring are fertilised inside the mother's body. This happens in 1 of 3 ways:

- 1) The young develop inside the female and are born alive (most mammals).
- 2) Fertilised eggs are laid outside the female's body and develop in the egg getting nourishment from the yolk.
- 3) In some animals the eggs are held within the female and hatch as they are laid e.g. a fruit fly.



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.

