

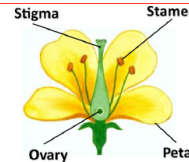
Key Vocabulary

Word	Definition
behaviourist	someone who studies animal behaviour: how they learn from their environment, rather than emotions or feelings.
naturalist	an expert in, or a student of, natural history.
seed dispersal	it is the way seeds get from the parent plant to a new place.
stigma	the stigma is the area where pollen is received.
stamen	the stamen is the part of the flower that produces pollen. There are two main parts of the stamen: the filament and anther.
life processes	there are seven life processes that every living thing has in common.
asexual reproduction	offspring obtain all of their information from just one individual (one parent).
pollination	the transference of pollen to a flower, or plant to allow fertilisation. Happens in sexual reproduction
life cycles	the series of changes that an animal or plant goes through from the beginning to the end of its life.
root	the part of a plant which attaches it to the ground. It transfers water and nutrients to the rest of the plant.
germination	the development of a plant from a seed or spore after a period of dormancy.

Plants

Sexual reproduction of a plant

- The **stamen** is the male part of the flower which holds pollen
- The **carpel** is the female part of the flower which contains eggs.
- **Pollen travels from the anthers of one flower to the stigma of another plant.** This is called **pollination**. Plants rely on bees or other insects to carry their pollen while some pollen floats in the wind.
- After pollination, the **pollen grain and the egg join together, fertilisation.**
- **The fertilised egg will develop into a seed.**



Asexual reproduction of a plant

Plant cuttings: Some plants **stems can grow roots if they are planted in the correct conditions, such as geraniums.** This allows for people to make lots of copies of the same plant.

Runners: Some plants, like strawberry plants, **grow runners which have new plants on the end. These plants are an exact copy of the parent plant from which they have grown.**

Bulbs: Other plants (onions, daffodils, garlic and tulips) **produce bulbs which will grow if they are planted. The bulbs form under the soil.** This helps the plant to survive during the winter months!

Knowledge and Skills

Knowledge:

I know that different living things have different life cycles

I know what a life cycle is, the concept of the stages of life.

I know the differences between the life cycles of a mammal, amphibian, an insect and a bird.

Skills:

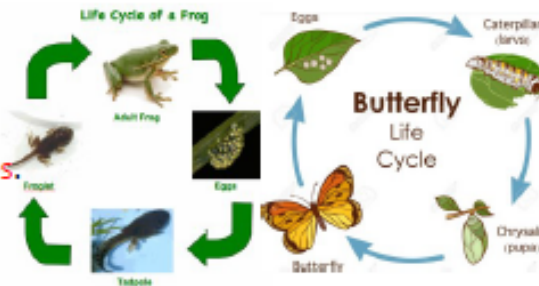
I can give examples and explain different types of life cycles and key words such as metamorphosis

I can identify the life cycles of a mammal, amphibian, an insect and a bird and explain how they vary

I can observe and predict the stages of varied life cycle

Life cycles of animals

Frogs start off life as a mass of eggs called **frogspawn**. The eggs then hatch into **tadpoles**. They then gradually grow a **set of back legs, and front legs**. They **lose their gills, and their tail shrinks**.



Both animals go through **metamorphosis**.

A butterfly starts its life as an **egg**, which hatches into a **caterpillar**. Eventually, the caterpillar **forms a chrysalis**. Inside the **chrysalis, it undergoes metamorphosis**, before emerging as an **adult butterfly**.

Key questions

What is noticeable between the life cycles?

Living things go through how many processes?

Is there a difference between metamorphosis and changes in the body?

How do flowers reproduce?