

**Key Concepts**

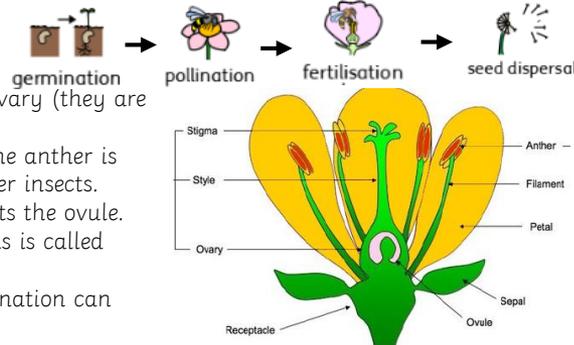
**Key Vocabulary**

What is reproduction?

Reproduction is when an animal or plant produces one or more individuals similar to itself:  
**Sexual reproduction:** requires two parents with male and female gametes (cells) will produce offspring that is similar to but not identical to the parent.  
**Asexual reproduction:** will produce offspring that is identical to the parent requires only one parent.

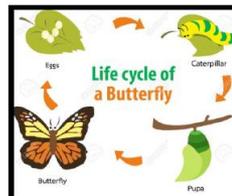
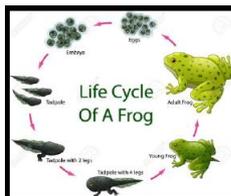
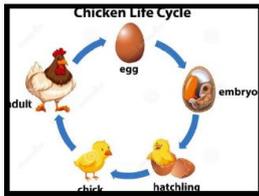
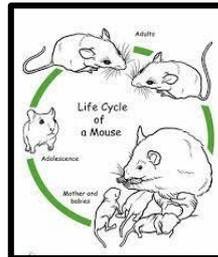
What is the life cycle of a plant?

- Male gametes can be found in the pollen.
- Female gametes can be found in the ovary (they are called ovules).
- Pollination occurs when pollen from the anther is transferred to the stigma by bees and other insects.
- The pollen then travels down and meets the ovule. When this happens, seeds are formed - this is called fertilisation.
- Seeds are then dispersed so that germination can begin again.
- Some plants, such as daffodils and potatoes, can also produce offspring using asexual reproduction



What are the life cycles of other living things?

- The life cycles of mammals, birds, amphibians and insects have similarities and differences.
- One difference is that amphibians and insects go through the process of metamorphosis. This is when the structure of their bodies changes significantly as they grow (for example, from tadpole to frog or caterpillar to butterfly).



anther	the part of a stamen that produces and releases the pollen
bulb	a root shaped like an onion that grows into a flower or plant
cell	the smallest part of an animal or plant that is able to function independently
dispersed	scattered, separated, or spread through a large area
dissect	to carefully cut something up in order to examine it scientifically
embryo	an unborn animal or human being in the very early stages of development
fertilisation	male and female gametes meet to form an embryo or seed
flowering	trees or plants which produce flowers
gamete	the name for the two types of male and female cell that join together to make a new creature
germination	if a seed germinates or if it is germinated, it starts to grow
Life cycle	the series of changes that a living thing passes through from the beginning of its life until its death
metamorphosis	a person or thing develops and changes into something completely different
ovary	a female organ which produces eggs
pollination	To pollinate a plant or tree means to fertilise it with pollen.
reproduction	when an animal or plant produces one or more individuals similar to itself
stigma	the top of the centre part of a flower which takes in pollen

**Working Scientifically Skills**

	Using Scientific knowledge to ask questions.		Recognising when to use other sources to answer questions, separating opinion from fact.
	Using scientific language to draw conclusions		

**Famous Scientists**



Dr George McGavin (1954 – ) a British entomologist, author, academic, television presenter and explorer. His research has taken him from the tropical forests of Papua New Guinea to the caves of Thailand. Dr George McGavin has several insect species named in his honour and hopes they survive him.