

Science Knowledge Organiser



Topic: Living things – Life Cycles and Reproduction

**Year 5:
Summer Term**

Strand: Biology

What should I already know?

- That living things can be grouped in a variety of ways
- Classification keys help to group, identify and name a variety of living things in their local and wider environment
- Environments can change and that this can sometimes pose dangers to living things.

Key vocabulary

life cycle	This shows how things are born, how they grow and how they reproduce.
reproduction	As part of their life cycle plants and animals reproduce. There is sexual and asexual reproduction.
sexual reproduction	Both the male and female are needed. Most animals reproduce sexually.
asexual reproduction	Only one parent is needed. This occurs mostly in plants and bacteria.
fertilise	In animals: When the male sperm reaches the female egg. In plants: When the male pollen reaches the female ovule.
metamorphosis	A major change from one form to another in the life cycle of some animals when they change from young to an adult.
runner	A long stem of a plant that grows along the ground in order to put down roots in a new place.
bulb	A round root of some plants from which the plant grows.
cutting	A piece, such as a roof, stem or leaf cut from a plant and used to grow another plant of the same type.
tuber	A swollen underground stem or root of a plant from which new plants can grow.

Life cycles of animals

Mammal	
<ul style="list-style-type: none"> - female gives birth to young - Live young are born - young looks like adult - female provides milk for young 	<p style="text-align: center;">the life cycle of a cat</p>
Amphibian	
<ul style="list-style-type: none"> - eggs laid in water - young go through different form before looking like adult - no parental care 	
Insect	
<ul style="list-style-type: none"> - egg laid and then hatch - some grow to adult but most go through metamorphosis to adult 	
Bird	
<ul style="list-style-type: none"> - eggs laid in a nest - young hatches from an egg - grow to adult - parental care after hatching 	<p style="text-align: center;">Life Cycle of a Bluebird</p>

Plants reproduce both sexually and asexually

<p>Sexual reproduction occurs through pollination usually involving wind or insects.</p>	<p>E.g. lily, apple tree, tomato</p>
<p>Asexual reproduction involves only one parent using bulbs, tubers, runners and cuttings.</p>	<p>E.g. spider plant, potato, strawberry</p>