Year 5 Living things and their environment (Biology)





Prior Knowledge	What's next?
 Recognise that living things can be grouped in a variety of ways. Explore and use classification keys to help group. Identify and name a variety of living things in their local and wider environment. Recognise that environments can change and that this can sometimes pose dangers to living things. 	 Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. Describe the life process of reproduction in some plants. Describe the life process of reproduction in some animals.

Track your learning

How I will show what I have learned	<u></u>	•	
I can describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.			
I can describe the life process of reproduction in some plants.			
I can describe the life process of reproduction in some animals.			

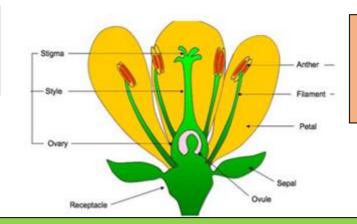
Key knowledge I need to understand

- As part of their life cycle, plants and animals reproduce. Most animals reproduce sexually. This
 involves two parents where the sperm from the male fertilises the female egg. Animals, including
 humans, have offspring which grow into adults. In humans and some animals, these offspring will be
 born live, such as babies or kittens, and then grow into adults. In other animals, such as chickens or
 snakes, there may be eggs laid that hatch to young which then grow to adults. Some young undergo
 a further change before becoming adults e.g. caterpillars to butterflies. This is called a
 metamorphosis.
- Plants reproduce both sexually and asexually. Bulbs, tubers, runners and plantlets are examples of asexual plant reproduction which involves only one parent. Gardeners may force plants to reproduce asexually by taking cuttings. Sexual reproduction occurs through pollination, usually involving wind or insects.

Possible texts to read:

Mummy laid an egg – *Babette Cole*The Land of Neverbelieve – *Norman Messenger*

Scientist: James Brodie (Reproduction of plants by spores)



Working scientifically assessment: Life cycles, growth survey

Link to maths curriculum:

Statistics:

• Constructing tables to record a range of data about the life cycles of animals from the same vertebrate group .(Compare, read and interpret information in tables, including timetables).

	Vocabulary		
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		
flower	the part of a plant which is often brightly coloured and grows at the end of a stem		
flowering	trees or plants which produce flowers		
function	a useful thing that something does		
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 an animal or plant passes through from the beginning of its life until its death		
mature	When something matures, it is fully developed		
metamor- phosis	a person or thing develops and changes into something completely different		
ovary	a female organ which produces eggs		
ovule	a small egg		
petal	thin coloured or white parts which form part of the flower		
plant	a living thing that grows in the earth and has a stem, leaves, and roots		
pollen	a fine powder produced by flowers . It fertilises other flowers of the same species so that they produce seeds		
pollination	To pollinate a plant or tree means to fertilise it with pollen . This is often done by insects		
reproduction	when an animal or plant produces one or <u>more_individuals</u> similar to itself		
seed	the small, hard part from which a new plant grows		
stigma	the top of the centre part of a flower which takes in pollen		
structure	the way in which something is built or made		