# Year 6 - Spring 1

# **Fight for Survival**

# **Knowledge Mat**

# **Topic Vocabulary**

offspring - The young animal or plant that is produced by the reproduction of that species

inheritance - This is when characteristics are passed on to offspring from their parents

variations - The differences between individuals within a species

**characteristics** - The distinguishing features or qualities that are specific to a species

**adaptation** - An **adaptation** is a trait (or **characteristic**) changing to increase a living thing's chances of surviving and reproducing

habitat - Refers to a specific area or place in which particular animals and plants can live

environment - An environment contains many habitats and includes areas where there are both living and nonliving things

evolution - Adaptation over a very long time

**natural selection** - The process where organisms that are better adapted to their **environment** tend to survive and produce more offspring

fossil - The remains or imprint of a prehistoric plant or animal, embedded in rock and preserved

adaptive traits - Genetic features that help a living thing to survive

**inherited traits** - These are traits you get from your parents. Within a family, you will often see similar traits, e.g. curly hair

Enquiry Question: Is life for all a 'fight for survival'?

## **Key Knowledge**

#### Offspring

Animals and plants produce offspring that are similar but not identical to them. Offspring often look like their parents because features are passed on.



#### Variation

In the same way that there is variation between parents and their **offspring**, you can see variation within any species, even plants.



### **Adaptive Traits**

**Characteristics** that are influenced by the environment the living things live in. These adaptations can develop



as a result of many things, such as food and climate.

# **Inherited Traits**

Eve colour is an example of an inherited trait, but so are things like hair colour, the shape of your earlobes and whether or not you can smell certain flowers.



# **Habitats**

A good habitat should provide shelter, water, enough space and plenty of food.



### Animals that have adapted to their habitat...

1	Living Things		Habitat		Adaptive Traits
1	polar bear		arctic		Its white fur enables it to camouflage in the snow.
	camel	W)	desert		It has wide feet to make it easier to walk in the sand.
	cactus	W	desert		It stores water in its stem.
	toucan	7	rainforest		Its narrow tongue allows it to eat small fruit and insects.

### **Environments**

There are many types of environment around the world. Polar regions, deserts, rainforests. oceans, rivers, and grasslands are all environments.



CLENCA

**Evolution** is the gradual process by which different kinds of living organism have developed from earlier forms over millions of years. Scientists have proof that living things are continuously **evolving** - even today!

**Fossils** are the preserved remains, or partial remains, of ancient animals and plants. Fossils let scientists know how plants and animals used to look millions of years ago. This is proof that living things have **evolved** over time.

# **Natural Selection**

**Fossils** of giraffes from millions of years ago show that they used to have shorter necks. They have gradually evolved through **natural selection** to have longer necks so that they can reach the top leaves on taller trees.



Previous Links You have already learnt about habitats in Years 1 & 2 through to finding out about food chains and life cycles of plants in Years 3 & 4! In Year 5, you have already discovered the different environments explorers have braved as well as looking at the animals and plants that live in those climates. This topic takes all of that previous learning and delves even deeper into the evolution of the animals and plants you've learnt about!

