

Year 6 Evolution and Inheritance Knowledge Organiser

Key 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	a trait or characteristic changing to increase a living thing's chance of surviving and reproducing
habitat	a specific area of place which particular animals and plants live
environment	contains many habitats and includes areas where there are both living and non-living 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 a 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 familiar traits

Key knowledge:

- ✓ Animals and plants produce offspring that are not similar but not identical to them. Offspring can look like their parents because features are passed on
- ✓ Variation can be seen between parents and offspring, but also in a number of other species – like plants
- ✓ Characteristics are influenced by the environment that living things live in. Adaptations develop as a result of these environments – food and climate, for instance
- ✓ A good habitat will provide shelter, water, enough space and plenty of food
- ✓ There are many different environments around the world (polar, rainforest, desert, oceans, rivers, grasslands). All living things will adapt in order to survive in these environments
- ✓ Fossils let scientists know how plants and animals used to look millions of years ago. They are proof that living things have evolved over time
- ✓ Evolution is a gradual process that happens over millions of years

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



Key questions:

What is evolution and how does understanding inheritance help us make sense of it?

What Can Fossils Tell Us About How Living Things Have Changed Over Time?

How are characteristics passed from parents to their offspring?

How are animals and plants adapted to suit their environment and how may this lead to evolution?

How does variation help us understand adaptation?

Core text:

