



## Year 6 Knowledge Organiser – Evolution, Inheritance and Classification

Key	Facts

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

Livi	ng Things	Habitat	Adaptive traits
	Polar Bear	Arctic	lts white fur enables it to camoflauge in the snow.
	Camel Cactus	Desert Desert	It has wide feet to make it easier to walk in the sand. It stores water in its stem.
	Toucan	Rain forest	lts narrow tongue allows it to eat small fruit and insects.





Key Vocabulary		
Spelling	Definition	
Offspring	The young animal or plant that is produced by the reproduction of that offspring.	
Inheritance	This is when characteristics are passed onto 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 things chances of surviving and reproducing.	
Habitat	Refers to a specific area or place in which particular animals or plants can live.	
Environment	An 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 pre- historic plant or animal, embedded in rock and preserved. <sup>,</sup>	
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.	