

Cunningham Hill Junior School - Science Knowledge Organiser - Year 6 - Evolution and Inheritance

Key Vocabulary:		
1	offspring	The young animal that is produced by the reproduction of that species.
2	inheritance	This is when characteristics are passed on to offspring from their parents.
3	variations	The differences between individuals within a species.
4	characteristic	The distinguishing features or qualities that are specific to a species.
5	adaptation	An adaptation is a trait (or characteristic) changing to increase a living things chances of surviving and reproducing.
6	habitat	Refers to a specific area or place in which particular animals and plants can live.
7	environment	An environment contains many habitats and includes areas where there are both living and non-living things.
8	evolution	Adaptation over a very long time.
9	natural selection	The process where organisms that are better adapted to their environment tend to survive and produce more offspring .
10	adaptive traits	Genetic features that help a living thing to survive
11	fossil	The remains or imprint of a prehistoric plant or animal embedded in rock and preserved.
12	inherited traits	These are traits you get from your parents. Within a family, you will often see similar traits e.g. Curly hair.

Habitats:	Environments:
A good habitat should provide shelter, water, enough space and plenty of food.	There are many types of environment around the world including: deserts, rainforests, oceans, rivers etc.

Adaptive Traits	Inherited 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.	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.

The peppered moth:

Free or attached ear lobes:

Offspring:	Variation:
Animals and plants produce offspring that are similar but not identical to them. Offspring often look like their parents because their features are passed on.	In the same way that there is variation between parents and their offspring , you can see variation within any species, even plants.

Scientist Study:	
Charles Darwin	Alfred Russel Wallace

Charles Darwin and Alfred Russel Wallace were both naturalists that proposed theories about the **evolution** of animals and how they change over time. Alfred Russel Wallace was a great admirer of Charles Darwin and ended up working with him on a range of scientific journals.

Living things:	Habitat:	Adaptive Traits:
polar bear	artic	white fur - camouflage in the snow
camel	desert	wide feet - balance in sand
cactus	desert	thick stem - stores water
toucan	rainforest	narrow tongue - eat small fruit and insects

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.

Evolution:

Evolution is the theory that all the kinds of living things that exist today developed from earlier types.

Fossils:

Fossils are the preserved remains of dead animals and plants. They prove that life has changed over time and by using **fossils**, scientists can deduce what plants and animals used to look millions of years ago. Different types of **fossils** include; body, trace and true form.