

Year 6: Evolution and Inheritance Learning Organiser

Subject Specific Vocabulary

off-spring

When living things reproduce they pass on characteristics to their offspring. All living things produce offspring of the same kind, but normally offspring are not identical to their parents

adaptation

Adaptation is the process by which animals, plants and other living things have changed so that they better suit their habitat.

evolution

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

inheritance

When living things reproduce they pass on characteristics to their offspring. This is known as inheritance.

palaeontologist

A palaeontologist is someone studying the life of past geological periods, as known from fossil remains.

Charles Darwin

Charles Darwin was an English scientist who studied nature. He is known for his theory of evolution.

fossil

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

natural selection

The process where organisms that are better adapted to their environment tend to survive and produce more off-spring.

species

A group of organisms that have common characteristics and can breed.

variation

Natural differences between living things in a species.

adaptive traits

Genetic features that help a living thing to survive.

inherited traits

These are the traits you get from your parents. Within a family, you will often see similar traits e.g. curly hair or brown eyes.



Large ground finch



Common cactus finch



Vegetarian finch



Small tree finch

Animals change over time and adapt to the surroundings in which they live. Darwin observed that there were many forms of finches that had different beak sizes and shapes. Once he considered the food sources of each finch, he noted the reason for these adaptations. He called this 'survival of the fittest'; or 'natural selection'.



The only way information can be obtained about evolution and animals and plants that are now extinct, is to examine fossils. They develop over millions of years and let scientists know how plants and animals used to look millions of years ago. This is proof that living things evolved over time.



Animals and plants produce off-spring that are similar but not identical to them. Off-spring often look like their parents because features are passed on such as eye colour or curly hair (inherited traits).

Living Things		Habitats		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.

The theory of evolution by natural selection (first formulated in Darwin's book "On the Origin of Species" in 1859) is the process by which organisms change over time as a result of changes in inheritable physical or behavioural traits. Scientists have proof that living things are continuously evolving – even today!

