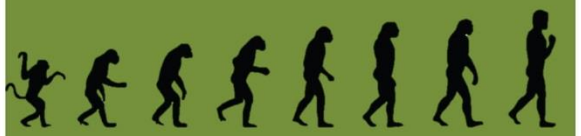
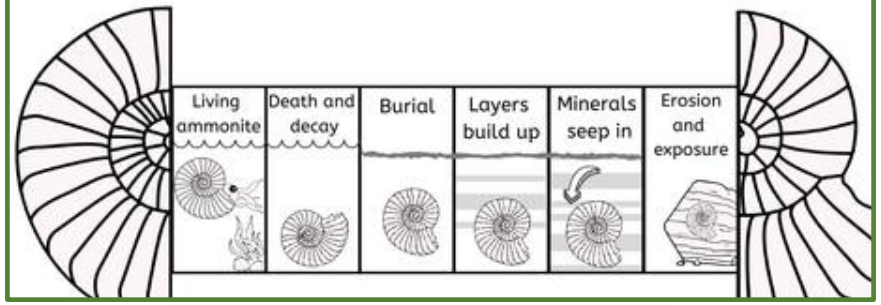
Annunciation Catholic Junior School
SCIENCE KNOWLEDGE ORGANISER

# Year 6 Evolution and Inheritance



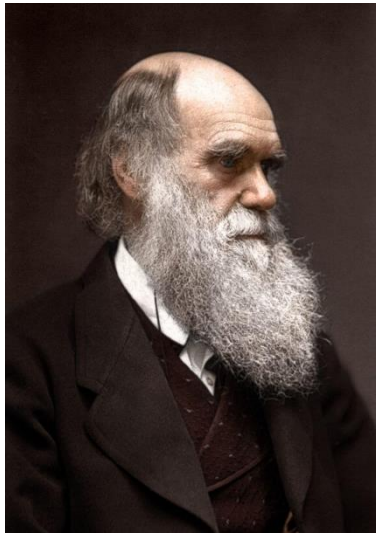
## How a fossil is formed




| 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** | 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 non-living things. |

| Key Vocabulary | |
|---|---|
| **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. |

Charles Darwin
1809-1882



| 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. |

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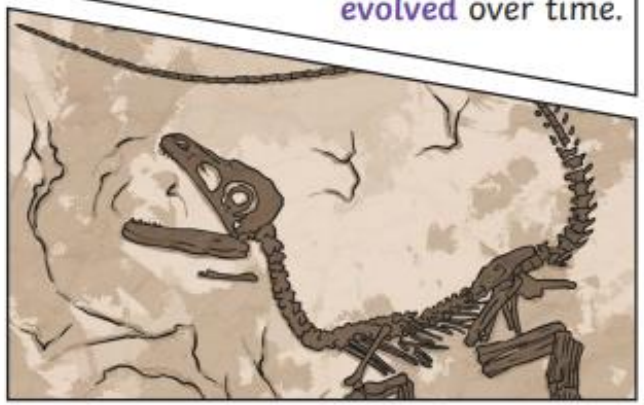
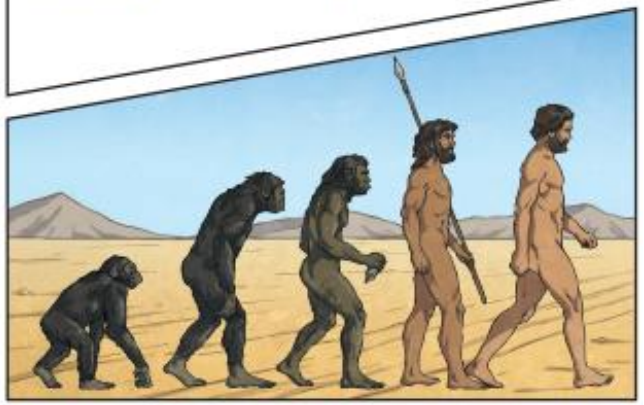
# YEAR 6 - EVOLUTION AND INHERITANCE

**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.

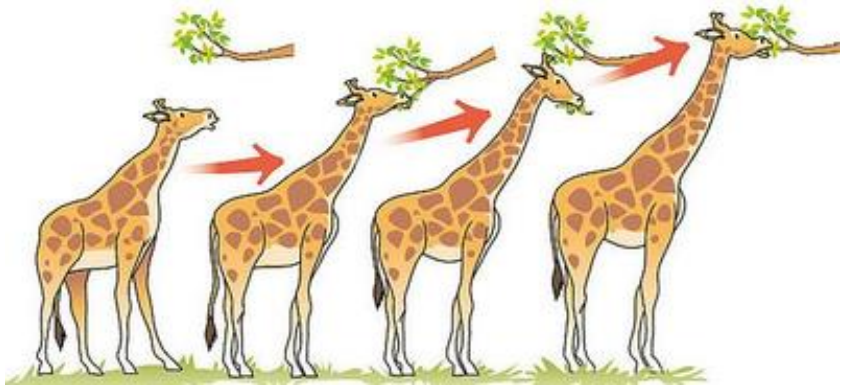


**Evolution** is the gradual process by which different kinds of living organism have developed from earlier forms over millions of years. Scientists have proof that living things are continuously evolving - even today!



## Natural selection

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



## 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.