

## What will I know by the end of this unit?

- **Living things** have changed over time.
- Animals and plants have **adapted** to suit their **environment** in different ways.
- Living things produce **offspring** of the same kind. However, normally offspring vary and are not identical to their parents.
- Living things can **inherit characteristics** and **traits** from their parents.
- Living things can learn ways in which to **adapt** their traits in order to **survive**.
- Within one species there will be lots of **variation**. Not every one in that species will look **identical**.
- Know **adaption** leads to **evolution**.
- **Fossils** provide information about living things that **inhabited** the Earth millions of years ago

## Evolution of humankind



## Variation



Science

Year 6

**Topic:** Evolution and Inheritance

**Strand:** Biology

## What should I already know?

- Living things are alive. They can move, breathe, reproduce, grow, eat and have senses
- People change over time.
- That children can look like their parents or other siblings.
- Animals live in an environment. This environment provides for them everything they need in order to survive.
- There are different types of rocks.
- Explain how fossils are formed.

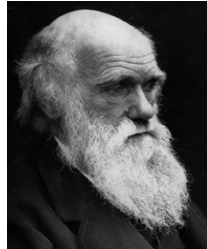
## Scientific Skills

- Ask questions about adaption and inheritance.
- Research theories by Charles Darwin, Alfred Wallace or Mary Anning.
- Make careful observations.
- Take accurate measurements.
- Report what they have found out.
- Record using scientific language, labelled diagrams, tables and charts what they have found out.
- Explain what adaption and inheritance is.
- Talk about family traits.

## Charles Darwin

Charles Darwin was most famous for his work on natural selection, the idea that all species of life have evolved over time from common ancestors.

This process involves the wanted traits becoming more common in the next generation of living things while at the same time unwanted traits become less common.



## Fossilisation

When an animal dies, it gets covered with sediments which eventually become rock. More layers of rock cover it. Only hard parts of the creature remain; bones, shells and teeth. Over thousands of years, sediment might enter the mould to make a cast fossil. Bones may change to mineral but will stay the same shape. Changes in sea level take place over a long period. Erosion and weathering take place and eventually the fossil becomes exposed. This is how many scientists have uncovered our past.



Can you explain what adaption is?



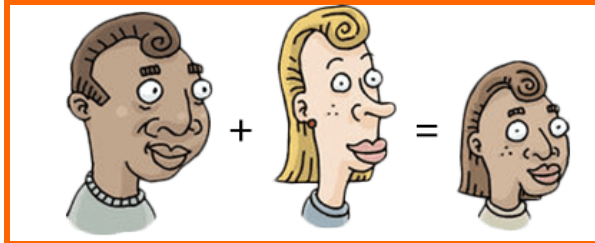
Do you have any family traits?

Do you have any characteristics that are similar to other family members?

## Subject Specific Vocabulary

<b>offspring</b>	This is the young animal or plant that is produced by the reproduction of that species.	<b>inherited traits</b>	These are traits you get from your parents. Within a family, you will often see similar traits, e.g. curly hair.
<b>inherit or inheritance</b>	This is when characteristics are passed on to offspring from their parents.	<b>habitat</b>	This is an area or place in which particular animals and plants can live.
<b>variations</b>	The differences between individuals within a species.	<b>environment</b>	It contains many habitats and includes areas where there are both living and non- living things.
<b>characteristics</b>	These are distinguishing features or qualities specific to each individual or species.	<b>evolution</b>	This is when adaptation happens over a very long time.
<b>adaptation</b>	This is a trait (or characteristic) changing to increase a living thing's chances of surviving and reproducing.	<b>natural selection</b>	This is a process where organisms that are better adapted to their environment tend to survive and produce more offspring.
<b>adaptive traits</b>	These are genetic features that help a living thing to survive.	<b>fossil</b>	These are remains or imprints of a prehistoric plant or animal embedded in rock and preserved.

## Heredity



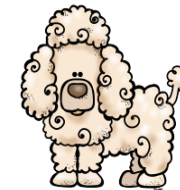
## Heredity

# Labradoodle

A crossbreed is a dog of mixed inheritance, whose parents are of two different breeds. Crossbreeds often display a mixture of their parents' characteristics like this Labradoodle.



Labrador



+ Poodle

=



Labradoodle