

# Preston Primary School Knowledge Organiser

**Topic: Science - Evolution and inheritance**

**Term: Summer 2**

**Year: Unit 4**

**Duration: 6 weeks**

The Powerful Knowledge we will take away from this Learning Enquiry  
(what we will be learning):



Questioning



Recording

- I will recognise that living things have changed over time.
- I will recognise that fossils provide information about living things that lived on Earth millions of years ago.
- I will recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.
- I will be able to identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

What I already know:

I was introduced to the concept of **reproduction** and **offspring** in our last science unit: Living Things and their Habitats.

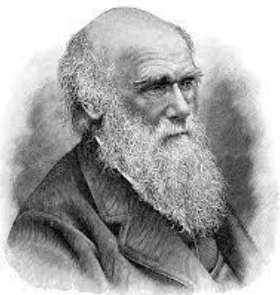
Our Key Vocabulary:

Word	Meaning
Evolution	The way that living things change over time.
Offspring	The young animal or plant that is produced by the reproduction of that species.
Natural selection	The process where organisms, that are better adapted to their environment, are able to survive and produce more offspring.
Inheritance	When characteristics are passed on to offspring from their parents
Reproduction	The process where young are produced.
Variation	The differences between living things of the same species.
Fossil	The remains or traces of plants or animals that lived a long time ago.
Adaptation	A characteristic changing to increase a living thing's chances of surviving and reproducing.

### Facts about evolution and inheritance:

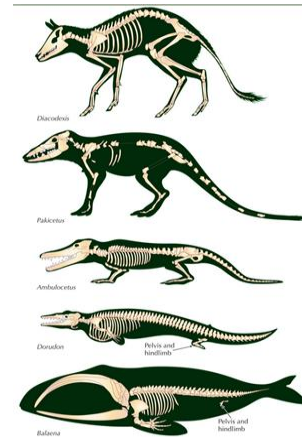
- Fossils are useful for telling us more about how animals and plants have evolved over time.
- Siblings of offspring are not always the same. This is called variation.
- One of the causes of variation is inheritance; characteristics that have been passed on from the parents.
- Living things (animals and plants) are adapted to their habitats. This means that they have **special features** that help them to **survive**.
- The animals and plants in one habitat are **suited** to live there and may not be able to survive in other habitats. When a habitat changes, the animals and plants that live there are affected.

### **Charles Darwin:**



Charles Darwin was an English scientist who studied nature. He is known for his theory of evolution by natural selection. According to this theory, all living things are struggling to survive. The living things that have the most helpful traits for their environment tend to survive. These living things then pass along their helpful traits to their young. In this way, animals change, or evolve, over hundreds of years.

### Images:



Palaeontologists (people who study fossils) think that these fossil skeletons show how whales might originate from land animals.



We can identify characteristics that living things have inherited from their parents: such as a tiger inheriting stripes.



A cactus is well adapted for survival in the desert. They have long roots to collect water from a large area and a stem that can store water for a long period of time.