

## YEAR 6 EVOLUTION AND INHERITANCE KNOWLEDGE ORGANISER

### KEY VOCABULARY AND SPELLINGS

**Fossils** – preserved remains of a living thing from the past

**Adaptation** – the process of change so that an organism or species can become better suited to their environment

**Environment** – the surroundings or conditions in which a person, animal or plant lives

**Evolution** – the process by which different kinds of living organisms are believed to have developed from earlier forms during the history of the Earth

**Inherit** – to gain a quality, characteristic of predisposition genetically from a parent or ancestor

**Ancestor** – a person from who one is descended

**Offspring** - a person's/animal's child or children

**Breeding** – the mating and production of offspring by animals

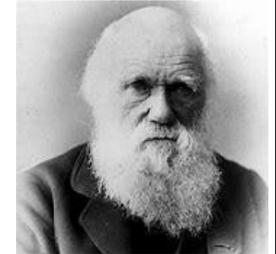
### EVOLUTION BY NATURAL SELECTION

The theory of evolution by natural selection was proposed by Charles Darwin. Organisms within a species show a wide range of variation, due to their genes (inherited by their parents) and their environment.

Natural selection occurs through the following steps:

- Individuals within a species show a genetic variation.
- The individuals with the characteristics that means they are better adapted to their environment will survive
- These useful genes are passed onto the next generation.

This process occurs over a large number of generations.



**ALFRED WALLACE** – co-published the theory of evolution by natural selection with Charles Darwin. He travelled the world and studied plants and animals. His ideas were very important in developing how we think about nature today.



**INHERITANCE** - Are you ever told that you look like your parents? This is because we inherit features and characteristics from them e.g. our natural hair and eye colour, our height or the shape of our face.

### DARWIN'S FINCHES ADAPTATION

Darwin's finches are an excellent example of the way in which species' gene pools adapt for long term survival.

Their beaks have evolved over time to be best suited to obtaining food.

