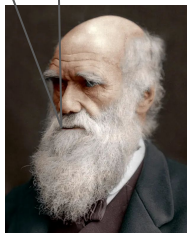




Year 6 Science knowledge organiser Evolution and Inheritance



"A man who dares to waste one hour of time has not discovered the value of life."



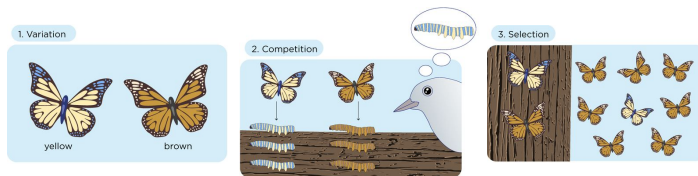
Charles Darwin, an evolutionary scientist, and Captain Robert Fitzroy set off on a five year voyage on the HMS Beagle to the **Galapagos Islands** in 1831. Darwin studied different animal and plant **species** and he noticed that the finches on the island were perfectly **adapted** to their environment. In 1859, Darwin published his controversial theory of Evolution.

Essential Learning

- A fossil is the preserved remains or traces of a dead organism. The process by which a fossil is formed is called fossilisation.
- After an animal dies, the soft parts of its body decompose leaving the hard parts, like the skeleton, behind. This becomes buried by small particles of rock called sediment.
- When living things reproduce they pass on characteristics to their offspring. This is known as inheritance. This is why children often look like their parents, or why a mix of two dog breeds will produce offspring which has some characteristics from each parent
- Adaptation means how living things are specialised to suit their environment. An African elephant, for example, lives in a hot habitat and has very large ears that it flaps to keep cool.
- Evolution is the way that living things change over time.

Here is an example of Natural Selection:

- 1) White moths were very popular.
- 2) Darker moths were better camouflaged and so were not eaten by predators as often.
- 3) White moths could be easily seen and were eaten.
- 4) This left the darker coloured moths alive and able to reproduce.
- 5) Darker coloured moths became more common.



Vocabulary	
adapt	to change behaviour so that it is easier to live in a particular place or situation
adaptation	a change in structure or function that improves the chance of survival for an animal or plant within a given environment
characteristic	a special quality or appearance that makes an individual or group different from others
environment	all the circumstances, people, things, and events around them that influence their life
evolution	the theory that all the kinds of living things that exist today developed from earlier types
evolve	to develop gradually, or to make someone or something change and develop gradually
habitat	the place a plant or animal lives
inherit	if you inherit a characteristic you are born with it, because your parents or ancestors also had it
inheritance	the process by which genetic information is passed on from parent to child
offspring	a person's children or an animal's young
parent	a person's father or mother
variation	the differences in characteristics between individuals of the same species