

**Science Knowledge Organiser**

**Year 6**

**Evolution and Inheritance**

Summary Statement

*Evolution* is the change, over time, of living things. “Survival of the fittest”, or the Theory of Evolution, developed by **Charles Darwin**, states that it is how well the organism *adapts* to its *environment* and is, thus, able to survive. Over time, living things that are best suited to their environment will tend to breed more successfully and it is their characteristics that are more likely to be inherited – this is called natural selection. Less, well-adapted living things become extinct as the fossil record shows.

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| **Key Knowledge** |
| Inherited or environment?    Plants Adaptations  Cactus Adaptations - Labelled diagram  Animals Adaptations  How do camels survive in deserts - YouTube  Fossils  Fossils provide a record (evidence) of how animals have changed/adapted over a very long time (millions of years), often in response to environmental changes.  Natural selection 🡪 Evolution  Living things most suited to their environment (the strongest and fittest) are more likely to survive and breed, passing on their favoured characteristics to their offspring – this is natural selection. For example, on an island with only small seeds as food, only the birds with pointed beaks would survive. |

**By the end of the unit children can:**

* Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.
* Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.
* Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

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| **Key Vocabulary** | |
| **Spelling** | **Definition** |
| Adaptation | How a particular animal or plant has changed over time to suit its environment. |
| Inherited | What living things (including humans) get from our parents- mum and dad (genes). |
| Offspring | New young life of animals including human babies. |
| Breeding | Sexual reproduction to produce offspring. |
| Evolution | Gradual changes over time |
| Fossil | Impression of plant or animal that lived millions of years ago, embedded in a rock. |