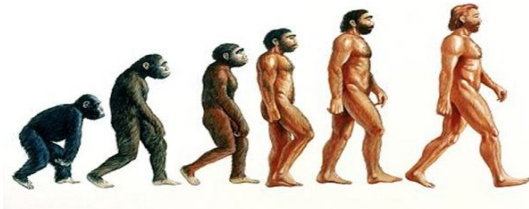


# Year 6 Key Knowledge Factsheet– Evolution and Inheritance

**Fossils** provide information about living things that inhabited the earth millions of years ago.

Animals and plants are **adapted** to suit their environment in different ways and that adaptation may lead to **evolution**.

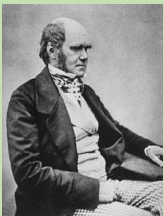
Living things produce off-spring of the same kind, but normally off-spring vary and are not identical to their parents although they may **inherit** certain



## Key Vocabulary

|                   |                                                                                                                                                                   |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Adaptation        | The process of change so that an organism or species can become better suited to their environment.                                                               |
| Characteristics   | The features of an animal or plant that belong to them and make them recognisable, e.g. leaf shape                                                                |
| Evolution         | The process by which different kinds of living organism have developed from earlier forms                                                                         |
| Fossil            | The remains or impression of a prehistoric plant or animal embedded in rock and preserved                                                                         |
| Natural Selection | A process by which species of animals and plants that are best adapted to their environment survive and reproduce, while those that are less well adapted die out |
| Offspring         | A person's child or children or an animal's young                                                                                                                 |
| Reproduction      | When an animal or plant produces one or more individuals similar to itself                                                                                        |

Charles Darwin



The four key points of Darwin's Theory of Evolution are: individuals of a species are not identical; traits are passed from generation to generation; more offspring are born than can survive; and only the survivors of the competition for resources will reproduce.

Mary Anning



Mary wasn't trained as a scientist but she soon became such an expert on fossils that scientists from all over England and the rest of the world visited her to buy fossils and ask for advice.

## Recall how fossils are formed



1. An animal dies and is buried beneath **sedimentary** rock. (sand, volcanic ash, or mud)



The animal **decomposes** underground. The soft parts (muscles)



Over thousands of years, the animal's remains are covered by more and more layers of rock.



As the pressure builds above, the sedimentary rock solidifies and the remaining remains of the animal are eaten away. This is then replaced by water.



The **minerals** in the water take the place of the missing animal bones, creating rocks that exactly match the shape of the animal.



After millions of years, the fossil gradually works its way up to the surface through ground movement