



**Science**

**Evolution and Inheritance**

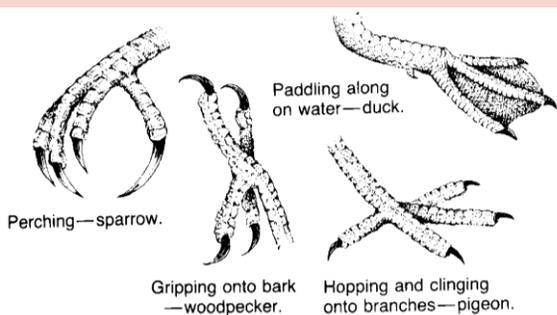
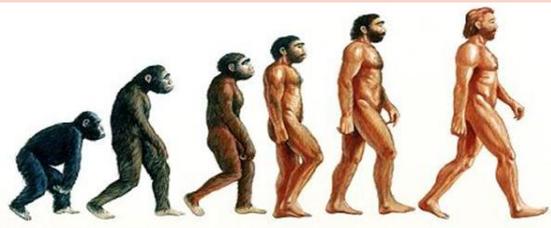
**Year 6**

**Spring Term**

## Key Knowledge

How are fossils formed and why are they important?	Sedimentary rocks form layers that trap dead animals and plants. When palaeontologists compare fossils to animals today, they can see similarities and identify relationships between them.
What influences living things?	Offspring are not identical to their parents. Some characteristics are inherited from parents through genes (e.g. eye colour, hair colour) while other characteristics come from choices we make and the way that we live, such as where we live, the food we eat or exercise we take (environmental characteristics).
Why is adaptation important?	Some animals have evolved over time to suit their habitat, which is essential because it helps the animal to survive.
Why does evolution occur?	Evolution occurs when there is competition to survive (natural selection). Species who best adapt are more likely to reproduce and pass on their useful characteristics. Those poorly adapted are less likely to survive. Characteristics that help survival become more common and species gradually change.

## Diagrams and Symbols



## Statutory Requirements

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

## Key Vocabulary

Adaptation	A change in structure or function that improves the chance of survival within a given environment.
Environment	The surroundings or conditions in which a person, animal, or plant lives.
Evolution	A process of change that takes place over many generations, during which species slowly change some of their physical characteristics.
Fossil	The remains or impression of a prehistoric plant or animal embedded in rock and preserved.
Inherit	To gain a quality or characteristic genetically from a parent or ancestor.
Offspring	A person's children or an animal's young.
Natural selection	A process by which species that are best adapted to their environment survive and reproduce.
Reproduction	The production of offspring by a sexual or asexual process.

## Possible Experiences

- Research the work of Charles Darwin and Alfred Russel Wallace.
- Use real life fossils to explore the past.
- Construct a family tree to explore traits that have been inherited.
- Visit a wildlife park/reserve to investigate how animals have evolved and adapted in order to become more suited to their environment.