

Evolution and Inheritance

A Science based topic

What do you need to know before this topic?

Most living things live in habitats to which they are suited.
Different habitats provide for the basic needs of different kinds of animals and plants.
Animals, including humans, have offspring which grow into adults.
The role that flowers play in the life cycle of flowering plants.
How fossils are formed - in simple terms.
Environments can change and that this can sometimes pose dangers to living things.
The life process of reproduction in flowering plants and some animals (i.e. birds, butterflies).

Key Vocabulary

Offspring, inheritance, inherited, variation, reproduction, characteristics, adaptation, suited, adapted, habitat, environment, adapted traits, inherited traits, natural selection, species, fossils, survival of the fittest

Sticky Knowledge

Animals and plants produce offspring that look similar but not identical to them.
Offspring often look like their parents because features are passed on.
There is variation between offspring and within species.
Adaptive traits are characteristics that are influenced by the environment the living things live in.
Eye and hair colour are examples of inherited traits.
Fossils are preserved remains of ancient animals and provide evidence of evolution.
Evolution is the process in which living things have adapted over time.
Natural selection is the process in which animals that are best-suited to their environment survive to produce offspring.

Key Skills

Research the evolution of an animal over time.
Present findings both in oral and written forms for different audiences.
Identify scientific evidence that has been used to support Darwin's theory of evolution by natural selection and refute Lamarckism.
Identify similarities and differences between different species of the same genus.
Draw conclusions on how different species of the same genus are adapted to their environments.

Key Assessment Questions

Where are features of an offspring inherited from?
What does adapted mean?
Give an example of how a plant or animal is suited to its environment.
What happens to animals or plants that cannot adapt?
Give an example of how an animal has evolved over time.
Give an example of a living thing from millions of years ago and how we know about it.

Curriculum Drivers

Caring Community

I am the child who can understand the importance of a living thing's environment and the value of preserving it.

Learning & Leading

I am the child who can understand that knowing where we came from empowers us and helps us make decisions about our futures.

British & Global Values

I am the child who can understand we all share a common ancestry and that there is more that unites us than divides us.

Wellbeing & Being Well

I am the child who can appreciate and understand the natural world and the positive impact this has on my own mental health and wellbeing.

Enterprise & Effort

I am the child who can understand the importance of presenting scientific findings clearly and the effort involved in researching subjects thoroughly over time.

Identity and Uniqueness

I am the child who can appreciate how unique each and every species of living thing is and how they each fill a niche in their environment.

Writing	Maths	Art	PE	Computing	Geography	PSHE - Jigsaw	French	Music
Varmints narrative – A story with an environmental message Information text – Evolution by natural selection	Statistics – Draw and read line graphs, bar graphs and pie charts Area, Perimeter and Volume Converting units	Drawing: Make my voice heard Explore expressive drawing techniques, including chiaroscuro	Outdoor Adventurous Activities Outdoor activities including orienteering	Introduction to spreadsheets Use formula to calculate data for practical purposes	Map Skills Use 6-figure grid references and symbols on OS maps	Healthy Me Understand what it means to be emotionally well and recognise stress. Develop an awareness of drugs and exploitation.	Clothes Numbers 60-80 Expressing opinion	Theory of chords. Learning how to play chords on the ukulele and tuned percussion