

In this unit: Pupils will explore genetics and understand that certain traits and characteristics are inherited from their parents. They will use this knowledge to solve missing links in family trees. Pupils will investigate the work of Charles Darwin and Alfred Wallace. They will explore how finches were adapted to live on the different islands of the Galapagos. They will apply this knowledge to create an animal that would survive in given conditions.

Children should already know:

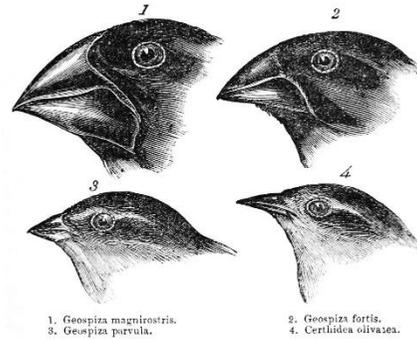
- that animals can be classified into carnivores, herbivore and omnivores.
- that animals require food, water and air to survive.
- that some animals have a skeleton for support, protection and movement.
- the life cycles of common animals and plants.
- that living things breed to produce offspring.
- the role of Mary Anning in palaeontology and the discovery of fossils.
- how fossils are formed and that evidence of life in the past comes from fossils.
- that palaeontologists can compare similarities and differences between fossils and animals today.
- that evidence of common ancestors and comparisons between different species can be found in fossils.

At the end of this unit, children will know:

- that evidence of life in the past comes from fossils.
- that palaeontologists can compare similarities and differences between fossils and animals today.
- that evidence of common ancestors and comparisons between different species can be found in fossils.
- that offspring have similarities to their parents.
- that animals and plants adapt to their environments over many thousands of generations and this may lead to some form of evolution.

Pupils could investigate:

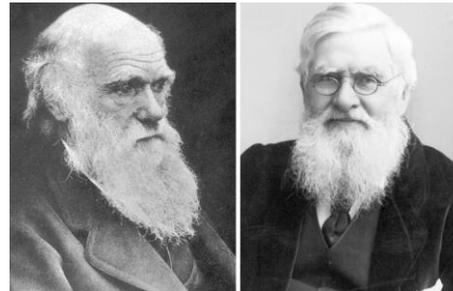
- what animals from the past looked like.
- where animals lived in the past.
- what different animals ate from their fossil findings.
- what was life like in the UK millions of year ago.
- how animals and humans may evolve in the future.
- why some animals and species of human have become extinct.



1. Geospiza magnirostris.
2. Geospiza fortis.
3. Geospiza parvula.
4. Certhidea olivacea.



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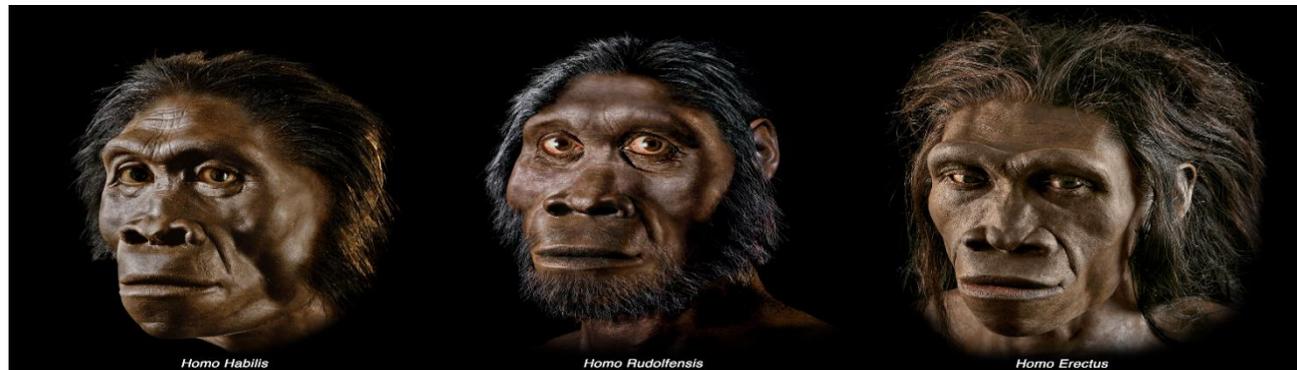


Key Vocabulary

adaptation	a change in structure or appearance of an animal or plant which increases its chances of survival
ancestors	an early type of plant or animal from which a new one has evolved
characteristics	a feature or quality belonging to a person or other living thing
evolution	the process by which different kinds of living things develop from earlier forms
extinction	an animal or plant that no longer exists in the world or a place
generation	all the people born and living at about the same time
identical	similar in everyway
inhabited	live in or occupy and place or habitat
inheritance	to receive from parents or ancestors
mutation	a characteristic that is not inherited from their parents or ancestors
natural selection	a process by those animals which are best suited to the environment survive while other die
naturalist	a person who is an expert in or studies natural history
palaeontologist	a person who studies the science of fossils
prehistoric	from a time before written and recorded history
species	a group of living organisms that share similar characteristics
survival	continue to stay alive and exist
variation	a change or slight difference

Key Questions:

- what is evolution?
- what is adaptation?
- why do animals or plants adapt and evolve?
- why is the work of Charles Darwin and Alfred Wallace important?
- why did finches need to adapt to live on different islands?



Homo Habilis

Homo Rudolfensis

Homo Erectus