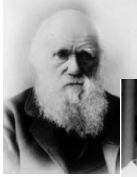


Scientist



Charles Darwin
(Naturalist, developed the theory of evolution)



Rosalind Franklin
(Discovered the structure of DNA)

Skills

I'm identifying scientific evidence to support ideas like a palaeontologist.



I'm presenting findings and conclusions like an archaeologist.



Careers

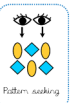
Archaeologist (studies history using artefacts)
Geneticist (studies genes)
Palaeontologist (studies fossils)

Enquiries



What is the most common eye colour in our class?

How have polar foxes adapted to their environment over time?



Is there a pattern between the size and shape of a bird's beak and the food it will eat?

Compare the skeletons of apes, humans, and Neanderthals—how are they similar and how are they different?

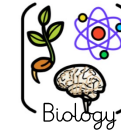


What happened when Charles Darwin visited the Galapagos islands?

Y6 EVOLUTION & INHERITANCE



Main idea



Building on what they learned about fossils in the topic on rocks in year 3, pupils should find out more about how living things on earth have changed over time. They should be introduced to the idea that characteristics are passed from parents to their offspring, for instance by considering different breeds of dogs, and what happens when, for example, Labradors are crossed with poodles.

Extinct animals

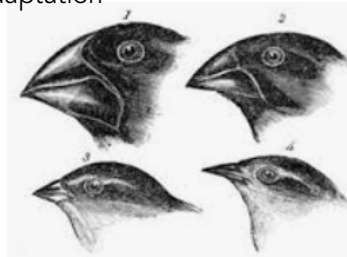


Dinosaur

Saber-Toothed Cat

Dodo

Adaptation



Evolution



Key Learning

- Pupils will learn about how humans and animals have adapted over time to their environment in order to survive.
- They will learn that variation in offspring over time can make animals more or less able to survive in particular environments.
- Pupils will explore the work of palaeontologists such as Mary Anning, and discover how Charles Darwin and Alfred Wallace developed their ideas on evolution.
- Pupils might work scientifically by: observing and raising questions about local animals and how they are adapted to their environment; comparing how some living things are adapted to survive in extreme conditions, for example, cactuses, penguins and camels.

What you should already know

There are variations in animals and plants, even within the same species. The features of these living things help them to survive in varying conditions and protect against predators as well as help them in catching their prey. Fossils inform us as to how animals and plants have changed over time.

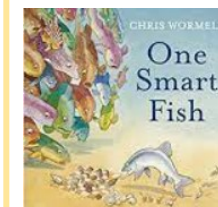
What comes next?

KS3 Biology: Structure and function of living organisms, Cells and organisation, Skeletal and muscular systems, Nutrition and digestion, Gas exchange systems, Reproduction and Health

Key vocabulary

Adaptation	Fossils
Ancestors	Genes
Chromosomes	Inheritance
Endangered	Natural selection
Evolution	Offspring
Extinct	

Literacy Links



One Smart Fish
(Christopher Wormell)

Year 6: Evolution & Inheritance



Adaptation: any change in the structure or behaviour of a species which helps it to become better fitted to survive and reproduce in its environment.



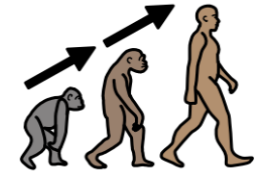
Ancestors: a person from who one is descended.



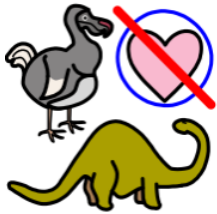
Chromosomes: DNA molecules that contain the set of instructions required to build and maintain cells



Endangered: species at risk of extinction because of human activity and other changes such as environmental changes



Evolution: change in the gene pool of a population from generation to generation by such processes as mutation, natural selection, and genetic drift



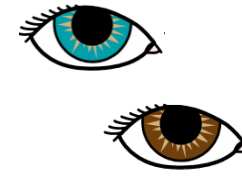
Extinct: no longer in existence; that has ended or died out



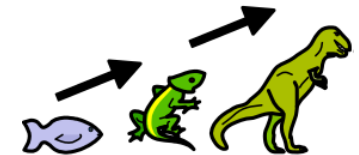
Fossils: any remains, impression, or trace of a living thing of a former geologic age, as a skeleton or footprint



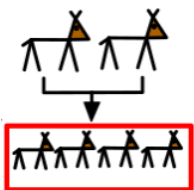
Genes: a portion of a DNA molecule that control the characteristics that an offspring will have



Inheritance: the genetic characters transmitted from parent to offspring



Natural selection: the process by which forms of life having traits that better enable them to adapt to specific environmental pressures



Offspring: a descendent from ancestors

Year 6: Evolution & Inheritance



Adaptation



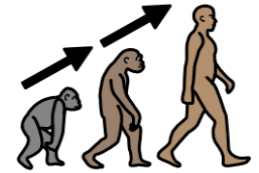
Ancestors



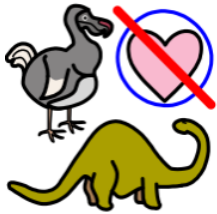
Chromosomes



Endangered



Evolution



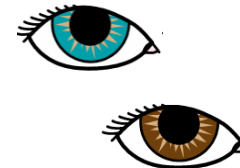
Extinct



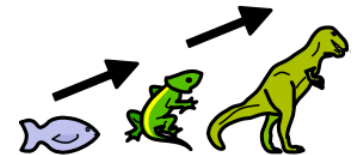
Fossils



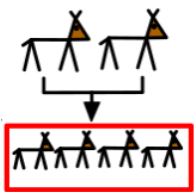
Genes



Inheritance



Natural selection



Offspring