



Kingsley CP Knowledge Organiser



Science focus	Evolution and Inheritance	Year 6	Spring Term
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What? (Key knowledge)

Key scientists

Charles Darwin	Charles Robert Darwin (12 February 1809 – 19 April 1882) was an English born evolutionary biologist, naturalist and geologist who was best known for his contributions to the science of evolution. He first formulated his theory in his book "On the Origin of Species" in 1859.
Mary Anning	Mary Anning (21 May 1799 – 9 March 1847) was an English fossil collector, dealer, and palaeontologist who became known around the world for important finds she made in Jurassic marine fossil beds in the cliffs along the English Channel at Lyme Regis in the county of Dorset in Southwest England.

Scientific theories

What is Darwin's theory of evolution	What was Darwin's theory of evolution? The theory of evolution by natural selection (first formulated in Darwin's book "On the Origin of Species" in 1859) is the process by which organisms change over time as a result of changes in inheritable physical or behavioural traits.
What is inheritance?	Inheritance refers to the characteristic traits that are genetically passed to offspring from their parents e.g. hair colour, eye colour, height etc. Darwin refers to this as natural selection when the strongest traits survive over generations.
What is adaptation?	Animals change over time and adapt to the surroundings in which they live. Darwin observed that there were many forms of finches that had different beak sizes and shapes. Once he considered the food sources of each finch, he noted the reason for these adaptations.

Possible experiences

- Designing and making our own fossils
- Exploring our family tree/ family tree of the Royal family
- Still life drawing

What? (Key Vocabulary)

evolution	the process by which different kinds of living organisms are believed to have developed from earlier forms during the history of the earth
inherit	derive (a quality, characteristic, or pre-disposition) genetically from one's parents or ancestors
adaptation	the process of change by which an organism or species becomes better suited to its environment
fossil	the remains or impression of a prehistoric plant or animal embedded in rock and preserved in petrified form
organism	an individual animal, plant, or single-celled life form
geology	the science which deals with the physical structure and substance of the earth, their history, and the processes which act on them
biology	the study of living organisms
palaeontology	the branch of science concerned with fossil animals and plants
selective breeding	The process by which humans use animal breeding and plant breeding to develop selective characteristics by choosing particular animals and plants
breeding	The mating and production of offspring by animals
reproduction	The production of offspring by a sexual or asexual process

Diagrams and symbols

