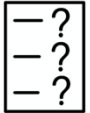




Year 6 – Summer 2 – Science – Pupil Knowledge Organiser



What do I already know?		What am I learning now?	
- Reproduction is the process an organism goes through to create offspring. - Offspring are the babies of all living things. - Offspring may look and behave in a similar way to their parents but will not be identical. - Environments can change, which can sometimes pose a danger to living things.		- How have living things changed over time, and what do fossils reveal? - How are offspring similar and different from their parents? - What is adaptation and why is it important? - How are different species best suited to their environments? - Who were the key scientists with theories of evolution? - How does evolution contribute to the diversity of life?	
Key Knowledge: Evolution & Inheritance	Significant People	Key Skills: Working Scientifically	Key Vocabulary
There are a range of different fossil types.  Fossils provide evidence of how living things have changed over millions of years.  Offspring inherit traits from their parents through genes, which are passed down through generations.  Offspring inherit different traits from each parent, making them different to their parents and siblings. An adaptation can be a physical, behavioural, or physiological trait.  Adaptations ensure a species is able to survive and pass on its genes to the next generation.  The processes linked to evolution, including speciation, increases biodiversity which leads to a healthy ecosystem.	Charles Darwin  Observed how finches had adapted in the Galapagos to better suit the food supply and proposed a theory of evolution by natural selection. Jean-Baptiste Lamarck  Proposed an early theory of evolution based on inheritance of characteristics. Gregor Mendel  Deduced that genes come in pairs, with one being inherited from each parent by experimenting on pea plants.	 Ask Questions  Conclusions  Enquiry  Observe  Record/ Present  Communicate  Evaluation	evolution The gradual change in organisms, over generations, to make them better suited to their environment. species A group of organisms that can reproduce with each other. fossils Remains or traces of organisms from the past that have been preserved in rock or sediment. variation Differences among individuals of the same species. adaptation A characteristic that helps an organism survive/reproduce in its environment. traits Characteristics/features that are inherited from parents. habitat The natural environment of an organism. inheritance The process by which traits are passed from parents to offspring. natural selection Where organisms, which are better suited to their environment, are more likely to survive and reproduce. speciation The accumulation of adaptations/ mutations which over time leads to a new species.