Science – Evolution and inheritance

By the end of this topic, pupils will have learnt about:	
Learning objective	Standard indicators
1. How offspring vary and are not identical to their parents	• Understand that some characteristics are inherited • Explain why offspring look similar but not identical to their parents • Understand that variations in species can be due to environmental factors
2. Animal adaptations	• Describe how an animal is adapted to its environment • Explain how an animal's adaptation helps it to survive in the habitat • Predict how an animal would have to adapt to suit a different habitat
3. Plant adaptations	• Describe how a plant is adapted to its environment • Explain how plants adaptation helps it to survive in the habitat • Create a new plant that is perfectly adapted to survive in a habitat
4. What we can learn from fossils	• Understand that fossils provide information about living things that are now extinct • Using evidence from fossils, compare extinct animals with those that are living and identify adaptations • Use evidence from fossils to suggest some conclusions about life in the past
5. The theory of evolution by natural selection	• Identify how living things have changed over time • Describe how natural selection causes living things to evolve over time • Explain why the theory of evolution was not accepted at first
6. Human evolution.	• Identify differences in human ancestors • Describe how humans have evolved • Compare and contrast neanderthals and homo sapiens

Key vocabulary	
Word	Definition
inherit	when features are passed on from parents to offspring
adaptation	changes or special features of a living thing to help it live in a habitat
epiphytes	plants that grow on the surface of other plants
fossil	the remains or impression of a prehistoric plant or animal embedded in rock
Mary Anning	A famous palaeontologist who discovered fossils on the Jurassic Coast
palaeontologist	a scientist that studies the remains of plants and animals found as fossils
ichthyosaurus	a large marine reptile that lived 201-194 million years ago
Charles Darwin	an English naturalist, best known for his theory of evolution
evolved	how living things gradually change over time
natural selection	survival and reproduction of the fittest
ancestor	a person/living thing an organism is descended from
Homo sapiens	the scientific name for the human species