

	Year 5 + 6 Science	
	Autumn term 2026 Evolution & Inheritance	
Prior Knowledge	- Identify that most living things live in habitats to which they are suited and describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other. (KS1 - Living things and their habitats). - Notice that animals, including humans, have offspring which grow into adults. (KS1 - Animals, including humans). - Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. (LKS2 - Plants). - Describe in simple terms how fossils are formed when things that have lived are trapped within rock. (LKS2 – Rocks). - Recognise that environments can change and that this can sometimes pose dangers to living things. (LKS2 - Living things and their habitats)	
Future Knowledge	- Heredity as the process by which genetic information is transmitted from one generation to the next. (KS3). - A simple model of chromosomes, genes and DNA in heredity, including the part played by Watson, Crick, Wilkins and Franklin in the development of the DNA model. (KS3). - The variation between species and between individuals of the same species means some organisms compete more successfully, which can drive natural selection. (KS3). - Changes in the environment may leave individuals within a species, and some entire species, less well adapted to compete successfully and reproduce, which in turn may lead to extinction. (KS3).	
Key Vocabulary	Variation, evolution, evolve, adaptation, inherit, inheritance, characteristics, sexual reproduction, Charles Darwin, environment, offspring, fossil, Alfred Wallace, Galapagos, identical, non-identical, justify, scientific argument	
Learning Sequence		
What is adaptation and how do plants adapt to their environment?		
Substantive Knowledge:	Disciplinary Knowledge:	
Recognise that animals and plants are adapted to suit their environment in different ways.	 Ask relevant questions and use different types of scientific enquiries to answer them, with teacher support.	
What is adaptation and how do animals adapt to their environment?		
Substantive Knowledge:	Disciplinary Knowledge:	
Recognise that animals are adapted to suit their environment in different ways.	 Ask relevant questions and use different types of scientific enquiries to answer them, with teacher support.	
How might adaptations lead to evolution?		

Substantive Knowledge: Recognise that animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution	Disciplinary Knowledge:  Ask relevant questions and use different types of scientific enquiries to answer them, with teacher support.
How might adaptations lead to evolution and who was Darwin and why was he important?	
Substantive Knowledge: - Recognise that animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution - Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.	Disciplinary Knowledge:  Ask relevant questions and use different types of scientific enquiry to answer them with increased independence.  Decide on the method and equipment to use to carry out an enquiry, with increased independence.  Use observations, ideas and straightforward scientific evidence to support and explain findings with increased independence.  Take measurements, using a range of scientific equipment, with increasing accuracy and precision, recognising independently when repeat readings are appropriate.  Gather, record, classify and present data/results of increasing complexity using a variety of ways with increased independence.  Use results to evaluate the success of an enquiry, suggest improvements and raise further questions, with increased independence.
What is variation and how does it happen?	
Substantive Knowledge: Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.	Disciplinary Knowledge:  Ask relevant questions and use different types of scientific enquiries to answer them, with teacher support.
How do we know that living things have changed over time?	

Substantive Knowledge:

- Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.

Disciplinary Knowledge:



Ask relevant questions and use different types of scientific enquiries to answer them, with teacher support.