

Science Knowledge Organiser -  
Evolution and Inheritance  
Year 6 - Term 3

Prior knowledge	Key knowledge	Subsequent knowledge
<p>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. (Y2 - Living things and their habitats)</p> <p>Notice that animals, including humans, have offspring which grow into adults. (Y2 - Animals, including humans)</p> <p>Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. (Y3 - Plants)</p> <p>Describe in simple terms how fossils are formed when things that have lived are trapped within rock. (Y3 - Rocks)</p> <p>Recognise that environments can change and that this can sometimes pose dangers to living things. (Y4 - Living things and their habitats)</p> <p>Describe the life process of reproduction in some plants and animals. (Living things and their habitats - Y5)</p>	<p>Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.</p> <p>Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.</p> <p>Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.</p>	<p>Heredity as the process by which genetic information is transmitted from one generation to the next. (KS3)</p> <p>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)</p> <p>The variation between species and between individuals of the same species means some organisms compete more successfully, which can drive natural selection. (KS3)</p> <p>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)</p>

**Working Scientifically Skills - Year 5 & 6**

At least one LI per block should focus on a WS skill.

- planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
- recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
- using test results to make predictions to set up further comparative and fair tests
- reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations
- Identifying scientific evidence that has been used to support or refute ideas or arguments.