



Science Skills Progression To understand evolution and inheritance

Essential characteristics of scientists	<ul style="list-style-type: none"> •The ability to think independently and raise questions about working scientifically and the knowledge and skills that it brings. •Confidence and competence in the full range of practical skills, taking the initiative in, for example, planning and carrying out scientific investigations. •Excellent scientific knowledge and understanding which is demonstrated in written and verbal explanations, solving challenging problems and reporting scientific findings. •High levels of originality, imagination or innovation in the application of skills. •The ability to undertake practical work in a variety of contexts, including fieldwork. •A passion for science and its application in past, present and future technologies. 	
	Key Knowledge	Key Vocabulary
EYFS ELG	Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur, and talk about changes.	
Y1/2	<ul style="list-style-type: none"> • Identify how humans resemble their parents in many features. 	
Y5/6	<p>Y6 learning challenge - Have we always looked like this?</p> <p>Science Bug - Y6 Evolution and inheritance</p> <ul style="list-style-type: none"> • Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago. Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents. • Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution. 	<ul style="list-style-type: none"> • fossils • variations • reproduce • off-spring • migration • evolve, evolution • adaptation
Y7	<ul style="list-style-type: none"> • Heredity as the process by which genetic information is transmitted from one generation to the next. • 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. • The variation between species and between individuals of the same species means some organisms compete more successfully, which can drive natural selection. • 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. 	