Year6				
Topic	Prior Learning	Present learning	Misconceptions	Future learning
Evolution and inheritance National Curriculum 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.	 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) Notice that animals, including humans, have offspring which grow into adults. (Y2 - Animals, including humans) Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. (Y3 - Plants) Describe in simple terms how fossils are formed when things that have lived are trapped within rock. (Y3 - Rocks) Recognise that environments can change and that this can sometimes pose dangers to living things. (Y4 - Living things and their habitats) Describe the life process of reproduction in some plants and animals. (Living things and their habitats - Y5) 	 Knowledge and Understanding - know about evolution and can explain what it is - recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents - adaptations in different animals giving reasons - plant adaptations giving reasons - fossils role in studying evolution in living things - characteristics of parent and offspring - advantages and disadvantages of hybridisation in plants and animals. Investigations:— - compare and contrast animals and plants using classification keys - analyse the advantages and disadvantages of specific adaptations - is there a pattern between the size and shape of a bird's beak and the food it will eat? Vocabulary: hybrid adaptation variation genetics mutation fossils evolution 	Some children may think: adaptation occurs during an animal's lifetime: giraffes' necks stretch during their lifetime to reach higher leaves and animals living in cold environments grow thick fur during their life offspring most resemble their parents of the same sex, so that sons look like fathers all characteristics, including those that are due to actions during the parent's life such as dyed hair or footballing skills, can be inherited cavemen and dinosaurs were alive at the same time.	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)