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| Year 6: Evolution and Inheritance | | | | |
| **National Curriculum Objectives:**  \* 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 ae not identical to their parents.  \* Identify how animals and plants are suited to their environment in different ways and that adaptation may lead to evolution. | | | | |
| **Prior Learning:** | **Working Scientifically (NC) Links:** | **Opportunities for working Scientifically:** | **Story / Book Opportunities:** | **Vocabulary:** |
| **In Year 2: Living things and their Habitats:**  \* 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.  **In Year 3: Rocks:**  \* Describe in simple terms how fossils are formed when things that have lived are trapped within rock  **In Year 4:**  **Living things and their Habitats:**  \* Recognise that environments can change and that this can sometimes pose dangers to living things. | \* Observe and raise questions about animals in the local environment and how they are adapted to their environment, comparing how some living things are adapted to survive in extreme conditions.  \* Analyse advantages and disadvantages of specific adaptations, e.g. being on 2 feet instead of 4, having a long or short beak, having gills or lungs, tendrils on climbing plants, brightly coloured or scented flowers. | \* How are different …. (Galapagos birds’ beaks) suited to where they live?  \* What features of …….. support their survival in ….?  \* How do anatomical observations support the theory of natural selection?  \* How are human skeletons now similar to / different from those of Neanderthals?  \* Is there a link between the shape of a bird’s beak and the food it eats? | One Smart Fish  (Christopher Wormell)  The Molliebird  (Jules Pottle)  Our Family Tree  (Lisa Westberg Peters) | offspring, sexual reproduction, variation, characteristics, suited, adapted, environment, inherited, species, fossils, evolution, mutation, survival of the fittest |
| **Types of scientific Enquiry:**  Fair & Comparative testing  Research using secondary sources  Identifying, classifying & grouping  Pattern seeking  Observing over time | **Famous Scientists:**  **Charles Darwin and Alfred Russel Wallace**  (Theory of Evolution by Natural Selection)  **Jane Goodall**  (Chimpanzees) |
| **In KS3:**  \* 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. | | | | |

