



Year 5– Animals, including Humans



Working Scientifically	Sticky Knowledge	Linked Texts	Key Scientists
- Recall and use specific scientific vocabulary accurately (year group key vocabulary) - Plan different types of scientific enquiries to answer questions, include recognise and control variables where necessary - Recognise when and how to set up comparative and fair tests and explain which variables need to be controlled and why - Take measurements, use a range of scientific equipment, with increasing accuracy and precision, take repeat readings when appropriate - Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs - Use test results to make predictions to set up further comparative and fair tests - Report and present findings from enquiries, include conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations - Identify scientific evidence that has been used to support or refute ideas or arguments. - Use relevant scientific language and illustrations to discuss, communicate and justify their scientific ideas	- Different animals mature at different rates and live to different ages. - Puberty is something we all go through, a process which prepares our bodies for being adults, and reproduction - Hormones control these changes; which can be physical and/or emotional. - Some organisms reproduce sexually where offspring inherit information from both parents. - Some organisms reproduce asexually by making a copy of a single parent. - Environmental change can affect how well an organism is suited to its environment. - Different types of organisms have different lifecycles. From Yr4 - Animals have teeth to help them eat. - Different types of teeth do different jobs. - Food is broken down by the teeth and further in the stomach and intestines where nutrients go into the blood. - The blood takes nutrients around the body. - Nutrients produced by plants move to primary consumers then to secondary consumers through food chains.	<i>The Land of Neverbelieve</i> (Norman Messenger) <i>Mummy Laid an Egg</i> (Babette Cole) <i>Hair in Funny Places</i> (Babette Cole) <i>Giant</i> (Kate Scott) <i>You're Only Old Once!</i> (Dr. Seuss)	David Attenborough (Naturalist and Nature Documentary Broadcaster) James Brodie of Brodie (Reproduction of Plants by Spores) Jane Goodall- naturalist Sylvia Earle - Marine biologist Dr. Paula Kahumbu-wildlife conservationist Mangala Mani – Antarctic scientist
Key Question(s):	Key Question(s)	WS vocabulary	
• Do all animal embryos look the same? • How do humans change? • Why do humans change? • What is a life cycle? What types of life cycles are there? • Are life cycles the same? • What causes puberty? • What changes do we go through during puberty?	• Can you describe some of the significant changes that happen as humans develop to old age? • Can you name three changes that happen to a human during puberty? • Can you give two examples of animals gestation period and why they are different? • Are there any patterns between vertebrate animals and their gestation periods? • Do plants reproduce in the same ways as us? How do plants spread their seeds?	Investigation, enquiry, prediction, variable, dependent variable, independent variable, constant, patterns, equipment, apparatus, method, results, conclusion, graph, patterns, distance, data, theory, fair test, reasoning	

Teaching suggestions in Enquiry types

<u>Comparative tests</u>	<u>Identify & Classify</u>	<u>Observation over time</u>	<u>Pattern Seeking</u>	<u>Research</u>	<u>BIG Question – Problem solving</u>
How does the level of salt affect how quickly brine shrimp hatch? How does age affect a human's reaction time? Who grows the fastest, girls or boys? 	Can you identify all the stages in the human life cycle? Compare this collection of animals based on similarities and differences in their lifecycle. 	How do brine shrimp change over their lifetime? How does a bean change as it germinates? How do different animal embryos change? 	Is there a relationship between a mammal's size and its gestation period? 	What are the differences between the life cycle of an insect and a mammal? Why do people get grey/white hair when they get older? 	Do all plants and animals reproduce in the same way? (Also use EXPLORIFY) <u>Assessment Opportunity</u> 