National curriculum objectives	HEP science lesson titles	Coherence:
Pupils should be taught to:	Do all animals develop the same way?	Literacy:
<ul> <li>describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird</li> </ul>	2. What is metamorphosis?	Etymology, phonetic spelling, comprehension, DARTs
<ul> <li>describe the life process of reproduction in some plants and animals</li> </ul>	3. What is inside a cocoon?	
	4. Which came first, the chicken or the egg?	Key vocabulary:
Misconceptions:	5. Why is there variation amongst living things?	Mammary glands, marsupials, offspring, camouflaged, clusters, embryo, frog
<ul> <li>Reproduction and sex are the same thing</li> <li>Animals do not need to breathe under water</li> </ul>	6. Do you always need two parents to	spawn, metamorphosis, tadpole,
Only humans feed their young milk	reproduce?	cocoon, entomologists, larva/ larvae (plural), moulting, nymph, parasites,
<ul> <li>Animals do not look after their young</li> <li>Only female animals care for their young</li> <li>Small animals do not have a gestation period</li> <li>Duck billed platypus is not a real animal</li> <li>Frogs only live in water</li> <li>Tadpoles are fish</li> <li>Frogs do not have teeth</li> <li>Only lungs are used for breathing</li> <li>All larvae are maggots</li> <li>Larvae stay as larvae throughout their life cycle</li> <li>That all insects are bugs</li> <li>Insects are not animals</li> <li>All insects have complete metamorphosis</li> <li>A freshly laid egg can have a baby chick inside it</li> <li>Reproduction can only happen if there are two parents</li> <li>Only animals carry out sexual reproduction</li> </ul>	Working scientifically  Scientific enquiry skills used: Secondary research, modelling, Key scientists and inventors: David Attenborough  Careers: Naturalist, entomologist	pupa, scabies, down, egg tooth, incubated, asexual, fertilisation, ovaries, ovules, testes, variation, bulb, cutting, clone, plantlet, regenerate, tuber  Maths: Gestation lengths, averages, interpreting tables and graphs, percentages, Venn diagram, Design Technology: Food – edible frog life cycle
Builds on:	Future learning:	Further reading:
Year 3: Plants - explore the part that flowers play in the life cycle of flowering plants, including pollination and seed formation;	Year 6: Living Things and Their Habitats, Evolution and Inheritance	Animals Lives and Life Cycles by Science Essentials

Year 4: Living Things and Their Habitats - recognise that living things can be grouped in a variety of ways, explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment, recognise that environments can change and that this can sometimes pose dangers to living things Animals Including Humans - construct and interpret a variety of food chains, identifying producers, predators and prey	Seed Sleepy Nature, Diana Hutts and Aston Sylvia Long
Year 5: Animals Including Humans - describe the changes as humans develop to old age	