Programme of Study Statements	Key Vocabulary
Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. Describe the life process of reproduction in some plants and animals.	Life cycle, reproduce, sexual, sperm, fertilises, egg, live young, metamorphosis, asexual, plantlets, runners, bulbs, cuttings

Investigations and Skills for thinking like a Scientist

					Sticky Knowledge:
					Different animals mature at different rates and live to different ages. • 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.

Comparative Tests	Identify & Classify	Observation over time	Pattern seeking	Research	Prior Knowledge:
How does the level of salt affect how quickly brine shrimp hatch?	Compare this collection of animals based on similarities and differences in their lifecycle.	How do brine shrimp or tadpoles change over their lifetime? How does a bean change as it germinates?	Is there are relationship between number of petals and number of stamens? Is there a relationship between size of animal and its life span?	What are the differences between the life cycle of an insect and a mammal?	• 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)

• **Potential Evidence to support our Scientists (I can..):**	Future Knowledge:
Can present their understanding of the life cycle of a range of animals in different ways e.g. drama, pictorially, chronological reports, creating a game • Can identify patterns in life cycles • Can compare two or more animal life cycles they have studied • Can explain how a range of plants reproduce asexually **Big Question:** **Do all plants and animals reproduce in the same way?**	• Reproduction in humans (as an example of a mammal), including the structure and function of the male and female reproductive systems, menstrual cycle (without details of hormones), gametes, fertilisation, gestation and birth, to include the effect of maternal lifestyle on the foetus through the placenta. (KS3) • Reproduction in plants, including flower structure, wind and insect pollination, fertilisation, seed and fruit formation and dispersal, including quantitative investigation of some dispersal mechanisms. (KS3)

Cultural Capital	

Visits and visitors	**Experiences and events**	**Key texts**
Trip to zoo to look at animals from different groups. Slimbridge trip to look at life cycles of birds.	Visit pond and observe changes in tadpoles.	*The Land of Neverbelieve* *(Norman Messenger)* *Mummy Laid an Egg* *(Babette Cole)*
Community events and links Explore local area and the plants and animals that live there.	**Global issues** Link to destruction of habitats and environments.	**Famous people/ Key Scientists** **James Brodie of Brodie** (Reproduction of Plants by Spores) **David Attenborough** (Naturalist and Nature Documentary Broadcaster)
Life Skills **Curiosity** **Team work** Resilience Making Links	**Key places** Pond School garden	