

Knowledge Organiser

Key Vocabulary

life cycle, human, age, bulb, fertilization, pollination, sexual reproduction, asexual reproduction, larva, gestation, metamorphosis, sperm, internal fertilization, external fertilization

Domain Knowledge

- Understand the life cycle of a mammal.
- Know what amphibians and insects are.
- Know that reptiles lay eggs and reproduce through internal sexual reproduction.
- Understand the similarities and differences in different life cycles.

Where can this take you in the future?

Botanist
Animal behaviourist
Zoologist
Conservationist
Horticulturalist

The Big Question: **What is the difference between the life cycles of mammals and insects?**



Conceptual Science Knowledge – Living things and their habitats/Animals including Humans

- To describe the life process of reproduction in plants.
- To explain the life cycles of mammals and birds.
- To understand the life cycle of amphibians and insects.
- To compare the life cycles of different animals.
- Identify, classify and group mammals and insects in order to recognise similarities and differences between their life cycles.



Biology

Working Scientifically Knowledge – Identify, Classifying and Grouping

In order to answer our big question, we will be identifying, classifying and grouping.

- Planning scientific enquiry based on the big question.
- Discussing how best to answer the question and gather and collate data.
- Reporting findings through classification and explanations.
- Reporting and presenting findings from enquiries, including conclusions, explanations of results, in oral and written forms such as displays and other presentations.

Tasks for experts

Extension for experts

- Research in to infectious diseases that are spread by insects, such as malaria and dengue fever spread by mosquitoes.
- Research the plague/'black death', which was spread by rat fleas. Discuss why scientists are looking at ways to stop these insects breeding.
- Research other insect life cycles – including gruesome ones like the parasitic wasp.

STEM links to try at home

Research the work of David Attenborough and the positive impact he has had on our environment. Devise some actions you will take to help support his work.

Trips and visits

Bristol Zoo
The wild place
Noah's Ark
Longleat
Eden project