



# Frogs – Science KCV – Living Things and their Habitats



## Key facts to learn:

- Know that the life cycle of a living thing is a series of stages of development starting with a fertilized egg in animals or a seed in many plants
- Know that in most mammals (e.g. dogs) a fertilized egg develops in the womb into an embryo and is then born and fed on milk before it is weaned onto the food that is adapted to eat; it then develops to maturity in a period called adolescence after which it can reproduce and the cycle can begin again
- Know that in amphibians (e.g. frogs) a fertilized egg develops into an embryo and then hatches into a tadpole; the tadpole develops adult characteristics, metamorphoses into the adult form after which it can reproduce and the cycle can begin again
- Know that in many insects (e.g. butterflies) a fertilized egg develops into wingless feeding form called a larva (caterpillar); the larva feeds then later becomes a pupa (chrysalis) with a protective cocoon; inside this cocoon, the pupa metamorphoses into the adult butterfly after which it can reproduce and the cycle can begin again
- Know that in birds (e.g. robins) a fertilized egg hatches in a nest (a hatchling) and is fed by its parents until it is ready to fly (i.e. becomes a fledgling); it then leaves the nest and grows into an adult after which it can reproduce and the cycle can begin again

## Key skills to do:

- Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
- Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking 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 tests.
- Report and present findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations.

## Words to know and spell (Tier 2 Vocabulary)

Adaptation	Amphibian	Biomes
Bird	Carnivore	Habitat
Insect	Mammal	Offspring
Organism	Characteristics	Physical
Life cycle	Embryo	Womb
Metamorphosis	Adolescence	Sexual
Asexual		

## Words to understand and spell (Tier 3 Vocabulary)

<b>Exoskeleton</b>	A hard outer layer that covers, supports and protects the body of an invertebrate animal such as an insect or crustacean.
<b>Invertebrate</b>	An animal with no spine.
<b>Physical Characteristics</b>	The things about an animal that might make it different (or similar) to another animal (e.g. having scales).
<b>Vertebrate</b>	Having a spine (backbone).
<b>Viviparous</b>	Giving birth to young that have already developed inside the mother's body, rather than producing eggs
<b>Larval Stage</b>	Larva, plural larvae, or larva's, stage in the development of many animals, occurring after birth or hatching and before the adult form is reached.

## Concept check questions. Test yourself:

- Describe the life cycle of a butterfly.
- Name 2 different ways that plants can reproduce.
- What are the similarities and differences between the lives of birds and mammals?
- Why are bees so important to our world?

## Opportunities for Investigation:

**Pattern Seeking:** Is there a relationship between a mammal's size and its gestation period?