



# Buglawton Primary School

Be the Best We Can

Topic: Living things and their habitats

Subject: Science

Year: 5

Term: Spring

### What should I already know?

- Notice that animals, including humans, have offspring which grow into adults.
- Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.

### What will I know and by the end of the unit?

- 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.

### What will I be able to do by the end of the unit?

- Can draw the life cycle of a range of animals identifying similarities and differences between the life cycles
- Can explain the difference between sexual and asexual reproduction and give examples of how plants reproduce in both ways
- 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

### Key Vocabulary

<b>asexual reproduction</b>	One parent is needed to create an offspring, which is an exact copy of the parent.
<b>fertilise</b>	The action of fusing the male and female sex cells in order to develop an egg.
<b>gestation</b>	The length of a pregnancy.
<b>life cycle</b>	The journey of changes that take place throughout the life of a living thing including birth, growing up and <b>reproduction</b> .
<b>metamorphosis</b>	An abrupt and obvious change in the structure of an animal's body and their behaviour.
<b>pollination</b>	The transfer of pollen to a stigma to allow <b>fertilisation</b> .
<b>reproduction</b>	The process of new living things being made.
<b>sexual reproduction</b>	Two parents are needed to make offspring which are similar but not identical to either parent.

Humans develop inside their mothers and are dependent on their parents for many years until they are old enough to look after themselves.



Amphibians such as frogs are laid in eggs then, once hatched, go through many changes until they become an adult.



Some animals, such as butterflies, go through **metamorphosis** to become an adult.



Birds are hatched from eggs and are looked after by their parents until they are able to live independently.



Some living things, such as plants, contain both the male and female sex cells. In others, such as humans, they contain either the male or female sex cell.

### Reproduction in mammals

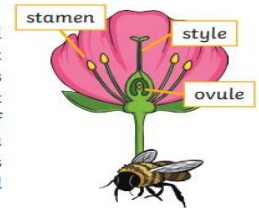
- Mammals use **sexual reproduction** to produce their offspring.
- The male sex cell, called the sperm, **fertilises** the female sex cells.
  - The **fertilised** cell divides into different cells and will form a baby with a beating heart.
  - The baby will grow inside the female until the end of the **gestation** period when the baby is born.



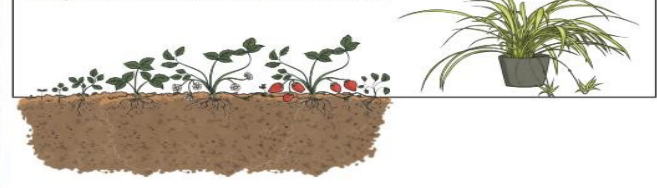
Echidnas and platypus are mammals but they lay eggs rather than giving birth to live young.

### Plants

Most plants contain both the male sex cell (pollen) and female sex cell (ovules), but most plants can't **fertilise** themselves. Wind and insects help to transfer pollen to a different plant. The pollen from the stamen of one plant is transferred to the stigma of another. The pollen then travels down a tube through the style and fuses with an ovule.



Some plants, such as strawberry plants, potatoes, spider plants and daffodils use **asexual reproduction** to create a new plant. They are identical to the parent plant.



### Agreed Real Life Outcome:

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