# Mossfield Primary School Knowledge Organiser

Year 5 — **Life Cycles —** Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird.

**Reproduction -** Describe the life process of reproduction in some plants and animals.

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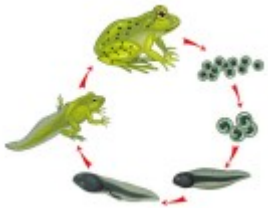
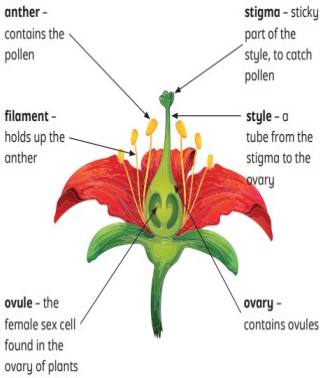
| Life cycles of mammals | Life cycles of amphibians (frogs)  | Life cycles of insects | Life cycles of birds | Sexual reproduction in mammals |
| Reproductive parts in plants   | Pollination | Asexual reproduction | Plan and plant – clone plants | Findings – clone plants & interpret data |

# Key Vocabulary

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| Anther | An anther is the part of a flower that makes and holds the pollen. |
| Asexual reproduction | Asexual reproduction involves one parent and produces offspring that has the same characteristics as the parent. |
| Chrysalis | A chrysalis is the hard, protective shell a caterpillar forms during the middle stage of its life cycle (called metamorphosis) to transform into a butterfly, acting like a special, safe sleeping bag where it changes from a crawling larva into a flying adult. |
| Clone | A clone is like an exact copy or a genetic twin of a living thing, like a plant or animal, made by humans or naturally, with the same DNA, such as identical twins or a plant grown from a cutting. |
| Cutting | A cutting is a piece of a plant's stem, leaf, or root that is removed and used to grow a new, separate plant. |
| Egg cells | An egg cell is defined as the female sex cell, also known as an ovum. |
| Embryo | An embryo is defined as a baby animal or plant in the early stages of its development |
| Fertilisation | Fertilisation is the joining together of a male sex cell and a female sex cell to create the first cell of a new living thing. |
| Fledgling | A fledgling is a young bird that has recently left its nest and is learning to fly, but is still dependent on its parents for food and protection. |
| Hatchling | A hatchling is defined as a baby animal that has just broken out of, or emerged from, its egg. |
| Mammary gland | The mammary gland is an organ found in female mammals that produces milk to feed their young. |
| Metamorphosis | Metamorphosis is a biological process by which an animal physically develops including birth transformation or hatching, involving a conspicuous and relatively abrupt change in the animal's body structure through cell growth and differentiation. |
| Monotreme | Monotremes are defined as a unique group of mammals that lay eggs. They are the only mammals in the world to do this, combining features of |
| Nestling | A nestling is a young bird that is too young to leave the nest and is completely dependent on its parents for food and care. |
| Larva | A larva (plural: larvae) is the young, immature form of an animal that hatches from an egg and looks completely different from its adult form. |
| Ovary | Seeds are formed inside the ovary of a flower. An ovary is a female reproductive organ |
| Ovule | An ovule is defined as the part of a flower that contains the female sex cell. |
| Parent plant | A parent plant is defined as a plant that has reproduced to create new plants, which are called offspring. |

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| Reproduction | Creating offspring by a sexual or asexual process. |
| Runner | A runner (also known as a stolon) is a special type of horizontal stem that grows along the surface of the soil. Its main |
| Sexual reproduction | Sexual reproduction is a biological process where a new living thing (offspring) is created by combining genetic infor- |
| Sperm cells | A sperm cell is the male sex cell, or gamete, which carries half of the genetic information needed to create a new or- |
| Stigma | The stigma is the top, sticky part of a flower's female reproductive organ (the pistil or carpel) that receives pollen |
| Style | The style is a slender stalk in the pistil of a flower that connects the stigma to the ovary. |
| Tuber | A tuber is a thick, swollen, underground part of a plant's stem or root that stores food, mainly as starch. This stored energy helps the plant survive conditions like winter or drought and allows it to grow new plants. |