

Year Group	5
Term	Summer
Subject	Science

Topic	Living Things and Their Habitats
Curriculum Intent	For children to explain the differences in the life cycles of a mammal, an amphibian, an insect and a bird.

Key Vocabulary	gamete, stamen, stigma, carpel, pistil, pollination, germination, flowering, sexual reproduction, life cycle, seed, pollen, anther, filament, style, ovary, botanical illustration, dissection, corm, bulb, spores, cutting, fern, moss, liverwort, tubers, asexual, non-flowering, propagation, artificial, natural, metamorphosis, amphibian, insect, mammal, bird, sexual reproduction, life cycle, gestation, foetus, sperm, egg, uterus, chick, egg, baby, adult
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Science Skills	Children observe life cycle changes in a variety of living things. They find out about different types of reproduction, including sexual and asexual reproduction in plants, and sexual reproduction in animals. They observe and compare the life cycles of plants and animals in their local environment with other plants and animals around the world, asking pertinent questions and suggesting reasons for similarities and differences.
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Science Knowledge	To describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. To describe the life process of reproduction in some plants and animals.
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Summer 1 MTP

Week	Learning Objective	Activities	Differentiation	Outcome
1	LO: To understand sexual reproduction in flowering plants	Watch videos and explore how plants reproduce. Using Hamilton Trust resources – Show children how to dissect a flower and create a scientific drawing, labelling each part of the flower. Using the instruction sheet and working in pairs, children slowly dissect their flowers. Drawing each part and labelling it as they work.	SEN – supply with a labelled diagram to copy.	Children to dissect and label the parts of a flower, identifying the male and female gamete and research the lifecycle and reproduction of their flowering plant.
2	LO: To learn about processes of natural and artificial asexual reproduction in plants.	Discuss asexual reproduction with children. Children write explanations to explain the lifecycle of a non-flowering plants. Children are given cuttings from Asexual plants, and plant into pots – to water and look after in school.	SEN - given template to write explanation.	To be able to explain the ways that plants can reproduce asexually, both naturally and artificially.
3	LO: To learn about the lifecycle and reproduction of amphibians and insects	Watch some online footage of insect and amphibian lifecycles to help create your own life cycle illustrations for display. Using Hamilton Trust Resources, children in groups, create 5 lifecycles using the words and pictures from the resource. Children draw their own lifecycle of choice from insects researched/shown.	SEN: Use lifecycle pictures from Hamilton for children to describe. Challenge: Draw a Venn diagram showing the differences and similarities between the two	Children will draw zoological illustration of the lifecycles of two insects and an amphibian.

4	LO: To learn about the lifecycle and reproduction of mammals and birds	Recap what a mammal is. Explain that mammals have a fairly simple life cycle and reproduce using sexual reproduction. Watch a horse giving birth in the BBC clip and highlight how the foal gets onto its feet within minutes. Ask children to identify the most obvious difference between birds and the large majority of mammals. Give children the opportunity to research life cycles of mammals and birds of their choice. Draw and annotate a life cycle zoological illustration for both mammal and bird lifecycles.	SEN: given lifecycle pictures to order	Children will research a life cycle of a mammal and bird online and draw and annotate a life cycle zoological illustration for both lifecycles,
5	LO: To research the life cycles of a contrasting bird, insect, amphibian and plant	Challenge children to find some interesting and quirky animals and plants from around the world and explore their life cycles online, in pairs. Suggest some good websites to start with and encourage them to also think about using the school library for books. Get them to think about the way they want to create their illustrations. Encourage each pair to look at the illustrations they have created so far and to remind themselves of the kinds of life cycle and reproduction they are expecting for each type of animal and plant.	SEN – give a list of lifecycles to choose from	Children will research the life cycles of an insect, amphibian, mammal, bird and plant that contrasts with those already studied and create a series of annotated scientific illustrations.