**Year 3 Science Curriculum – Autumn 2**

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| **Theme: Flowering plants life cycles** |
| **Curriculum objectives** | **Vocabulary** | **Links across the curriculum** |
| Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal. | **Complete** | When two or more living things both require something which is in limited supply. | **Formation** | How something is produced. | Art:* William Morris – the natural world to inspire designs.

DT:* Cooking – making fruit muesli bricher

Geography:* Local walks for trips – noticing nature

English:* Oracy for presentation
* The Last Garden by Rachel Ip
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| **Invent** | To create or design (something that has not existed before) | **Savoury** | Not sweet. |
| **Scar** | A blemish on the skin of fruit or an animal, produced as part of the healing process. | **Similar** | Not identical but very alike. |
| **Structure** | The way that the parts of something are joined together. |  |  |
| **Tier 3 vocabulary** [SNAP23\_Y3\_M6\_lifecycles\_ms.docx (live.com)](https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fstatic.collins.rhapsode.com%2FSnap_Science%2FTeaching_Science%2FYear_3%2FSNAP23_Y3_M6_lifecycles_ms.docx&wdOrigin=BROWSELINK) |
| **Prior knowledge:** *What specifically have pupils learned that is relevant to this unit that they are building upon?* | **Future knowledge:** *What specifically will pupils learn in the future that is relevant to this unit?* |
| Children have previously learnt:- To identify and describe the functions of some parts of a flowering plant: roots, stem/trunk and leaves (Year 3 Biology – Plants).- That plants need air, light, water, nutrients and room to grow (Year 3 Biology – Plants). | This prepares children for later learning:* About reproduction in plants (Year 5 Biology – Living things and their habitats).
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| **Lesson Sequence** | **Key Knowledge** | **Key Skills** |
| What is inside a flower? | * Children learn that flowers produce seeds.
* Identify the sepals, petals, carpel including the ovary (female part) and stamens (male part).
* They learn that a flower has male parts that produce pollen and a female part that contains the ovary which produces ovules.
* Pollen is produced (the anther at the top of the stamen).
* Different flowers will have different numbers, shapes and colours of sepals, petals and stamens. The top of the carpel (the stigma) may also be shaped differently. Some carpels end in a single point, while others may be split into a number of parts.
 | Working scientifically:● Recording findings using simple scientific language, drawings, labelled diagrams, [keys, bar charts, and tables]. |
| What is animal pollination? | * In order for the flower to produce seeds, the pollen from one flower needs to be transferred to another flower and that this is called pollination.
* Animals (mainly insects) can pollinate flowers.
* Pollinators can be attracted to a flower by its colour and its scent.
* Pollinators pick up nectar and pollen when they have visited a flower.
* Pollen is then transferred to the top of the female part (carpel) of another flower.
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| What is wind pollination? | * Flowers are pollinated by the wind.
* The similarities and differences between wind- and insect-pollinated flowers.
* Describe and explain the structure of a wind-pollinated flower.
 | Conceptual knowledge:● Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.Working scientifically:● Identifying differences, similarities or changes related to simple scientific ideas and processes |
| What are fruits? | * A fruit develops from a flower that has been pollinated.
* After pollination the ovary gets bigger and becomes the fruit.
* All fruits contain at least one seed.
* Children make observational drawings of cut fruits.
* Fruit develops from inside of the flower.
* Some examples of fruits which can be found in the vegetable aisle in a supermarket or greengrocers are: peas, courgettes, pumpkins, tomatoes, beans, peppers, chillies, avocados.
 | Working scientifically:● Identifying differences, similarities or changes related to simple scientific ideas and processes.● Recording findings using simple scientific language, drawings, labelled diagrams, [keys, bar charts, and tables]. |
| How are seeds dispersed? | * Seeds are moved away from the plant that produced them and that this is called seed dispersal.
* Seeds are dispersed to avoid competition with the plant that produced them.
* Seeds are dispersed by wind, water, animals eating fruit, seeds becoming attached to an animal, and through explosions of a seed pod (fruit).
* How the structure of the seed and fruit relates to the way that it is dispersed.
 | Working scientifically:● Asking relevant questions and using different types of scientific enquiries to answer them.● Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.Scientific enquiry type:● Identifying and classifying. |
| **Themes and links** |
| **Themes (types of enquiry)** | **Where these are covered:** | **Links across the science curriculum** |
| **Observation over time** |  |

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| **EYFS**  |  |
| **1**  | Seasons |
| **2**  | Growing |
| **3**  |  |
| **4**  | Electricity |
| **5**  | Materials |
| **6** | Classification of living things |

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| **Research** |  |
| **Pattern seeking** |  |
| **Comparative and fair testing** | * Lesson 3
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| **Identifying, classifying and grouping** | * Lesson 5
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