

Inspiring and enabling our school community to live life to the full



YEAR 3 SCIENCE

Flowering Plants Life Cycle

Our Science curriculum aims to enthuse children and help them to be curious and develop a sense of excitement about the world. Through a range of teaching, learning and extra-curricular opportunities, children will develop scientific knowledge and conceptual understanding to recognise the uses and implications of Science, today and for the future. We encourage children to ask their own questions; predict how things will behave and analyse causes, using Science to explain what is happening.

Characteristics of an Effective Learner

Courage
Commitment
Collaboration
Creativity
Curiosity

Prior Learning:

- Children explore animals' diets and classify them into carnivores, herbivores and omnivores in year 1
- Children know how animals in all habitats depend on plants and each other for food by creating simple food chains in year 2
- In year 3, children explore different types of food, sorting them into different categories and planning meals. They begin to understand that different people may have different energy/nutritional requirements e.g. athletes or explorers.

Key Vocabulary taught in this unit:

Compete, formation, invent, savoury, scar, similar, structure, burr, carpel, dispersal, nectar, nutrient, ovary, ovule, pollen, pollination, pollinator, ripe, scent, sepal, stamen, explain/explanation, observe/observation, flower, fruit, insect, petal, seed.

Key Questions:

- Q1: What is inside a flower?
Q2: What is animal pollination?
Q3: What is wind pollination?
Q4: What are fruits?
Q5: How are seeds dispersed?

Intent: What do we want the children to know and be able to do by the time they complete this unit?

- 1: The flower produces the plant's seeds. A flower has: a female part (called the carpel) which includes the ovary, which contains ovules; male parts (called stamens) which produce pollen; petals which surround the male and female parts; and sepals which cover the flower when it is in bud.
- 2: Pollination is when the pollen from one flower is transferred to another flower. Animals, called pollinators, can transfer the pollen.
- 3: Some flowers' pollen is transferred from one plant to another using the wind.
- 4: After pollination, a fruit develops from the flower. The ovary swells up and becomes the fruit. Fruits contain at least one seed.
- 5: Seeds are moved away from the plant that produced them, and this is called seed dispersal. They are moved away so they do not compete for space, sunlight, water and nutrients. Seeds are dispersed in a number of ways. The structure of the seedpod (fruit) and seed is related to the method of dispersal. Seeds are dispersed by wind, water, animals eating fruit, seeds becoming attached to an animal, and through explosions of a seedpod (fruit).

Working Scientifically:

- Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions.
- Recording findings using simple scientific language, drawings, labelled diagrams, [keys, bar charts, and tables].
- Identifying differences, similarities or changes related to simple scientific ideas and processes.

Impact / Outcome: What will the final product / result be?

Children will learn about the methods scientists use to build scientific knowledge, observing natural phenomena and developing explanations.

They will learn that scientists and inventors often take years to discover ways in which the world works, or to invent new materials.

They will develop an understanding of the following type of enquiry: identifying and classifying.

P4C Inquiry (where appropriate):