Learning Organiser for Year 3 - Plants

National Curriculum Summary
Key Subject Concept

- Identify and describe the functions of different parts of flowering plants: roots, stem, leaves and flowers
- Investigate the way in which water is transported within plants
- Explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal.

Key Questions

What does each part of the flowering plant do?

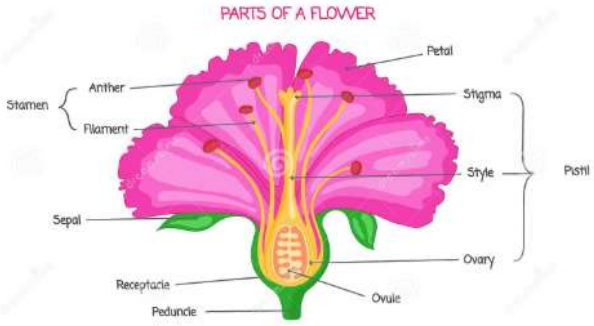
How do plants carry water?

How do the parts of the flower support pollination?

Key Vocabulary	Definition
Nutrition	The ingredients needed for health and growth
Reproduction	The production of offspring
Absorb	Take in or soak up
Mineral	Material that does not come from an animal or a plant
Pores	Tiny opening for gases to pass through
Stigma	Top of the centre part of the flower which takes in pollen
Stamen	The stamens of a flower are the small, delicate stalks which grow at the flower's centre and produce pollen.
Style	The stalk of a carpel, bearing the stigma
Anther	The terminal part of a stamen consisting usually of two lobes each containing two sacs in which the pollen matures
Filament	The filament is the stalk that holds the anther.
Sepal	The sepal is a support structure for the petal. It is typically green and helps to protect and hold up the petal. All the sepals together are called the calyx.

Key Facts

- The petals on a flower are usually bright in order is to attract bees and other insects so that they can collect pollen to make seeds.
- Seeds grow to make new plants. This is called germination.
- Leaves use carbon dioxide and sunlight to make food for the plant.
- The stem carries water and other nutrients from the roots to the rest of the plant. It helps to keep the plant upright so that the sunlight can reach it more easily.
- The roots help to 'anchor' the plant in the soil. They also absorb water and nutrients from the soil for the stem to carry to the rest of the plant.
- The flower's job is to create seeds so that new plants can grow.
- Pollination occurs when pollen from the anther is transferred to the stigma by bees and other insects. The pollen then travels down and meets the ovule. When this happens, seeds are formed. This is called fertilisation.
- Seeds are then dispersed so that germination can begin again.

Working Scientifically Skills	Diagrams/Charts/Pictures
Setting up simple practical enquiries, comparative and fair tests	
Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment	
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	

Possible Experiences	Biographical Information
• How does the amount of water/light/soil affect the height/number of leaves on a plant? • How is seed germination affected by seed size/temperature/moisture/soil? • How does the amount of space for roots affect the size of a plant? • What affects the speed that water rises up a plant stem?