Our Intent is: To develop inquisitive children who are excited about investigating with curiosity, "How can scientific enquiry explain the world?" Exploring answers by gathering and analysing evidence.

Forton Primary School
Science

Clougha Class
Summer 1
Year A

Etymology: Pollination- the transfer of pollen to a stigma, ovule, flower, or plant to allow fertilization.

Key Concept: Plantspll

Key Question: Why are plants important to the world?


Superhero Plants
By Chris Packham

Unit Overview:

The function of the different parts of the plant.

N.C. LINKS:

Plants Pupils should be taught to:

- Identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers
- Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant
- 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.

Vocabulary:

Our Intent is: To develop inquisitive children who are excited about investigating with curiosity, "How can scientific enquiry explain the world?" Exploring answers by gathering and analysing evidence.

How water travels up a plant, how plants get nutrients. Seed dispersal and pollination.	Subject Specific: Roots, stem, leaves, flowers, nutrients, evaporation, fertilisation, petal, stamen, carpel (pistil), sepal, pollination, pollinator, germination, seed dispersal.	Working Scientifically: Research Comparative and fair test Systematic Careful observation Thermometer Data Gather Record Classify Labelled diagrams Keys Bar charts Tables Conclusion Prediction difference Similarities Changes evidence

. New Knowledge Progression: • Explore the requirements of plants for life and growth (air, light, water, nutrients from soil, and room to grow) and how they vary from plant to plant. • 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. • Roots grow downwards and anchor the plant. • Water, taken in by the roots, goes up the stem to the leaves, flowers and fruit.	Building on Prior learning KS1: • Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. • Identify and describe the basic structure of a variety of common flowering plants, including trees.	Building on Prior learning when B follow A: • Recognise that living things can be grouped in a variety of ways. • Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. • Recognise that environments can change and that this can sometimes pose dangers to living things.

Our Intent is: To develop inquisitive children who are excited about investigating with curiosity, "How can scientific enquiry explain the world?" Exploring answers by gathering and analysing evidence.

• Nutrients (not food) are taken in through the roots. • Stems provide support and enable the plant to grow towards the light. • Plants make their own food in the leaves using energy from the sun. • Flowers attract insects to aid pollination. • Pollination is when pollen is transferred between plants by insects, birds, other animals and the wind. • Seeds are formed after the flowers are pollinated. • Many flowers produce fruits which protect the seed and/or aid seed dispersal. • Seed dispersal, by a variety of methods, helps ensure that new plants survive. • Plants need nutrients to grow healthily (either naturally from the soil or from fertiliser added to soil).		• Use and make identification keys for plants and animals.

Key Skills (Disciplinary)

- Suggest their own ideas on a concept and compare these with what they observe / find out.
- Observe and record relationships between structure and function or between different parts of a processes.

Our Intent is: To develop inquisitive children who are excited about investigating with curiosity, "How can scientific enquiry explain the world?" Exploring answers by gathering and analysing evidence.

- Make a simple guide to local living things.
- Use guides or simple keys to classify / identify [animals, flowering plants and non-flowering plants].
- Use their observations to identify and classify.
- Begin to give reasons for these similarities and differences.
- Record similarities as well as differences and / or changes related to simple scientific ideas or processes or more complex groups of objects / living things / events

(e.g. evaporation and condensation, different food chains, different electrical circuits).

- Ask questions such as 'What will happen if…?" or 'What if we changed…? .
- Choose / select a relevant question that can be answered [by research or experiment / test].
- Recognise when and how secondary sources might help them to answer questions that cannot be answered through practical investigations.
- Make some decisions about an idea within a group *(e.g. I think we should find out by testing…)*
- Increasingly support, listen to and acknowledge others in the group.

Sequence of Lessons:

1. LO – To name the different parts of flowering plants and explain their jobs.
2. LO – To explore the requirements of plants for life and growth.
3. LO – To set up an investigation to find out what plants need to grow well.
4. LO – To investigate the way in which water is transported within plants.
5. LO – To name the different parts of a flower and explain their role in pollination and fertilisation.
6. LO – To understand the life cycle of a plant.

Enhancements: Myerscough Plant World	End of Unit Outcome: Plant Fact File

Our Intent is: To develop inquisitive children who are excited about investigating with curiosity, "How can scientific enquiry explain the world?" Exploring answers by gathering and analysing evidence.

	Design a plant information leaflet that gives lots of facts about plants (Plant parts and requirements, water transportation, life cycle of a plant etc). Present it in a shape of a flower.
Oral Assessments: Can you name the different parts of flowering plants and explain their jobs? What are the requirements of plants for life and growth? How is water transported within plants? Can you name the different parts of a flower and explain their role in pollination and fertilisation? Can you explain the life cycle of a plant?	