Year 3 Term 6

Should humans interfere with nature?

SCIENCE

National Curriculum Links:
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.

Essential Prior Learning:
Children should be able to identify and name some common plants, including deciduous and evergreen trees, that can be found locally. Identify the roots, stem, petals, branches, etc. of common flowering plants, including trees. Seeds and bulbs grow into mature plants. Plants need water, light and a suitable temperature to grow and stay healthy.

Progression in Skill:
Use secondary sources to find information and answer question (books, photographs and videos) Conduct simple practical enquiries that are comparative or fair tests Make systematic and careful observations of the plants each week for changes in condition, measuring different changes.

Investigation over time (Pattern-seeking) Develop criteria to group, sort and classify, taking into account similarities and differences or changes related to simple scientific ideas and processes. From your own enquiries, observations and measurements: • collect/gather data and results • record data and results • present data and results Use straightforward scientific evidence to develop explanations to answer questions. Draw simple conclusion, e.g. the …-er the … the …-er the … Compare the development of scientific discoveries and inventions. Appreciate that ideas are refined and improved over time. Explore the work of: George Washington Carver (principles of crop rotation) and Luciano Scandian (honeybees health).

Long-term Memory Knowledge:
Explain the functions of the different parts of a plant: roots, stem/trunk, leaves and flowers. Name what plants need to live and grow. Explain, simply, how water is transported within plants. Describe the life cycle of a plant, including pollination, seed formation and seed dispersal. Use books, photos, and videos to find information and answer questions. Carry out simple experiments, making sure they are fair tests and then draw simple conclusions. Measure accurately. Group and sort things based on similarities, differences, or changes. Compare how scientific ideas and inventions have developed. Know the importance of George Washington Carver (crop rotation) and Luciano Scandian (honeybee health).

Key Vocabulary	
nutrients	something that is needed for healthy growth, development and to function
transportation	process of moving water, minerals and food to all parts of the plant body
dissect	cut or take apart for investigation
pollination	transfer of pollen, usually from one plant to another, so new plants can grow
seed formation	the making of a seed as part of the process of reproduction in plants
seed dispersal	movement, spread or transportation of seeds away from the parent plant

Progression in Resources:
a collection of seeds that use different means of dispersal; collection of different plants; digital microscope; white carnations/roses/celery; transparent containers; herb plant;

Relevance	
Now	Children appreciate the function of the different parts of a plant and treat them with care.
Future	They will be able to care for plants with an understanding of what plants need to thrive, enjoying plants in the home/garden and in public.
Aspiration	Pursue a career and/or interest in gardening and plants. This may be pursuing a career in horticulture or tending an allotment. They may become involved in the development of new varieties of plants, responding to the changing needs of the world and its population.