Language Provision Termly Science Learning Journey Overview

Summer Term 2024

As Scientists, we will be covering the following topic:
Biology: Understanding Plants

Topic	Understanding Plants	
Progression Step/Year Curriculum	**By the end of the learning journey, I will be able to:**	**Vocabulary**
Progression Step 1	• Start to find to find an object with a specific characteristic (eg, a plant that is yellow). • Notice and respond to plants in my local environment. • Collect different leaves with support. • Identify leaves in a variety of situations, eg flowers, grass, pine needles etc. • Identify one characteristic of a plant or seed, eg small. • Differentiate between plant life eg flowers and leaves, trees and other plants.	Plant, tree, flower, grass, leaves, seed, grow.
Progression Step 2	• Identify natural familiar objects, eg. Fruit and vegetables. • Observe the shapes of flowers and leaves and give a single property. • Point to parts of a plant when they are named. • Compare flowers and leaves and identify a difference (compare 2 flowers, compare 2 leaves). • Observe and respond to change over time (eg, observing the change in plants when growing). • Identify that some plants give us food. • Suggest ways that can help plants grow. • Compare the results of growing seeds in 2 different places (eg dark and light).	Plant, tree, flower, grass, leaves, seed, grow, change, observe, same, different, shape, food, fruit, vegetable, dark, light.
Progression Step 3	• Classify plants simply as trees or flowers. • Compare and contrast plant life, eg 2 flowers or 2 trees. • Look at and describe plants in more detail, eg through a magnifying glass. • Sequence a simple life cycle of a plant. • Identify that some plants are vegetables. • Identify where fruit comes from, eg plants, not a shop. • List items that I need to successfully grow flowers from a seed.	Plant, tree, flower, grass, leaves, seed, grow, change, observe, same, different, shape, food, fruit, vegetable, dark, light, classify, compare, describe, vegetation.

	• Collect evidence to show the different types of vegetation grown in the local area.	
Year 1	**Knowledge** • Classify plants as living things. • Describe plants in simple terms. • Group different plants and explain simply how I have grouped them. • Talk about, name and label the main features/parts of plants and flowers. • Compare/contrast 2 flowers. • Draw a variety of flowers showing the main features. • Draw and name flowers that I see outside. • Talk about, name and label the main parts of a tree. • Compare/contrast 2 trees. • Draw a tree showing the main features. • Identify the differences between evergreen and deciduous trees. • Draw and name trees that I see outside. • List what plants need to survive, eg nutrition. • List what seeds need to grow well. • State that a shoot grows up. • State that a root grows down. • State that flowers make seeds.	Plant, tree, flower, grass, leaves, seed, grow, change, observe, same, different, shape, food, fruit, vegetable, dark, light, classify, compare, describe, vegetation, shoot, root, deciduous, evergreen, nutrition, water, sunlight, air, oxygen, carbon dioxide, magnifying glass, growth, life cycle, observe, record, suggest, results, chart.
	Skills • Use a magnifying glass to aid observation of a plant. • Describe what I can see under the magnifying glass. • Ask questions about what they have observed. • Measure the growth of seeds with support. • Record the growth of the seeds in class. • Records my results using a simple pre-drawn chart. • Suggest why/why not a seed grew well/not well based on observations.	

Year 2	**Knowledge** • Labels parts of vegetables as root, leaf and stem • Explains the role of different parts of a plant simply, e.g. roots anchor plant • Identifies that plants need light, water, warmth and nutrients • Identifies that plants reproduce • Explores how some plants reproduce, e.g. by planting and growing potatoes • Uses local environment to study changes in plants throughout a school year • Aware of the term germination • Tests different bulbs/seeds to find out how the availability of light affects their growth • Describes how seeds/bulbs grow into mature plants • Describes the basic needs of plants for survival and the impact of changing these and the main changes as seeds and bulbs grow into mature plants	Plant, tree, flower, grass, leaves, seed, grow, change, observe, same, different, shape, food, fruit, vegetable, dark, light, classify, compare, describe, vegetation, shoot, root, deciduous, evergreen, nutrition, water, sunlight, air, oxygen, carbon dioxide, magnifying glass, growth, life cycle, observe, record, suggest, results, chart, environment, reproduce, germination, bulbs, experiment, predict, data, survival.
	Skills • Observes the roots of a plant closely, e.g. hyacinth roots in a glass jar • Suggests what a plant needs to help it grow based on observations, e.g. a plant with yellow leaves may need more sunlight • Records their observations, e.g. drawings, photographs or notes • Helps plan experiment to show how well seeds grow under different conditions, e.g. differences in light / water / temperature • Predicts what might happen with each variable • Records data using observations • Records data using simple measurements • Explains their ideas simply using their results or observations • Creates a chart to record results	

Year 3	**Knowledge** • Labels a flowering plants, giving an explanation of the functions of the root, stem, etc. • Names, locates and describes the main parts of a plant • Explains simply why seeds need to be dispersed • Suggests how often observations should be made • Recognises that plants make their own food • Understands of the term "photosynthesis" • Describes the requirements of plants for life and growth • Begins to give answers in comparable form, e.g. the more sunlight the better the plant will grow • Explores how plants in different habitats vary in their requirements • Recognises that the flower of a plant is important in its life cycle • Labels parts of a flowering plant Finds the seeds in different flowers/plants • Understands the terms "pollen" and "pollination" • Looks for patterns in colours or textures of flowers when discussing how the seeds are dispersed • Discusses the importance of plant life in relation to human/animals • Produce a guide/leaflet on the best growing conditions for a specific plant based on their investigations	Plant, tree, flower, grass, leaves, seed, grow, change, observe, same, different, shape, food, fruit, vegetable, dark, light, classify, compare, describe, vegetation, shoot, root, deciduous, evergreen, nutrition, water, sunlight, air, oxygen, carbon dioxide, magnifying glass, growth, life cycle, observe, record, suggest, results, chart, environment, reproduce, germination, bulbs, experiment, predict, data, survival, pollen, pollination, function, disperse, conditions, photosynthesis, temperature, habitats, variables, conclusions, investigation.

	Skills • Explores the basic needs of a plant by planning an experiment to show effects on a plant of lack of water/light/different temperature • Gives different variables that could be tested to find the best growing conditions for a seed • Decides how to make a seed growing investigation fair • Decides on equipment they need to grow seeds in an experiment • Uses observations to draw simple conclusions • Closely observes different plants noting where the seeds are found • Predicts how different conditions may affect seed growth • Investigates the best conditions for a seed to grow • Makes careful observations • Uses and reads a thermometer Records their findings using tables or charts • Uses findings to draw simple conclusions • Discusses results they found and compare with their prediction • Observes different stages of a plant's life cycle over time • Investigates how plants transport water, e.g. using dye and white flowers	

Year 4	**Knowledge** • Describes and labels a flowering plant, giving an explanation of the functions of the main parts, e.g. flower, leaves, root • Lists factors that are needed for plant growth • Observes and compares living things in order to answer scientific questions • Understands the role of the leaf in producing new material for plant growth Understands the term "lobe" • Understands the term "vein" • Labels the veins and lobes of a variety of leaves • Understands and uses the terms evergreen and deciduous • Discusses changes seen in leaves through different seasons • Describes simply how the plant takes in water at the root and exits water at the leaf • Explains how the plant makes its own food • Makes links between the amount of light in spring/summer and amount of food a plant makes • Uses a range of resources to find out key questions about plants, e.g. does photosynthesis occur under water • Uses resources to find and name parts of a flower/seedpod, e.g. guide • Suggests how a seed might be dispersed • Suggests how water is transported throughout the plant from roots to leaves at the top of the plant • Suggests why some parts of plants are different, and what the role of specific parts are, e.g. stems, thorns • Gives examples of each part of a plant we eat, e.g. rhubarb stem, carrot root • Describes flowering plants as having life cycles • Outlines different stages of a plant's lifecycle, e.g. seed dispersal • Uses the correct scientific vocabulary germination, pollination, fertilisation and seed dispersal • Makes a detailed labelled drawing of a plant, which includes their observations using equipment such as microscopes • Makes detailed written explanations about the function of a variety of flowering and non-flowing plants	Plant, tree, flower, grass, leaves, seed, grow, change, observe, same, different, shape, food, fruit, vegetable, dark, light, classify, compare, describe, vegetation, shoot, root, deciduous, evergreen, nutrition, water, sunlight, air, oxygen, carbon dioxide, magnifying glass, growth, life cycle, observe, record, suggest, results, chart, environment, reproduce, germination, bulbs, experiment, predict, data, survival, pollen, pollination, function, disperse, conditions, photosynthesis, temperature, habitats, variables, conclusions, investigation, fair test, lobe, vein, seasons, fertilisation, microscope.

	Skills • Plans an investigation to test their list of factors that they think are needed for plant growth • Considers resources they will need for an investigation • Identifies what is fair about their test • Records their findings in charts/tables of their own devising • Makes careful observations e.g. of parts of a simple flower • Observes parts of a plant which have different growth factors using equipment, e.g. a celery stem which has had no water and one that has • Uses equipment to observe, deconstruct and record information they find, e.g. uses a microscope to look closely at the texture of a seed • Identifies differences when observing • Compares different leaves and records their information • Compares different stems, e.g. blackberries (thorny), small tree (bark) and records	