Progression in Science at Welwyn St Mary's Primary School

Plants

	Expectations	Key words
EYFS	• identify something as a plant • name some common plants, identify leaf, root, stem and flower • recognise that plants need water to grow • name some places plants live • identify the seeds in a fruit	Root, stem, tree, leaf, flower, water, seed, plant,
Y1 In the Garden	• make observations of plants, including flowers and vegetables they have planted • identify the leaf, root, stem and flower of a plant • identify the trunk, branch, roots and leaves of a tree • know that plants produce seeds • identify differences between plants • **identify and describe the basic structure of a variety of common flowering plants, including trees** • name some common plants • name some plants that live in the garden • name some plants that live in the wild • name some trees in the local environment • recognise that different plants live in the local environment • use simple identification guides to name plants in the local environment • **identify and name a variety of common wild and garden plants, including deciduous and evergreen trees** • *compare and contrast different plants* • *sequence pictures of how plants changes over time* • *describe how deciduous trees changes throughout the year* • *explain why some plants are only seen at certain times of the year*	petal, tall, taller, tallest, wild, trunk, similar, different, within, under, next to, soil, blossom, fruit, leaves, branch, bulbs, shrub, alive, vegetables, grass, garden, habitat, deciduous, earth, evergreen, compost, non-living, living, not alive, dead, artificial Names e.g. daffodil, daisy, sunflower, rose, lavender, tulip, snowdrop, holly, dandelion, oak, beech, chestnut, pine
Y2 Growing Plants	• know that flowering plants produce seeds which grow into new plants • know that some plants have bulbs from which they grow • make observations of plants over time • explore how plants from seeds and bulbs grow • describe what happens to bulbs during the	seedling, bulb, buds, shoot, water, sun light, seeds, nuts, fruit stones, warm, grow, temperature, germinate

	plant cycle as they grow • describe what happens to a seed as it grows and develops • describe what they observe as new plants grow • **observe and describe how seeds and bulbs grow into mature plants** • *compare the plant cycle for a plant from a seed with that from a bulb* • suggest how to find out about what plants need in order to grow well • recognise that plants are living and need water, light and warmth to grow • describe differences between plants grown in the light and in the dark • **find out and describe how plants need water, light and a suitable temperature to grow and stay healthy** • *explain how to look after a variety of plants* • *know that a seed and bulb both contain everything a plant needs to grow* • *explain that seeds and bulbs do not need light to germinate and identify how this is different to the needs of a plant* • *explain how plants in the desert survive with little water and plants in the rainforest survive with little light*	
Y3 Investigating Plants	• identify parts of flowering plants • **identify and describe the functions of different parts of flowering plants: roots, stem/trunk, leaves and flowers** • describe why healthy roots and a healthy stem are needed for plants to grow • recognise that the leaves of a plant are associated with healthy growth and more specifically nutrition • recognise that plants need light, water and warmth and healthy leaves, roots and stems in order to grow well • know that water travels from the roots up the stem • **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** • know that plants make their own food • know that fertilisers contain minerals • understand that plants absorb minerals from the soil (Teacher Note: plants create their	Ground, transport, attract bees, catch sunshine, green, air, nutrients, growth, pollen, pollination, seed formation, seed dispersal, nutrition, support, anchor, reproduction

	own food using sunlight, water and carbon dioxide, they do not absorb food from the soil) • describe how changes to light and fertiliser affect plant growth • *explain that differences in plant growth are due to the amount of light and/or water* • **investigate the way in which water is transported within plants** • describe how the stem has a role in support and nutrition (transport of water) • *explain why healthy roots and a healthy stem are needed for plants to grow* • **explore the part that flowers play in the life cycle of flowering plants, including pollination, seed formation and seed dispersal** • describe why plants need flowers • sequence pictures to show the life cycle of a plant • describe how pollen and seeds are dispersed • explain the role of bees and insects in pollination • *describe the processes of pollination, seed formation and seed dispersal* • *compare the roots of different plants (e.g. desert plants or rainforest trees (Teacher Note: rainforest trees have very shallow roots as the quality of the soil is poor and most of the nutrients are near the surface)*	