



Understanding of the	Norld: Science	KS1 National Curriculum Statement		KS2 National Curriculum Statement				
		KST National Curriculum Statement:		NS2 National Curriculum Statement.				
Plant seeds and care for growing plants		• Identify and name a variety of common wild		I lear 5				
Understand the key fe	atures of the life cycle of	 Identity and name a variety of common wild and garden plants, including deciduous and 		• identity and describe the functions of different parts of nowering plants: roots, stem/trunk,				
a plant	atores of the file cycle of	evergreen trees		• Evolore the requirements of plants for life and growth (air light water putrients from soil and				
		 identify and describe the basic structure of a 		room to grow) and how they vary from plant to plant				
Reception		variety of common flowering plants, including		Investigate the way in which water is transported within plants				
Explore the natural world around them.		trees		• Explore the part that flowers play in the life cycle of flowering plants, including pollination.				
Describe what they see, hear and feel whilst		Year 2		seed formation and seed dispersal.				
outside.		Observe and describe how seeds and bulbs		Year 4				
Understand the effect	of changing seasons on	grow into mature plants		• recognise that living t	things can be grouped in	a variety of ways		
the natural world arou	nd them.	• Find out and describe how plants need		• explore and use classification keys to help group, identify and name a variety of living things in				
		water, light and a suitable temperature to		their local and wider environment				
ELG		grow and stay healthy.		• recognise that environments can change and that this can sometimes pose dangers to living				
Explore the natural world around them,				things. (covered yr5)				
making observations and drawing				Year 5				
pictures of plants.				Describe the life process of reproduction in some plants				
Understand some imp	ortant processes and			Year o				
changes in the natural world around them,				Describe how living the	hings are classified into b	broad groups according to	o common observable	
including the seasons				characteristics and base	ed on similarities and diff	rerences, including plants		
				• Give reasons for class	anying plants based on sp			
Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
Plants need water	Plants; how they	How plants grow,	Seeds and bulbs	Functions of plants:	Classification of	life process of	Classification of	
and light	grow from seeds	what function each	grow into mature	roots, stem/trunk,	plants- flowering	reproduction in	plants	
to grow	and bulbs.	part has and	plants.	leaves and flowers.	and non-flowering.	some plants		
	What plants need identifying which		Life and growth,					
Grow plants in to grow.		common plants	Healthy plants	variety of plants,		Photosynthesis,	Asexual	
nursery and		grow around us.	need water, light	water		vascular and non-	reproduction,	
observe plants	Identify parts of	The parts and	and warmth to	transportation,		vascular plants.	sexual	
growing	plants including	functions of plants, grow. Comparative		seed formation and			reproduction in	
e.g. sunflowers,	roots, stem and	food production,	tests.	dispersal.		How plants (and	non-flowering and	
cress etc.	leaves.	flowers and seeds,				animals) change in	flowering plants,	
				Life cycles		-	pollination,	

Talk about how the	Identify trees and	deciduous and	Plants are grown			local area over	fertilisation,
plants change as	plants growing	evergreen.	for	To understand how		time.	reproduction
they grow.	locally on the	Investigate how	food.	plants can change			
	school grounds or	seeds germinate,		through the			
Make observations	in local parks. Draw	using a fast-		seasons			
and describe plants	pictures of local	growing seed such					
they have seen.	plants	as cress. They will					
		find out the					
The season of	Seasons of the	conditions that					
Autumn, leaves	year; Autumn.	seeds are unlikely					
changing colour	Deciduous and	to grow in, such as					
and falling from	evergreen trees.	in the darkness or					
trees.	Observing leaves	without moisture.					
	using magnifying	Grow plants within					
Recognise the	glasses, leaves	the classroom,					
season of Spring	changing colour.	from bulbs,					
and notice new	Spring. The first	cuttings or seeds,					
plants growing.	signs of spring;	Seasons and					
	snowdrops, cherry	Weather unit builds					
	blossom, buds and	on seasons work					
	flowers	done in nursery					
	Summer. Signs of	and reception.					
	summer; flowers,						
	1		Knowled	lge Goals	1	1	1
Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Plants need water	Plants need water,	Plants need the right	There are many	A botanist is a	Scientists sort living	Oak trees grow from	Some plants
and light	light and warmth to	temperature, light	different kinds of	scientist who studies	things using a	acorns and become a	reproduce asexually.
to grow	grow.	and water to grow.	plants.	plants.	process	habitat for many	Asexual reproduction
	Diante con grou france	iviost plants grow	Around my school I	Botanists look closely	of classification.	animais.	does not require a
	riants can grow from	If coods do not have	can find plants such	their features	To know that a	squirreis are	doorn't alter constic
	seeus anu buibs.	the right	ds. Around my school I	Eleworing plants	flowering plant	who can make their	information
		the right	Around my school I	Flowering plants	flowering plant	who can make their	information.

Plants have roots,	temperature, light	can find trees such as:	have roots, a stem or	produces flowers to	homes in oak trees,	Asexual reproduction
stem and leaves.	and water, they may	(complete depending	trunk, leaves and	make seed in order	eat acorns, build	is
	not grow into healthy	on your environment)	flowers.	to	nests	when an organism
In Autumn, the leaves	plants.			reproduce	and have young.	simply copies itself.
change colour and			Around the world,		Plants and animals	
fall from some trees.	The roots of a plant	A seed can grow into	there are many	To know that a non-	are	Most flowering plants
In Spring, new buds	act	a flowering plant.	different types of	flowering plant grows	interconnected within	reproduce by
form, some trees	as an anchor, fixing	When a seed	plant.	from spores instead	an ecosystem.	combining a
blossom.	the	germinates, it	Some plants need	of		male and female
	plant into the ground.	changes from a seed	lots of water to grow;	seeds.	Most large plants	gamete
	They also absorb	into a seedling.	others only need a		reproduce by	(pollen and ovule) to
	water	Some plants create	little.		combining a male	make a fertilised egg
	from the soil.	bulbs that live	Some plants can		and female gamete	that
	The stem of a plant	underground, and	thrive in the shade;		(pollen and ovule) to	grows into an
	grows above the	their leaves grow up	others need a lot of		make a fertilised egg	embryo.
	ground. The leaves	through the soil.	sunlight.		that grows into an	The embryo or baby
	and				embryo.	plant
	flowers grow from it.	When a plant has no	Plants absorb water		The embryo or baby	is protected inside a
	A plant's leaves	water, it cannot grow	from the soil to help		plant is protected	seed.
	absorb	well.	them to live and		inside a seed.	Most flowering plants
	sunlight and turn it	When a plant has no	grow.		Most plants clothe	clothe their seeds
	into	light, it cannot grow	Water moves around		their seeds with fruit.	with
	energy that the plant	well.	the plant via the			fruit.
	uses to grow.	Plants often grow	stem.			
		well in the Spring as	Plants with large root			Fruits are seed
	Plants spread their	the temperatures get	systems can take			coverings.
	seeds in order to	warmer and there is	more water from the			Fruit protect and
	make	often rain.	soil.			keep seeds moist.
	new plants.					Fruits help with seed
	When plants make		Flowering plants			dispersal.
	seeds to make new		create seeds.			
	plants, we call this		Flowering plants can			Living things or
	reproducing.		only produce seeds if			organisms are
	Plants must spread		pollen is transferred			classified
	their seeds to help	Some plants are				

	them grow into new	grown for food.	from the anther to		into five main
	plants.	Farmers grow crops	the stigma.		kingdoms
		for food.	Insects, like bees and		The members of each
	Evergreen trees keep	Crops are harvested,	butterflies, are		kingdom share
	their leaves all year	packaged and	essential for		features
	around.	transported for	pollination.		that are unique to
	Deciduous trees drop	people to buy and			that
	their leaves during	eat.	Flowering plants		group.
	autumn time and		produce pollen.		The five kingdoms
	grow		When fertilised,		are:
	fresh leaves in spring		pollen can join with		plants, animals,
	time.		the ovule and grow		fungus,
	Oak trees are		into a seed. In the		protist and
	deciduous and fir		right conditions,		prokaryote.
	trees		seeds grow into new		
	are evergreen.		plants.		Cells are the tiny
	-				building blocks that
	We eat different parts		Plants spread their		make up all living
	of plants including		seeds in order to		things.
	the		reproduce.		There are two main
	roots, stem, leaves		Some plants rely on		types of cells: animal
	and		the wind to spread		and plant cells.
	sometimes the		their seeds.		Animal and plant cells
	flowers.		Some plants rely on		are structured
	Some plants are		animals to spread		differently.
	dangerous to eat and		their seeds.		
	would make us ill.				
	We need a variety of		George Washington		
	fruit and vegetables		Carver was a scientist		
	in		who studied botany.		
	our diet.		He was born into		
			slavery,		
			but went on to study		
			science at University,		

Plants

		teach botany and		
		help		
		farmers.		
		He encouraged		
		farmers		
		to plant crops that		
		would		
		feed their families		
		and		
		nourish the soil.		
		During the spring,		
		plants begin to grow.		
		During the summer,		
		plants grow and fruit		
		ripens.		
		During the autumn,		
		plants drop their		
		seeds and begin to		
		die.		
		During winter, seeds		
		are dormant in the		
		ground, they wait for		
		the spring.		

In every year of their science curriculum, pupils will encounter plants, studying them in increasing depth. Our curriculum has been written and planned to give pupils many opportunities to revisit knowledge and clarify their understanding, whilst learning new and interesting content that increases in sophistication as they progress.

This knowledge of planting a seed and understanding that without water it will not grow will be built upon in KS1 where children learn more about seed dispersal and growth. In KS2 children look at classification of plants and learn more about how plants reproduce. Supplementing this part of the curriculum is being developed across 2023-34 to include growing a range of plants in the school environment.