Lesson Breakdown - Science



Summer – Cycle A – KS1

Prior Learning - EYFS

- observe how plants change and explore growth and decay
- introduced to the features of plants
- learn vocabulary including stem, leaf, stem, root and petal
- learn what seed and plants need to grow and survive
- learn to name and describe parts of plants

Project: <u>Plants</u>	Learning Objective	Skills	Knowledge	Resources
Engage Lesson 1: Seasonal	To understand seasonal changes in plants.	Describe, following observation, how plants and animals change over time.	All living things (plants and animals) change over time as they grow and mature.	
changes in plants	Develop understanding of the nature, processes and methods of science through different types of science enquiries that help them to answer scientific questions about the world around them.	Observe the local environment throughout the year and ask and answer questions about living things and seasonal change.	The local environment is a habitat for living things and can change during the seasons. In winter, many plants and trees are dormant and have buds on their branches. In spring, leaves and blossom appear on trees and smaller plants begin to grow and flower.	
	Enquiry Use their observations and ideas to suggest answers to questions.			
Engage Lesson 2: Identifying plants	To identify different plants in our school.	Identify, compare, group and sort a variety of common wild and garden plants, including deciduous	Plants are living things. Common plants include the daisy, daffodil and grass. Trees are large, woody plants and are either evergreen or deciduous. Trees that lose their leaves in the autumn are called deciduous trees. Examples include oak, beech	•



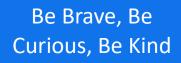
	Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees.	and evergreen trees, based on observable features.	and rowan. Trees that shed old leaves and grow new leaves all year round are called evergreen trees. Examples include holly and pine.	
Engage Lesson 3: Plant parts and diagrams	To label different parts of a plant. Gather and record data to help in answering questions. Identify and describe the basic structure of a variety of common flowering plants, including trees.	With support, gather and record simple data in a range of ways (data tables, diagrams, Venn diagrams). Label and describe the basic structure of a variety of common plants.	Data can be recorded and displayed in different ways, including tables, pictograms and drawings. The basic plant parts include root, stem, leaf, flower, petal, fruit, seed and bulb. Trees have a woody stem called a trunk.	•
Develop Lesson 4: Seeds and	To understand how seeds and bulbs grow.	Observe objects, materials, living things and changes over time, sorting and grouping them based	Objects, materials and living things can be looked at and compared.	
bulbs	Y2 - observe and describe how seeds and bulbs grow into mature plants	on their features.	Plants grow from seeds or bulbs. There is a tiny plant inside a seed or bulb that grows when the conditions are optimal. Seeds are smaller than bulbs and come in various shapes, sizes and colours. Bulbs are larger than seeds and typically have a rounded shape and papery coating.	
Develop Lesson 5: Importance of plants	To understand the importance of plants Ask simple questions and recognise that they can be answered in different ways.	Ask simple scientific questions.	Question words include what, why, how, when, who and which. Plants are important because they provide food, shelter and materials for animals, including humans.	
Innovate Lesson 6:	To identify and investigate trees from our school environment.	Label and describe the basic structure of a variety of common plants.	The basic plant parts include root, stem, leaf, flower, petal, fruit, seed and bulb. Trees have a woody stem called a trunk.	



	Identify and name a variety of common wild and	Identify, compare, group and sort a variety of common wild and garden plants, including deciduous	autumn are called deciduous trees. Examples include oak, beech and rowan. Trees that shed old leaves and grow new leaves all year round are called evergreen trees. Examples include holly	
	garden plants, including deciduous and evergreen	and evergreen trees, based on observable features.	and pine.	
	trees.		Deciduous trees usually have broad, flat leaves. Evergreen usually have thin, needle-like leaves.	
Express Lesson 7: Assessment	To be able to recall knowledge from this project.	n/a	n/a	n/a

Links within other projects:	Learning Objective	Skills	Knowledge

Key Vocabulary:							
answer	data	flower	importance	observe	ripen	simple	texture
bark	deciduous	food	investigation	palmate	roadside	size	tree
blade	describe	fruit	leaf	pattern	root	smell	trunk



Lesson Breakdown - Science



blossom	diagram	fruit	living thing	petal	season	soil	type
branch	digital microscope	garden	living thing	photograph	seasonal change	spring	vein
bud	dormant	garden plant	lobed	plant	seasonal cycle	stalk	water
bulb	equipment	grow	margin	purpose	seed	stem	wild plant
colour	evergreen	hand lens	materials	question	shape	sunlight	winter
compare	evidence	harvest	meadow	record	shelter	survive	woodland
compound	explain	hedgerow	needle-like	research			

Prior Learning - EYFS

- features of woodland animals and explore how wild animals differ from pets
- learn about nocturnal animals and their features
- learn what animals need to grow and survive
- learn how to care for the animals that live in the local environment
- looking after insects in the environment
- learn about the features of insects
- introduced to the terms 'carnivore' and 'herbivore' when studying the diets of animals

Project: Animals	Learning Objective	Skills	Knowledge	Resources
Engage Lesson 1	To explore pets and sort them into a range of categories	Compare and group living things using basic vocabulary.	Understand that a pet is a domesticated animal.	
	identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals			
	describe and compare the structure of a variety of			



	common animals (fish, amphibians, reptiles, birds and mammals including pets)			
Develop Lesson 2	To sort a range of wild animals into different groups identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals	Compare and group living things using basic vocabulary. Make observations of characteristics different of animals.	Understand that amphibians, reptiles, birds, mammals and fish are all different classifications for animals. Each of these classes has different, key features that members of that group all have in common.	•
Develop Lesson 3	To know what different animals eat identify and name a variety of common animals that are carnivores, herbivores and omnivores	Compare and group living things using basic vocabulary. Make observations of characteristics different of animals.	Understand that a carnivore's diet consists of meat only, a herbivore's diet consists of plants only and an omnivore eats a mixture of the two.	•
Develop Lesson 4	To compare a range of animals using their features identify and name a variety of common animals including fish, amphibians, reptiles, birds and mammals	Compare and group living things using basic vocabulary. Make observations of characteristics different of animals.	Understand that amphibians, reptiles, birds, mammals and fish are all different classifications for animals. Each of these classes has different, key features that members of that group all have in common.	•
	describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds			



	and mammals including pets)			
Innovate Lesson 5	To explore scientific questions asking simple questions and recognising that they can be answered in different ways	Ask scientific questions using "I wonder why"	Pupils should use the local environment throughout the year to explore and answer questions about animals in their habitat. They should understand how to take care of animals taken from their local environment and the need to return them safely after study.	
Innovate Lesson 6	To explore scientific questions asking simple questions and recognising that they can be answered in different ways	Ask scientific questions using "I wonder why"	Pupils should use the local environment throughout the year to explore and answer questions about animals in their habitat. They should understand how to take care of animals taken from their local environment and the need to return them safely after study.	
Express Lesson 7: Assessment	To be able to recall knowledge from this project.	n/a	n/a	n/a

Links within other projects:	Learning Objective	Skills	Knowledge

Key Vocabulary:							
amphibians	birds	carnivores	fish	herbivores	mammals	omnivores	reptiles