Uplands Infant and Nursery School

Progression in Science

2021-2022

	Nursery	Reception	Year 1	Year 2
Term 1	Humans	Humans	Humans	Humans
Term 1 Biology	· ·	-		
Term 2	Humans Recognise changes within themselves – from a baby to now Natural world - Plants/flowers and trees To name parts of a flower Introduce how tress, plants, flowers grow	and plants Humans Compare and describe the similarities and differences between themselves now and when they were babies Natural world - Plants/flowers and trees Naming and describing the parts of a flower Talk about how tress, plants, flowers grow Name and describe different types of flowers and trees	Humans To identify which part of the body is associated with which sense. Plants Identify and describe the basic structure of a variety of common flowering plants.	Plants Observe and describe how seeds grow into mature plants (Longitudinal study) Find out and describe how seeds need water, light and a suitable temperature to grow and stay healthy.

	Animals – birds, farm animals, sea creatures, wild animals Naming features of animals Naming and matching baby animals with their parents	Animals – birds, farm animals, sea creatures, wild animals Naming and describing features of animals Naming and matching baby animals with their parents – look and talk about similarities and differences Have an awareness of the life cycle Observational drawings of the natural world, animals and plants	Identify and describe the basic structure of a variety of common trees. Animals Identify and name a variety of common animals that are carnivores, herbivores, omnivores.	
Term 3	Humans Recognise how to stay healthy Food Hygiene Natural world Plants/flowers and trees Look at and investigate what plants, trees and flowers need to stay healthy Animals – birds, farm animals, sea creatures, wild animals, dinosaurs Name where these animals live Identify and name adult and baby animal	Humans Talk about and describe the important of staying healthy Food Hygiene Natural world Plants/flowers and trees Discuss and talk about what plants, trees and flowers need to stay healthy Animals – birds, farm animals, sea creatures, wild animals, dinosaurs Name and describe and compare the different places where these animals live. What do these animals need to stay healthy? Understand and talk about the key features of a life cycle Observational drawings of the natural world, animals and plant	Animals Describe and compare the structure of a variety of common animals (fish, amphibians, reptiles, birds and mammals including pets). Plants Identify and describe the basic structure of a variety of common trees.	Living things and their habitats Explore and compare the differences between things that are living, dead, and things that have never been alive Identify that most living things live in habitats to which they are suited Describe how different habitats provide for the basic needs of different kinds of animals and plants, and how they depend on each other Identify and name a variety of plants and animals in their habitats, including microhabitats Describe how animals obtain their food from plants and other animals, using the idea of a simple food chain, and identify and name different sources of food

Chemistry	Explore	Explore and talk about	Everyday materials	
,	materials with	materials with different	Distinguish between an	
Term 1	different	properties	object and the material it is	
	properties –	Explore collections of	made from.	
	Explore	materials with similar		
	textures,	and/or different properties	Identify and name a range	
	sounds smells	Talk and describe what	of everyday materials	
	and tastes –	they see	including wood, plastic,	
	inside and		glass, metal, water and	
	outside	Notice and talk about the	rock.	
	Sensory play	differences and change		
		between materials	MATERIALS The MATERIALS	
	Explore and	Provide opportunities to		
	notice the	observe and talk about the	INVESTIGATION	
	differences and	changes materials from		
	change	one state to another		
	between	Cooking		
	materials	Melting		
	Provide	Heating		
	opportunities to	Cooling		
	change materials from			
	one state to			
	another Cooking –			
	-			
T	Melting	Funlows and talk shout	Everyday materials	Evender Meterials
Term 2	Explore materials with	Explore and talk about materials with different	Describe the simple	Everyday Materials Identify and compare the
	different	properties	physical properties of a	suitability of a variety of
	properties	Explore collections of	variety of everyday	everyday materials, including
	Explore	materials with similar	materials on the basis of	wood, metal, plastic, glass, brick,
	collections of	and/or different properties	their simple physical	rock, paper and cardboard for
	materials with	Talk and describe what	properties.	particular uses
	similar and/or	they see	h. ch e	
	different	Notice and talk about the	Compare and group	Identify and discuss the uses of
	properties	differences and change	together a variety of	different everyday materials and
	p. op 0	between materials	everyday materials on the	that some materials are used for
	Explore and	Provide opportunities to	basis of their simple	more than one thing and that
	notice the	change materials from one	physical properties.	different materials can be used
	differences and	state to another		to make the same thing
	change	Cooking		5
	between	Melting		
	materials	Heating		
	Provide	Cooling		
	opportunities to	Talk and describe what		
	change	they see		
	materials from			
	one state to			
	another			
	Cooking –			
	Melting			
	Freezing			
Term 3	Explore	Explore and talk about	Everyday materials	Everyday Materials
	materials with	materials with different	Compare and group	Find out how the shapes of solid
		properties	together a variety of	objects made from some
	different			
	properties	Talk about what they see –	everyday materials on the	materials can be changed by
	properties Explore	Talk about what they see – continue to develop and	basis of their simple	squashing, bending, twisting and
	properties Explore collections of	Talk about what they see – continue to develop and deepen children's		
	properties Explore collections of materials with	Talk about what they see – continue to develop and deepen children's language skills so they can	basis of their simple	squashing, bending, twisting and stretching
	properties Explore collections of materials with similar and/or	Talk about what they see – continue to develop and deepen children's language skills so they can talk about and discuss their	basis of their simple	squashing, bending, twisting and stretching Explain the properties of
	properties Explore collections of materials with	Talk about what they see – continue to develop and deepen children's language skills so they can	basis of their simple	squashing, bending, twisting and stretching

	Talk about what	Notice and describe the		narticular nurnosos
	they see	differences and change		particular purposes
	they see	between materials		Consider unusual and creative
	Explore and	Provide opportunities to		uses for everyday materials
	notice the	change materials from one		
	differences and	state to another		
	change	Cooking		
	between	Heating		
	materials	Freezing		
	Provide	Cooling		
	opportunities to	Talk about what they see –		
	change	Talk and discuss their		
	materials from	findings		
	one state to			
	another			
	Cooking –			
	Melting			
	Heating			
	Freezing			
Physics	Recognise when	Name different times of	Seasonal changes	Seasonal changes
	it is night time	the day	Observe changes across the	Organise images or objects from
Term 1	and day time	Autumn	four seasons	each season into categories.
Term 1	Autumn	Signs		Explain your categories
	Signs	Weather	Observe and describe	
	Weather	How animals behave	weather associated with	
	Clothes		the seasons and how day	
		Talk about the different	length varies	
		forces they can feel		
		Using magnets		
		Sinking and floating		
	Explore the			
	different forces	Explore and talk about how		
	they can feel	materials can be changed		
	Magnets	Light and dark – using		
	Sinking and	torches, light box,		
	floating			
	Fuelese here			
	Explore how			
	materials can			
	be changed			
	Light and dark –			
	using torches,			
T D	light box,	Caring	Seasonal changes	Concernel Changes
Term 2	Name times of	Spring	Seasonal changes Notice the features of	Seasonal Changes
	the day	Autumn	Winter and Spring	Show how you might know,
	Spring	Signs	white and spring	roughly, what time it is in a day
	Signs Weather	Weather How animals behave	Observe weather	by looking at the position of the
			Provide opportunities to	sun
	Clothes	Compare with Autumn	record the weather	Compare and contract weather
	Explore and	Talk and describe the		Compare and contrast weather and day length across the four
	talk about the	different forces they can	Observe how length of day	seasons- especially Spring
	different forces	feel	increases.	seasons- especially spring
	they can feel	Magnetic / non magnetic		
	Explore and talk	magnetic / non magnetic		
	about what	Explore and talk about		
	they see when	similarities and differences		
	using magnets,	between materials		
	shadows,	Floating and Sinking		
	torches and	Shadows		
	light box,	Light travelling through		
	sinking and	materials		
	floating	materials		
	noating			

Term 3	Continue to talk	Summer	Seasonal changes	Seasonal Changes
	about the	Signs	Notice the features of	Show how you might know,
	different times	Weather	Spring and Summer	roughly, what time it is in a day
	of the day	How animals behave	Observe weather	by looking at the position of the
	Summer	Compare with	Provide opportunities to	sun
	Signs	Autumn/winter/spring	record the weather	
	Weather		Observe how length of day	Compare and contrast weather
	Clothes	Observe and talk about	increases.	and day length across the four
		the different forces they		seasons (summer)
	Explore and	can feel		
	talk about the	Compare magnetic and		
	different forces	non-magnetic items		MEATHEN
	they can feel	Explore and observe how		
	Explore using	materials can be changed		
	magnets –			
	compare	Talk about the similarities		
	magnetic and	and differences between		0 0 0 · 0 / 100 - 0
	non-magnetic	these materials		
	items			
	Use language –	Talk about what they see –		
	wood, metal,	continue to develop and		
	plastic	deepen children's		
	Explore items	language skills so they can		
	that sink and	talk and discuss their		
	float –	findings –		
	investigate			
		Floating and Sinking		
	Explore how	Shadows		
	materials can	Light travelling through		
	be changed by	materials		
	Talk about what			
	they see			