



Science Long term plan 2023-2024

2023- 2024 Year A	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Puffins (Y1/2)	Animals, including humans NC Y1 Identify and name a variety of common animals, inc fish, amphibians, reptiles, birds and mammals. Identify and name variety of common animals that are carnivores, herbivores and omnivores. Describe and compare structure. Identify, name & label basic parts and associate with senses.	Everyday Materials NC Y1 Identify variety of everyday materials, describe physical properties, compare & group.	Seasonal Changes NC Y1 Observe changes across four seasons, observe and describe weather associated with seasons and how day length varies.	Plants NC Y1 Identify & name a variety of common wild and garden plants, inc. deciduous & evergreen. Identify & describe the basic structure of common flowering plants inc. trees.	Animals, including humans NC Y1 Identify and name a variety of common animals, inc fish, amphibians, reptiles, birds and mammals. Identify and name variety of common animals that are carnivores, herbivores and omnivores. Describe and compare structure. Identify, name & label basic parts and associate with senses.	
	Longitudinal Study How does the weather change over the four seasons? (NC Y1)					
Kingfishers (Y2/3)	Forces (Part of Forces and Magnets) NC Y3 Compare how things move on different surfaces.	Use of everyday materials NC Y2 (2023 only) Identify & compare the suitability of a variety of everyday materials . Find out how shapes of solid objects can be changed.	Animals, including humans NC Y3 Identify that animals need the right types and amount of nutrition, cannot make own food. Identify that humans and other animals have skeleton and muscles for support, protection and movement		Plants NC Y2 Observe and describe how seeds and bulbs grow into mature plants. Find out and describe how plants need water, light and a suitable temperature to grow and stay healthy.	
	Longitudinal Study How does a shadow change over a day and through the year?					



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Sparrowhawks (Y3/4)		Sound NC Y4 How sounds are made, linked to vibration travelling through medium to ear, find patterns between pitch and features of object, find patterns between volume and strength of vibration, fainter sound, greater the distance.		Animals including humans NC Y4 Describe simple functions of basic parts of digestive system. Identify different types of teeth in humans & functions, construct & interpret food chains.	Electricity NC Y4 Identify common electric appliances, construct simple circuit, naming parts, explore open & closed circuits, testing with a lamp, recognise good conductors and insulators.	States of Matter NC Y4 Compare & group materials together as solids, liquids and gases. Observe changing states when cooled/heated & measure temperature. Identify the role of evaporation and condensation in water cycle.
	Longitudinal Study What plants live in the school ground over the year? We are using quadrants to sample what plants live in the school grounds, and how this differs in autumn, winter, spring & summer.					
Housemartins (Y5/6)	Electricity NC Y6 Associate brightness of lamp or volume of buzzer with the number & voltage of cells in circuit. Compare & give reasons for variations in how components function, inc. brightness of bulbs, volume, on/off position of switch. Use recognise symbols when representing simple circuit in a diagram.	Properties and changes of materials NC Y5 Compare & group based on properties; know some dissolve to form a solution and describe how to recover substance from solution; use knowledge to separate mixtures e.g. with filtering, sieving, 7 evaporating Give evidence from comparative & fair test for the uses of materials Demonstrate reversible changes; explain that some changes create a	Forces NC Y5 Explain how the force of gravity cause unsupported objects to fall to Earth; identify effects of air & water resistance and friction; recognise that some mechanisms inc, levers, pulleys and gears allow a smaller force to have a greater effect.	Animals, including humans NC Y5 Describe animals change with old age Create a timeline of stages of growth & development in humans, inc. puberty. Work scientifically research gestation periods of other animals, tracking length & mass of baby as it grows.	Living things and their habitats NC Y5 Describe the life cycles of a mammal, amphibian, an insect and a bird Describe the life process of reproduction in some plants and animals	



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		new materials, usually irreversible.			
	Longitudinal Study How much do we grow during the year? House martins are measuring height, arm span, hand span and foot length each term. At the end of the year, they will calculate how much they have grown and compare their individual growth to the growth of the class.				