Science: Key Obejctives

	Year 4: Programme of Study	Date Achieved
Working scientifically	Ask relevant questions and use different types of scientific enquiries to answer them.	
	Set up simple practical enquiries, comparative and fair tests.	
	Make systematic and careful observations take accurate measurements using standard units, using a range of equipment, including thermometers and data loggers.	
	Gather records, classify and present data in a variety of ways to help in answering questions.	
	Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables.	
	Report on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions.	
	Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions.	
	Identify differences, similarities or changes related to simple scientific ideas and processes.	
	Use straightforward scientific evidence to answer questions or to support my findings.	
Living things (Biology)	Recognise that living things can be grouped in a variety of ways.	
	Use classification keys to help group, identify and name a variety of living things in my local and wider environment.	
	Understand that environments can change and that this can sometimes pose dangers to living things.	
Animals (Biology)	Describe the simple functions of the basic parts of the digestive system in humans.	
	Identify the different types of teeth in humans and their simple functions.	
	Construct and interpret a variety of food chains, identifying producers, predators and prey.	
States of matter (Chemistry)	Compare and group materials together, according to whether they are solids, liquids or gases.	
	Understand that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)	
	Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.	
Sound (Physics)	Understand how sounds are made, associating some of them with something vibrating and that these vibrations travel through a medium to the ear.	
	Find patterns between the pitch of a sound and features of the object that produced it	
	Find patterns between the volume of a sound and the strength of the vibrations that produced it and that sounds get fainter as the distance from the sound source increases.	
Electricity (Physics)	Identify common appliances that run on electricity.	
	Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers.	
	Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp is part of a complete loop with a battery or whether a switch is operating in the circuit.	
	Recognise some common conductors and insulators, and associate metals with being good conductors.	