	Science Skills Progression EYFS – Y6								
			 Enquiry types: observing over time, pattern seeking, identifying and classifying, comparative testing research using secondary sources 	Enquiry types: • observing over time, • pattern seeking, • identifying and classifying, • fair testing • research using secondary sources					
		EYFS	KS1	LKS2	UKS2				
Plan	Asking questions	Ask questions about aspects of	Ask simple questions and recognise that they can	Ask relevant questions and use different types of	Ask relevant questions and use different types of				
		their familiar world.	be answered in different ways.	scientific enquiries to answer questions.	scientific enquiries to answer questions.				
	Setting up investigations	Choose resources they need for chosen activities and say when they do or don't need help.	Suggest how to collect the data needed. Recognise that they will need to make observations or measurements.	Suggest the appropriate investigation type needed to answer a question Suggest all the equipment needed from a given range Suggest and agree on the data needed to be collected Discuss and suggest how long to observe and take measurements for	Identify the appropriate investigation type needed to answer a question List all the equipment needed Decide what and how much data to collect				
	Fair testing		Recognise when a simple comparison or test is unfair	Suggest and agree on variables	Identify variables				
	Prediction		Make a simple prediction when appropriate	Make predictions based on experience and scientific knowledge	Predict based on scientific knowledge				
Do	Equipment		Use a range of simple measuring equipment including rulers, metre sticks, weighing scales and measuring jugs	Use a range of measuring equipment including thermometers and data loggers / apps	select the appropriate measuring equipment and measure accurately and with precision				
	Measuring	Look closely at similarities, differences, patterns and change.	Use uniform non-standard measures, including straws and unfix cubes, and simple standard units (Year 2), including m, cm, kg, g, minutes, seconds, ml and l Read measuring scales accurately and in line with age-related maths expectations	Use simple standard measures including m, cm, mm, kg, g, minutes, seconds, newton (measuring to the nearest half unit measure) Read measuring scales accurately and in line with age-related maths expectations	use standard measures including m, cm, cm ² , mm, kg, g, minutes, seconds, newton (measuring to the nearest half unit measure) plus fractions, decimals and mixed units take repeat measurements when appropriate read measuring scales with precision and accuracy				
	Classifying and identifying		Classify things into two groups where one has an observable feature that the other doesn't, including waterproof vs non-waterproof	Use identification keys (and charts) to identify and classify materials and organisms	use identification keys (and charts) together with tests and evidence to identify and classify materials and organisms				
Record		Talk about things they have observed Represent their own ideas, thoughts and feelings in a range of ways.	Simple sentences and descriptions Pictures Photos Pictograms Simple charts and tables Sorting circles or Venn diagrams Practical block graphs Drawn block graphs Practical / collective scatter graphs (attach sticker to a teacher-drawn graph for height)	Simple scientific language Drawings Labelled diagrams Branching databases / classification keys Bar charts Line graphs (where relevant e.g. plotting changes in shadow size, temperature changes when heating and cooling) Tables Carroll / Venn diagrams	scientific diagrams (including circuit diagrams with recognised symbols) and labels, classification keys, tables, scatter graphs, bar graphs, line graphs pie charts				
Review	Interpreting data	Talk about the features of their own environment and how environment might vary Describe similarities and	Describe their observations and data Describe and sequence simple changes (plant growth – how the size of leaves have changed) Describe simple patterns	Interpret data (including graphs and tables) to draw simple conclusions	Interpret data (including graphs and tables) to draw conclusions				
	Communicating findings	 differences in relation to places, objects, materials and living things Talk about why things happen and how things work. 	Use their observations and findings to suggest answers to questions	Report and present findings from enquiries in oral and written forms such as displays and other presentations of results and conclusions	Report and present findings from enquiries in oral and written forms such as displays and other presentations				

			Offer explanations for findings or answer questions using straightforward scientific evidence	Offer scientific explanations for their conclusions using scientific evidence to support or refute ideas
	Evaluation	Say whether what happened was expected Describe how things have been sorted (why have you sorted it in that way?)	Evaluate investigations by suggesting improvements ('next time, I would')	Evaluate investigations by commenting on the accuracy of the data or suggesting improvements to the scientific method
	Applying knowledge	Identify which group an additional object or organism would be placed into.	Use test results to make predictions for new values	Use test results to make predictions to set up further comparative and fair tests