

		Working Scientifically Progression Map							
	Year 1	Year 2		Year 3	Year 4	Year 5	Year 6		
Plan	Can they ask simple questions	Can they ask simple questions and recognise that they can be answered in different ways		Plan	Can they ask relevant questions and using different types of scientific enquiries to answer them?	Can they ask relevant questions and using different types of scientific enquiries to answer them?	Can they plan and carry out a scientific enquiry to answer questions, including recognising and controlling variables where necessary?	Can they explore different ways to test an idea, choose the best way, and give reasons?	
Do- Observing Closely	Can they talk about what they see, touch, smell, hear or taste?	Can they use their senses (see, touch, smell, hear or taste) to help them answer questions? Can they suggest ways of finding out through listening, hearing, smelling, touching and tasting?			Can they set up simple practical enquiries, comparative and fair tests?	Can they set up simple practical enquiries, comparative and fair tests?			
	Can they use simple equipment to help them make observations, such as a ruler, weighing scales and containers.	Can they use simple equipment and choose and use appropriate standard units to measure length/height, mass (kg/g), temperature (°C), capacity (litres/ml) to the nearest appropriate unit. Using rulers, scales, thermometers and measuring vessels to help them make observations.			Can they make and record a prediction before testing which is relevant to the investigation?	Can they make and record a prediction before testing using key scientific vocabulary?	Can they make a prediction with reasons including the independent and dependent variable?	Can they use information to make a prediction which is explained using scientific reasoning?	
Do- Performing Tests	Can they perform a simple test?	Can they carry out a simple fair test? Can they explain why it might not be fair to compare two things?							
				Do	Can they carry out investigation in a logical order?	Can they explain how they will ensure a fair test?	Can they identify how to measure the dependent variable and how they will control variables to ensure a fair test?	Can they collect and record repeat readings?	
Do- Identifying and Classifying	Can they identify and classify things they observe?	Can they organise things into groups?			Can they make systematic and careful observations?	Can they explain why they need to collect information to answer a question?	Can they explain why they have chosen specific equipment? (incl ICT based equipment)	Can they explain why a measurement needs to be repeated?	
	Can they talk about similarities and differences?	Can they identify animals and plants by a specific criteria, eg, lay eggs or not; have feathers or not? Can they suggest more than one way of grouping animals and plants and explain their reasons?			Can they measure using different equipment (including thermometers and data loggers) and units of measure?	Can they take measurements using different equipment and units of measure and record what they have found in a range of ways?	Can they take measurements using a range of scientific equipment with increasing accuracy and precision?	Can they take measurements using a range of scientific equipment with accuracy and precision?	
		Can they use information from books and online information to find things out?		Record	Can they record their observations in different ways? (labelled diagrams, charts etc)	Can they record more complex data and results using scientific diagrams, tables, bar charts and models?	Can they record more complex data and results using scientific diagrams, labels, classification keys, tables, bar and line graphs?	Can they record their measurements in different ways? (incl bar charts, tables, scatter and line graphs)	
				Review	Can they explain what they have found out? Can they use their findings to draw a simple conclusion?	Can they use their findings to draw a simple conclusion? Can they identify patterns in their results?	Can they draw conclusions from their work? Can they find a pattern from their data and explain what it shows?	Can they draw conclusions from their work? Can they find a pattern from their data and explain what it shows?	
Record	Can they gather and record data to help in answering questions?	Can they gather and record data to help in answering questions?			Can they use straightforward scientific evidence to answer questions or to support their findings?	Can they identify differences, similarities or changes related to simple scientific ideas or processes?	Can they suggest how to improve their work and say why they think this?	Can they report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results?	
Review	Can they suggest answers to their question?	Can they use their observations and ideas to suggest answers to questions			Can they explain their findings in different ways (oral, display, presentation, writing)?	Can they explain their findings in different ways (oral, display, presentation, writing)?	Can they report their findings in oral and written forms such as displays and other presentations?	Can they report findings from investigations through written explanations and conclusions?	
	Can they give a simple reason for their answers?	Can they explain what they have found out using scientific vocabulary?				Can they link their conclusions to other scientific knowledge?	Can they explain, in simple terms, a scientific idea and what evidence supports it?	Can they explain, in simple terms, a scientific idea and what evidence supports it?	
Comparative and fair testing enquiry recording format	Question Prediction Results Conclusion	Question Prediction Results Conclusion							
				Comparative and fair testing enquiry recording format	Question Prediction Fair test (if appropriate) Results Conclusion	Question Prediction Method (how it will be a fair test) Results Conclusion Evaluation	Question Prediction Method (independent, dependent, controlled variable + how it will be a fair test) Results Conclusion Evaluation	Question Prediction Method (independent, dependent, controlled variable + how it will be a fair test) Results Conclusion Evaluation	