

Monkleigh School

	<u>Science Disciplinary Knowledge</u> <u>Explicit Teaching</u>			
<u>Enquiry Skills</u>	EYFS <i>Linked to all areas of the EY curriculum</i>	<u>Key Stage 1</u>	<u>Lower Key Stage 2</u>	<u>Upper Key Stage 2</u>
Questioning	Ask the children questions with the expectation of them giving an answer.	Teach what a question is and how to ask a question. <i>Link - Oracy, RWI, SPAG</i>	Link questions to mind map and recap at the end to see if the question has been answered.	Ask questions and make predictions linked to their science experience. 'I know..... so I think ...'
Testing	Plenty of opportunity for investigating through play.	Introduce the idea of the test being fair and how we do this	Fair tests Understanding the language of fair test and comparing	What is a variable? What is a control?
Using different Features				<u>Keys</u> How and why keys are used Link - geography, maths, literacy, history
Secondary Sources	Introduce the use of non fiction books for finding information Using information 'Can you Find?' sheets when exploring the local natural environment - e.g. trees/leaves/plants/flowers in different seasons	How to use a non fiction books, looking in the index and glossary	Different types of sources Books Internet people	What is reliable and trustworthy <i>-link to computing and history</i>
Simple equipment/ Measurement	Open ended exploration of different measuring/science equipment Teaching the meaning of these words through our word of the week and vocabulary. Introduction to measuring equipment during baking, focus activities, maths exploration, sand and water play, etc	How to use different equipment and what it does? Allow children to explore and ask questions about the equipment before using in the enquiry. <i>Link to Maths</i>		
Recording Data	Using pictures/diagrams to record Recording table tick sheet Taught/modelled in guided activities and used in the provision.	What is data? Tally chart Bar graph pictogram	What is data? How to record data and how to use it.	Discuss which is the most appropriate way to record for the task/enquiry.
Conclusions/Evaluation	Encourage children to talk/reason about their play/exploring E.g. Flying Bats STEM investigation - how effectively did their bat fly?	Talk about the data and how is links to their question	How to write a conclusion and draw all the evidence together. What have we found out?	How to evaluate the enquiry using their conclusions
Scientific Language	Introduce and teach a wide range of vocabulary.	See Vocab progression		
Predictions	Ask the children to think about what might happen and reasons why - link to speaking in full sentences using the conjunction because	Explaining and reason using full sentences and scientific vocabulary.	What is a prediction?	To be able to link their results to make further predictions

