

Skills	KS1	KS2 Lower	KS 2 Upper
Posing questions	Explore the world around them and raise simple questions	Raise their own relevant questions about the world around them	Use their science experience to explore ideas and raise different kinds of questions
Enquiry	Explore ways to answer questions	Make their own decision about the most appropriate scientific enquiry to answer questions	Select and plan appropriate scientific enquiry to answer scientific questions
Testing	Carry out simple tests	Set up some practical enquiries, comparative and fair tests. Recognise when a fair test is necessary and how to set it up.	Set up some practical enquiries, comparative and fair tests and explain which variables need to be controlled and why
Identify/classify	Use simple features to compare and with help decide how to sort and group them	Talk about criteria for grouping, sorting and classifying and use simple keys	Use and develop keys to identify, classify and describe and identify patterns that might be found in the natural environment
Research to ask and answer questions	Ask people questions and use secondary sources to find answers	Recognise when and how secondary sources might help them answer questions that can't be answered through practical investigations	Recognise which secondary sources will be most useful to research their ideas and begin to separate opinion from fact
Observation	Observe closely using simple equipment with help, observe changes over time	Help to make decisions about what to observe, for how long and equipment that might be used	Make the own decisions about how and what to observe, measurements to use and for how long
Pattern seeking	With guidance begin to notice patterns	Begin to look for naturally occurring patterns/ relationships and decide what data to collect to identify them	Look for different causal relationships and identify evidence that refutes or supports their ideas
Gather and record data	Use simple measurements and equipment to gather and record simple data	Take accurate measurements using standard units and record in a variety of ways: bar charts, tables, keys..	Choose appropriate equipment and explain how to use it to make measurements with increasing precision. Decide how to record data and results of increasing complexity.
Drawing and evaluating scientific conclusions	Use their own ideas to suggest answers. Talk about what they found out and how they found it. With help record their findings and begin to use simple scientific language	Use simple scientific language to discuss their ideas and communicate their findings eg oral, written explanations. With support identify new questions arising and ways to improve what they have already done	Use relevant scientific language to discuss, communicate and justify their scientific ideas using oral and written form inc. explanations of degree of trust in results. Use results to predict and identify when further observations, comparative and fair tests might be needed