# Scientific Enquiries Progression

| | Year 1 and 2 | Year 3 and 4 | Year 5 and 6 |
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|  Grouping and classifying | ⇒ Find out about the world by asking simple questions<br>⇒ Make simple observations using simple equipment<br>⇒ Compare objects with support | ⇒ Ask questions building on prior knowledge from Milestone 1<br>⇒ Decide which criteria you will sort objects into<br>⇒ Explain how objects are sorted<br>⇒ Use simple classification keys | ⇒ Ask scientific questions building on primary learning and wider general knowledge<br>⇒ Identify, classify and sort through a range of different types of classification and describe how they've been sorted and other possibilities |
|  Research | ⇒ With support, look in non-fiction books, newspapers, magazines and the internet to find answers<br>⇒ Talk to 'experts' and ask the simple questions | ⇒ Look in books, newspapers, magazines and the internet to find answers<br>⇒ Talk to 'experts' and ask them questions based upon on what you want to find out and ask them scientific questions about what they do | ⇒ Conduct own scientific research using a range of sources - books, newspapers, magazines, journals and the internet.<br>⇒ Begin to critically analyse scientific research<br>⇒ Identify scientific evidence that has been used |
|  Pattern Seeking | ⇒ With support, begin to notice patterns and relationships<br>⇒ Record data through pictograms, tally charts or simple tables | ⇒ Look for naturally occurring patterns and relationships<br>⇒ Begin to identify, with support, changes, similarities and differences then drawing simple conclusions<br>⇒ Answer questions and begin to identify new questions<br>⇒ Record data through bar charts, pictogram and tables | ⇒ Look for different causal relationships in data and identify evidence that refutes or supports ideas<br>⇒ Use relevant scientific language and illustrations to discuss, communicate and justify scientific ideas |
|  Observation over time | ⇒ Observe closely using simple equipment, with support | ⇒ Make careful observations using simple equipment<br>⇒ Think about how long to observe for and which equipment is most suitable to use | ⇒ Decided what is best to observe and why<br>⇒ Choose which equipment is best suited and why<br>⇒ Decide what measurements to take and how to |
|  Comparative or Fair Testing | ⇒ Experience practical testing opportunities, planned with support<br>⇒ Use simple equipment, with support<br>⇒ Carry out simple tests | ⇒ Set up simple, comparative and fair tests with support<br>⇒ Recognise the difference between comparative and fair tests and which on is necessary<br>⇒ Take measurements using standard units and begin to use data loggers with support | ⇒ Choose the most appropriate equipment to make measurements and explain how to use it<br>⇒ Use results to make predictions and identify when further observations, comparative and fair tests might be needed |