

	Foundation Stage	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Questioning, enquiring and making predictions	<p>Ask questions about why things happen and how things work. Try things out.</p> <p>Child initiated 'what will happen' activities</p>	<p>Ask questions using a range of question stems. Why, what, how? Test ideas suggested to them.</p> <p>Begin to make a guess about what might happen</p>	<p>Asks questions with support which lead to scientific enquiry.</p> <p>Make predictions and listen to others ideas</p>	<p>Sometimes asks questions leading to scientific enquiry.</p> <p>Make predictions and begin to explain</p>	<p>Asks and answers questions leading to own ideas for Scientific enquiry.</p> <p>Make predictions and begin to support these with an explanation of thinking</p>	<p>Asks and answers questions leading to own ideas for Scientific enquiry. With support, improves question to clarify scientific purpose.</p> <p>Make accurate predictions and explain the reasons for chosen prediction</p>	<p>Asks questions and offers own ideas for enquiry which have a clear Scientific purpose.</p> <p>Make predictions based on scientific knowledge and understanding within breath of study</p>
Planning a fair test and choosing equipment	<p>Sometimes suggests next steps in a plan.</p> <p>Try out different approaches suggested to them</p> <p>Uses equipment provided</p>	<p>Suggests next steps or steps to follow in a plan.</p> <p>With support, identifies questions that can be answered in different ways by practical methods or not answered .</p> <p>Share equipment with others and uses what is provided.</p> <p>Begin to recognise hazards</p>	<p>With support describes the observations or measurements they need to take, spots when a plan will lead to unfair results; recognises hazards.</p> <p>Sorts questions into those that can be answered by trying it out and those that cannot.</p> <p>Use provided equipment to carry out an experiment.</p> <p>Recognise hazards</p>	<p>Produce a written plan of what to do including equipment and resources</p> <p>Knows that there are different ways of answering scientific questions.</p> <p>Begins to choose equipment to help carry out an investigation.</p> <p>Recognises hazards and explain their dangers.</p>	<p>Produce a written plan of what to do including equipment and resources referring to fair testing and safety</p> <p>With support knows when to answer a question by using a fair test and when evidence should be collected in other ways.</p> <p>Chooses equipment to help carry out an investigation.</p> <p>Recognise hazards and explain their dangers and ways they can be reduced.</p>	<p>With support produce a plan that includes question prediction variables (things to keep the same things to change) method results analysis evaluation</p> <p>With support knows when to answer a question by using a fair test and when evidence should be collected in other ways, including secondary sources.</p> <p>Chooses equipment to help carry out an investigation, and use it effectively.</p> <p>Identify hazards and explain their dangers and how the hazard is minimised.</p>	<p>Produce a plan that includes question prediction variables (things to keep the same things to change) method results analysis evaluation</p> <p>Identifies an appropriate approach to answer a scientific question.</p> <p>Continue to choose equipment to help carry out an investigation, and use it effectively.</p> <p>Identify hazards and explain their dangers and how the hazard is minimised.</p>
Observing and measuring	<p>Observes simple features</p>	<p>Makes relevant observations. With support takes some non standard measurements.</p>	<p>Makes relevant observations. Uses non standard measurements. Begins to use basic equipment for measuring quantities such a s length or mass in standard units.</p>	<p>Makes relevant observations. Uses standard equipment for measuring quantities such as temperature and volume.</p>	<p>Makes a series of observations. Uses standard measuring equipment for most quantities.</p>	<p>Makes a series of relevant observations. With support takes accurate readings on measuring equipment repeating them when necessary.</p>	<p>Makes a series of relevant observations. Takes accurate readings on measuring equipment repeating them when necessary.</p>

Recording and reporting findings	Uses drawings to present evidence and with support uses prepared simple tables and charts.	Uses drawings and labels to present evidence. With some support uses prepared tables and charts.	Uses drawings and labels to present evidence. Uses prepared tables and charts.	Sometimes creates own tables and bar charts as well as filling in prepared ones with accuracy.	Creates own tables and bar charts and uses a line chart with support. Has increasing accuracy in presenting results.	Begins to select appropriate way to present evidence. Creates own charts including those for repeated readings.	Selects suitable ways to present evidence. Draws up charts and graphs including line graphs independently.
Concluding	<p>With support describes a simple observation. Show awareness of changes</p> <p>Notice and comment on patterns</p> <p>Responds to prompts about cause and effect in simple situations</p> <p>With support recognises some of the difficulties encountered</p> <p>Look closely at similarities and differences, patterns and change</p>	<p>Describes simple observations made and with support makes a simple comparison.</p> <p>With support says whether what happened was expected in a specific instance.</p> <p>With support, recognises cause and effect in simple situations.</p> <p>Use the appropriate vocabulary for the topic area</p> <p>With support recognise some of the difficulties encountered.</p> <p>Begins to explain has been seen and reasons for it</p>	<p>Describes what happened making comparisons where appropriate. With support order results where necessary.</p> <p>Says whether what happened was expected. With support makes further predictions from results.</p> <p>Recognises cause and effect in most simple situations.</p> <p>Use the appropriate vocabulary for the topic area</p> <p>Recognises some of the difficulties encountered.</p> <p>Respond to suggestions of how to improve an investigation – with prompting</p>	<p>With support makes a general statement about some simple patterns in results.</p> <p>With support makes further predictions from results in simple contexts.</p> <p>With support provides explanations for simple patterns in results.</p> <p>Use the appropriate vocabulary for the topic area</p> <p>Recognises the difficulties encountered.</p> <p>With support suggest how the enquiry might be improved.</p>	<p>Makes a general statement about some simple patterns in results.</p> <p>Makes further predictions from results in simple contexts.</p> <p>Provides explanations for simple patterns in results.</p> <p>Use the appropriate vocabulary for discussion</p> <p>Recognise with support the limitations of their evidence.</p> <p>Suggest more than one way that an investigation can be improved</p>	<p>With support describes relationships identified, linking both factors and describing whole relationship in comparative terms.</p> <p>With support makes further predictions from results and uses these to test out the suggested patterns in the relationship studied.</p> <p>Sometimes relates patterns in results to scientific knowledge where appropriate.</p> <p>Regularly use the appropriate vocabulary for discussion Identify how much to trust results.</p> <p>Suggest reasons why similar enquiries yield different results. With support consider the spread of repeated measurements.</p> <p>Suggest ways to improve an investigation supported with reasons why</p>	<p>Describes relationships identified, linking both factors and describing whole relationship in comparative terms.</p> <p>Makes further predictions from results and uses these to test out the suggested patterns in the relationship studied.</p> <p>Relates patterns in results to scientific knowledge where appropriate.</p> <p>Use appropriate scientific vocabulary to ask and answer questions Identify how much to trust results.</p> <p>Suggest reasons why similar enquiries yield different results.</p> <p>Consider the spread of repeated measurements.</p> <p>Recognise some of the limitations of their evidence.</p> <p>Make practical suggestions about how working methods could be improved</p>