

Science – Working Scientifically (disciplinary knowledge)				
	EY & KS1	KS2	KS3	KS4
Green Pathway	<p>Observe closely. Discover with independence through explorations. Make simple predictions. I can make simple records of my findings.</p>	<p>Ask simple questions, recognising they can be answered in different ways. Observe closely, using simple equipment. Perform simple tests. Identify and classify. Use own observations and ideas to suggest answers to questions. Gather and record data visually to help in answering questions.</p>	<p>Ask questions linked to scientific enquiry. Use different types of scientific enquiry to answer questions. Set up simple practical enquiries, comparative and fair tests. Make systematic and careful observations. Use accurate measurements using standard units with a range of equipment, with increasing accuracy and precision. Gather, record, classify and present data in a variety of ways to help in answering questions. Record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, tables and classification tables. Report on findings from enquiries and present data. Use results to draw simple conclusions, make predictions, suggest improvements and raise further questions. Identify differences, similarities or changes related to simple scientific ideas and processes. Use straightforward scientific evidence to answer questions or support findings. Plan different types of scientific enquiries to answer questions.</p>	<p>Plan a simple investigation, identifying the techniques or equipment needed and the method to be followed Make a simple prediction about the outcome of the investigation Use equipment and materials safely to take simple measurements or observations that are meaningful and valid Record the results in an appropriate way Display the data using an appropriate method State what has been found out during the investigation (drawing a conclusion) and describe simple relationships in the data Simply evaluate the investigation for its success in justifying the initial prediction.</p>
Purple Pathway	<p>Begin to observe closely. Discover through explorations. Begin to make simple predictions. Begin to make simple records of my findings.</p>	<p>Begin to ask simple questions with visual support. Begin to observe closely, using simple equipment. Begin to perform simple tests. Begin to identify and classify. Begin to use own observations and ideas to suggest answers to questions. Begin to gather and record data visually to help in answering questions.</p>	<p>Begin to ask questions linked to scientific enquiry. Begin to use different types of scientific enquiry to answer questions. Begin to set up simple practical enquiries, comparative and fair tests. Make careful observations. Begin to use accurate measurements using standard units with a range of equipment, with increasing accuracy and precision. Begin to gather, record, classify and present data in a variety of ways to help in answering questions. Begin to record findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables. Begin to report on findings from enquiries and begin to present data. Begin to use results to draw simple conclusions, make predictions, suggest improvements and raise further questions. Begin to identify differences, similarities or changes related to simple scientific ideas and processes. Begin to use straightforward scientific evidence to answer questions or support findings. Begin to plan different types of scientific enquiries to answer questions.</p>	<p>Begin to plan a simple investigation, identifying the techniques or equipment needed and the method to be followed Begin to make a simple prediction about the outcome of the investigation Begin to use equipment and materials safely to take simple measurements or observations that are meaningful and valid Begin to record the results in an appropriate way Begin to display the data using an appropriate method Begin to state what has been found out during the investigation (drawing a conclusion) and describe simple relationships in the data Begin to simply evaluate the investigation for its success in justifying the initial prediction.</p>
Orange Pathway	<p>Observe for brief periods (up to 20 seconds). Explore for brief periods (up to 1 minute). Make choices.</p>	<p>Use gesture and symbols to answer simple questions. Observe for extended periods (up to 1 minute). Match and sort objects/pictures with limited choices. Be aware of the use of objects of reference to record simple data.</p>	<p>Use symbols and aided language displays to answer questions linked to scientific enquiry. Be aware of simple practical enquiries and observe enquiries. Be aware of the use of visuals to record simple data. Be aware of changes related to simple scientific processes.</p>	<p>Use symbols & ALDs to sequence a scientific investigation or method Use a choice of symbols/ALDs to make a prediction Use symbols/ALDs to record simple results Use symbols/ALDs to draw a simple conclusion</p>