



### Skills Map for Enquiry

#### Science

*'We enquire, we hypothesise, we investigate in order to live life in all its fullness'*

#### Year 1

<i>Planning</i>	<i>Data</i>	<i>Evaluating</i>
<ul style="list-style-type: none"> <li>To ask simple questions.</li> <li>To make simple predictions about an investigation</li> </ul>	<ul style="list-style-type: none"> <li>To observe closely, using simple equipment.</li> <li>To perform simple tests.</li> <li>To identify phenomena.</li> <li>To gather data to help in answering questions.</li> <li>To identify patterns in their observations.</li> </ul>	<ul style="list-style-type: none"> <li>To use their observations and ideas to suggest answers to questions</li> <li>To suggest ways to improve a scientific investigation</li> <li>To explain their ideas using scientific vocabulary correctly.</li> </ul>

#### Year 2

Planning	Data	Evaluating
<ul style="list-style-type: none"> <li>To ask simple questions.</li> <li>To ask simple questions and recognising that they to be answered in different ways</li> <li>To make simple predictions about an investigation</li> <li>To find ways to record predictions.</li> </ul>	<ul style="list-style-type: none"> <li>To observe closely, using simple equipment.</li> <li>To perform simple tests.</li> <li>To identify and classify phenomena.</li> <li>To gather data to help in answering questions.</li> <li>To record data to help in answering questions.</li> <li>To identify patterns in their observations.</li> </ul>	<ul style="list-style-type: none"> <li>To use their observations and ideas to suggest answers to questions</li> <li>To begin to evaluate and improve an investigation</li> <li>To explain their ideas using scientific vocabulary correctly.</li> <li>To find ways to record evaluations to an experiment.</li> </ul>

#### Year 3

<i>Planning</i>	<i>Data</i>	<i>Evaluating</i>
<ul style="list-style-type: none"> <li>To say what I could change in an investigation, and know that these are called variables.</li> <li>To identify independent variables.</li> <li>To be able to ask a scientific question using variables, scientific vocabulary.</li> <li>To be able to ask a scientific question and use the equipment I am given to answer it.</li> <li>To make a simple prediction using scientific vocabulary.</li> </ul>	<ul style="list-style-type: none"> <li>To be able to identify the variables and decide which one to record with help.</li> <li>To be able to identify the dependent variable and how to record it with help.</li> <li>To be able to fill in the result table with the independent variable and each record of the dependent variable with help.</li> <li>To draw a table showing headings for the independent variable and the dependent variable with help.</li> </ul>	<ul style="list-style-type: none"> <li>To say if you have changed the independent variable, kept all the other variables the same, and recorded the dependent variable.</li> <li>To justify that data collected is valid because I have changed the independent variable, kept all the other variables the same, and recorded the dependent variable.</li> <li>To identify incorrect results in a table with support and independently.</li> <li>To identify explain why data may not fit a pattern</li> </ul>



	<ul style="list-style-type: none"> <li>To draw a table showing headings for the independent variable and the dependent variable independently.</li> </ul>	<ul style="list-style-type: none"> <li>To explain what I would do next time to prevent my data having odd ones out.</li> </ul>
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**Year 4**

<b>Planning</b>	<b>Data</b>	<b>Evaluating</b>
<ul style="list-style-type: none"> <li>To identify an independent and dependent variable.</li> <li>To ask a question using my chosen variables and using scientific vocabulary, which I to find the answer to.</li> <li>To be able to ask a scientific question and use the equipment I am given to answer it.</li> <li>To make a simple prediction using scientific vocabulary.</li> <li>To be able to justify why things will and will not happen.</li> <li>To be able to justify predictions, discussing scientific concepts I know about.</li> </ul>	<ul style="list-style-type: none"> <li>To be able to identify the variables and decide which one to record with help.</li> <li>To be able to identify the dependent variable and how to record it with help.</li> <li>To be able to fill in the result table with the independent variable and each record of the dependent variable with help.</li> <li>To draw a table showing headings for the independent variable and the dependent variable with help.</li> <li>To draw a table showing headings for the independent variable and the dependent variable independently.</li> <li>To make a comment on a pattern in the table.</li> <li>To be able to reorder my table to show a pattern more clearly.</li> <li>To be able to say something about what I have found out.</li> </ul>	<ul style="list-style-type: none"> <li>To say if you have changed the independent variable, kept all the other variables the same, and recorded the dependent variable.</li> <li>To justify that data collected is valid because I have changed the independent variable, kept all the other variables the same, and recorded the dependent variable.</li> <li>To identify incorrect results in a table with support and independently.</li> <li>To identify explain why data may not fit a pattern</li> <li>To explain what I would do next time to prevent my data having odd ones out.</li> </ul>

**Year 5**

<b>Planning</b>	<b>Data</b>	<b>Evaluating</b>
<ul style="list-style-type: none"> <li>To identify an independent and dependent variable.</li> <li>To ask a question using my chosen variables and using scientific vocabulary, which I to find the answer to.</li> <li>To be able to ask a scientific question and use the equipment I am given to answer it.</li> </ul>	<ul style="list-style-type: none"> <li>To be able to identify the variables and decide which one to record.</li> <li>To be able to identify the dependent variable and how to record it with help.</li> <li>To be able to fill in the result table with the independent variable and each record of the dependent variable with help.</li> </ul>	<ul style="list-style-type: none"> <li>To say if you have changed the independent variable, kept all the other variables the same, and recorded the dependent variable.</li> <li>To justify that data collected is valid because I have changed the independent variable, kept all the other variables the same, and recorded the dependent variable.</li> <li>To identify incorrect results in a table with support and independently.</li> </ul>



Compassion, Hope, Reverence, Wisdom

<ul style="list-style-type: none"> <li>• To make a simple prediction using scientific vocabulary.</li> <li>• To be able to justify why things will and will not happen.</li> <li>• To be able to justify predictions, discussing scientific concepts I know about.</li> <li>• To write a short method to show how to use equipment.</li> </ul>	<ul style="list-style-type: none"> <li>• To draw a table showing headings for the independent variable and the dependent variable with help.</li> <li>• To draw a table showing headings for the independent variable and the dependent variable independently.</li> <li>• To make a comment on a pattern in the table.</li> <li>• To be able to reorder my table to show a pattern more clearly.</li> <li>• To write an explanation of what I have found out.</li> </ul>	<ul style="list-style-type: none"> <li>• To identify explain why data may not fit a pattern</li> <li>• To explain what I would do next time to prevent my data having odd ones out.</li> <li>• To suggest other questions I could ask using the variables in my investigation.</li> <li>• To think of another way of doing the investigation to find the same pattern of results.</li> </ul>
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**Year 6**

<i>Planning</i>	<i>Data</i>	<i>Evaluating</i>
<ul style="list-style-type: none"> <li>• To be able to list a range of independent and dependent variables.</li> <li>• To be able to ask a scientific question.</li> <li>• To make a prediction and justify it discussing scientific concepts I know about.</li> <li>• To write a short method to show how to use equipment.</li> <li>• To plan an enquiry to answer a scientific question about sound, including all elements of planning an investigation and to justify my choices for equipment and methods using scientific vocabulary.</li> </ul>	<ul style="list-style-type: none"> <li>• To identify an independent and dependent variable.</li> <li>• To draw my own table, showing the headings for the independent variable and the dependent variable.</li> <li>• To use a table of results to draw a graph.</li> <li>• To make a comment on a pattern in the table.</li> <li>• To be able to reorder my table to show a pattern more clearly.</li> <li>• To write an explanation of what I have found out.</li> </ul>	<ul style="list-style-type: none"> <li>• To say if you have changed the independent variable, kept all the other variables the same, and recorded the dependent variable.</li> <li>• To justify that data collected is valid because I have changed the independent variable, kept all the other variables the same, and recorded the dependent variable.</li> <li>• To identify incorrect results in a table with support and independently.</li> <li>• To identify explain why data may not fit a pattern</li> <li>• To explain what I would do next time to prevent my data having odd ones out.</li> <li>• To suggest other questions, I could ask using the variables in my investigation.</li> <li>• To think of another way of doing the investigation to find the same pattern of results.</li> <li>• To write a complete report starting with the plan, recording the date in a table and graph, and evaluating the success or not of the investigation.</li> </ul>