

**Progression of Working Scientifically Skills**

	<b>Nursery</b>	<b>Reception</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>	<b>Year 6</b>
<b>Questioning and enquiring planning</b>	ask simple questions about the world around them.	ask simple questions about the world around them.	ask simple questions.	ask more complex questions and look at different points of view.	ask relevant questions and use different types of scientific enquiries to answer them.	ask relevant questions and begin to use different types of scientific enquiries to answer them.	plan different types of scientific enquiries to answer questions.	ask questions and develop a line of enquiry based on observations.  make predictions using scientific knowledge and understanding.
<b>Observations</b>	comments and asks questions about aspects of their familiar world such as the place where they live or the natural world.  talk about some of the things they have observed such as plants, animals, natural and found objects.	observe similarities and differences in relation to places, objects, materials and living things.  make observations of animals and plants and explain why some things occur, and talk about changes	observe closely, using simple equipment.	make refined observations through use of equipment.  observe, identify, classify, compare and describe.  use observations and ideas to suggest a variety of answers.	make systematic and careful observations through use of equipment.	make systematic and careful observations through use of equipment, with increasing independence and confidence.	observe and take measurements, using a range of equipment, with increased accuracy.	observe and make accurate measurements using a range of methods for different investigations.
<b>Identifying, grouping and classifying</b>	group and sort.	group and sort with increasing confidence.	identify and classify.  use observations and ideas to suggest answers.	group, sort and classify.	group, sort, compare and classify using simple keys.	use own criteria to group, sort, compare and classify using a key.	use and develop keys and other information records to identify, classify and describe.	use and develop keys and other information records to identify, classify and describe with increased accuracy.
<b>Investigating</b>	talk about the features of their own immediate environment and how environments might vary from one another.	talk about the features of their own immediate environment and how environments might vary from one another.	perform simple tests.	perform simple tests with increasing independence and confidence.	set up simple practical enquiries, comparative and fair tests.	set up simple practical enquiries, comparative and fair tests, with increasing independence and confidence.	use test results to make predictions and set up further comparative and fair tests.	select, plan and carry out the most appropriate types of scientific enquiries to test predictions.  suggest improvements to plans and explain the reasons why.

<b>Recording and reporting findings</b>	gather and record data, in a way they can verbally explain, to answer their own questions.	gather and record data, in a way they can verbally explain, to answer their own questions.	gather and record data to answer questions	gather and record data accurately to answer questions confidently.	gather, record, classify and present data to answer questions.  record findings using simple scientific language, diagrams, and charts.  take accurate measurements, using a range of equipment.	gather, record, classify and present data to answer questions, including diagrams and charts, and oral and written explanations.	record data and results of increasing complexity using diagrams and graphs, etc.	present observations and data using appropriate methods
<b>Reviewing and Conclusions</b>	talk about what they found out.	talk about what they found out.	talk about what they found out and how they found it out.	talk about what they found out, how they found it out and suggest simple changes to the investigation.	report on findings - including results and conclusions.  use results to draw simple conclusions, predictions and suggest improvements and raise questions.  identify differences, similarities or changes.  use straightforward scientific evidence to answer questions.	report on findings - including results and conclusions.  use results to draw simple conclusions, predictions and suggest improvements; identify new questions that arise from data, making new predictions.	report and present findings from enquiries, including conclusions, explanations of results.  identify scientific evidence that has been used to support or refute ideas.  use results to make predictions to set up further comparative tests.	interpret observations and data, including identifying patterns and data to draw conclusions.  present and evaluate reasoned explanations, including data in relation to predictions and hypotheses.  identify further questions arising from results to make predictions to set up further comparative tests.

