SCIENCE – Working scientifically									
	FINDING AND USING INFORMATION	**QUESTIONING**	**FAIR TEST**	**PREDICTION**	**OBSERVATIONS**	**USE OF EQUIPMENT AND MEASURING**	**COMMUNICATING FINDINGS**	**DRAWING CONCLUSIONS**	**EVALUATING THEIR WORK**
Year 1					Describe or respond appropriately to simple features of objects, living things and events they observe.		They communicate their findings in simple ways, (for example talking about their work, through drawings, simple charts).		
Year 2	They use simple texts, with help to find information.	Pupils respond to suggestions of how to find things out and, with help, make their own suggestions about how to collect data to answer questions.		They say whether what happened was what they expected.	They make observations related to their task. They observe and compare objects, living things and events they observe.	They use simple equipment provided.	They describe their observations using scientific vocabulary and record them using simple tables when appropriate.		
Year 3	They recognise why it is important to collect data to answer questions They use simple texts to find information.	Pupils respond to suggestions and put forward their own ideas about how to find an answer to a question.	With some help they carry out a fair test, recognising and explaining why it is fair.		They make relevant observations.	They use a range of simple equipment. They measure quantities such as length or mass.	They record their observations in a variety of ways. They communicate in a scientific way what they found out.	They provide explanations for observations and for simple patterns in recorded measurements.	They suggest improvements for their work.
Year 4	They select information from sources provided for them.	Pupils recognise that scientific ideas are based on evidence.	In their own investigative work, they decide on an appropriate approach (for example using a fair test) to answer a question. Where appropriate, they describe, or show in the way they perform their task, how to vary one factor while keeping the others the same.	Where appropriate, they make predictions.	They make a series of observations and measurements.	They select suitable equipment to use. They make a series of measurements that are adequate for the task	They record their observations, comparisons and measurements, using tables and bar charts. They begin to plot points to form simple graphs. They communicate their conclusions with appropriate scientific language.	They use these graphs to point out and interpret patterns in their data. They begin to relate their conclusions to these patterns and to scientific knowledge and understanding.	They suggest improvements in their work, giving reasons.
Year 5	Pupils describe how experimental evidence and creative thinking have been combined to provide a scientific explanation (for example Jenner's work on vaccination at KS2). They select from a range of sources of information.	When they try to answer a scientific question, they identify an appropriate approach.	When the investigation involves a fair test, they identify key factors to be considered.	Where appropriate, they make predictions based on their scientific knowledge and understanding.	They make a series of observations appropriate to the task. They begin to repeat observations and to offer simple explanations for any differences they encounter.	They select apparatus for a range of tasks and plan to use it effectively. They make a series of observations, comparisons or measurements with precision appropriate to the task. They begin to repeat observations and measurements and to offer simple explanations for any differences they encounter.	They record observations and measurements systematically and, where appropriate, present data as line graphs. They use appropriate scientific language and conventions to communicate quantitative and qualitative data.	They draw conclusions that are consistent with the evidence and begin to relate these to scientific knowledge and understanding.	They make practical suggestions about how their working methods could be improved.
Year 6	Pupils describe evidence for some accepted scientific ideas and explain how the interpretation of evidence by scientists leads to the development and acceptance of new ideas. They select and use sources of information effectively.		In their own investigative work, they use scientific knowledge and understanding to identify an appropriate approach.		They make enough measurements, comparisons and observations for the task.	They measure a variety if quantities with precision using instruments with fine-scale divisions	They choose scales for graphs and diagrams that enable them to show data features effectively.	They identify measurements and observations that that do not fit the main pattern shown. They draw conclusions that are consistent with the evidence and use scientific knowledge and understanding to explain them. They select and use appropriate methods for communicating qualitative and quantitative data using scientific language and conventions.	They make reasonable suggestions about how their working methods could be improved.

Y1/2 – 5 units a year - 1,2,3,5,6
Y3/4 – 5 units a year – 2,3,4,5,6, 7
Y5/6 – 6 units a year – 2,3,4,5,6,7

1.Finding and using information

2.Questioning

3.Prediction

4.Fair Test

5.Use of equipment/Observation

6.Communicating findings

7. Drawing conclusions/evaluating