St Monica's RC Primary School	St Monica's RC Primary School: Science Curriculum Progression and End Points			
Domains/ Themes/ Areas	**End of EYFS**	**End of KS1**	**End of LKS2**	**End of UKS2**
Working Scientifically	• Ask questions to find out more information. • Use observation to look closely – observing change and patterns. • Identify and classify. • Work together to carry out a simple investigation.	• Asking simple questions and recognising that they can be answered in different ways; • Observing closely, using simple equipment; • Performing simple tests; • Identifying and classifying; • Using their observations and ideas to suggest answers to questions; • Gathering and recording data to help in answering questions.	• Asking relevant questions and using different types of scientific enquiries to answer them; • Setting up simple practical enquiries, comparative and fair tests; • Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers; • Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions; • Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables; • Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions; • Using results to draw simple conclusions, make predictions for	• Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary; • Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate; • Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs; • Using test results to make predictions to set up further comparative and fair tests; • Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations; • Identifying scientific evidence that has been used to support or refute ideas or arguments.

			new values, suggest improvements and raise further questions; • Identifying differences, similarities or changes related to simple scientific ideas and processes; • Using straightforward scientific evidence to answer questions or to support their findings.	
Scientific Questioning	• To ask simple questions.	Asking simple questions and recognising that they can be answered in different ways. Performing simple tests, children can: • Explore the world around them, leading them to ask some simple scientific questions about how and why things happen; • Begin to recognise ways in which they might answer scientific questions; • Ask people questions and use simple secondary sources to find answers; • Carry out simple practical tests, using simple equipment; • Experience different types of scientific enquiries, including practical activities; • Talk about the aim of scientific tests they are working on.	Asking relevant questions and using different types of scientific enquiries to answer them. Setting up simple practical enquiries, comparative and fair tests, children can: • Start to raise their own relevant questions about the world around them in response to a range of scientific experiences; • Start to make their own decisions about the most appropriate type of scientific enquiry they might use to answer questions; • Recognise when a fair test is necessary; • Help decide how to set up a fair test, making decisions about what observations to make, how long to make them for and the type of simple equipment that might be used; • Set up and carry out simple comparative and fair tests.	Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary. Using test results to make predictions to set up further comparative and fairs tests, children can: • With growing independence, raise their own relevant questions about the world around them in response to a range of scientific experiences; • With increasing independence, make their own decisions about the most appropriate type of scientific enquiry they might use to answer questions; • Explore and talk about their ideas, raising different kinds of scientific questions; • Ask their own questions about scientific phenomena; • Select and plan the most appropriate type of scientific enquiry to use to answer scientific questions; • Make their own decisions about

				what observations to make, what measurements to use and how long to make them for, and whether to repeat them; • Plan, set up and carry out comparative and fair tests to answer questions, including recognising and controlling variables where necessary; • Use their test results to identify when further tests and observations may be needed; • Use test results to make predictions for further tests.
Observing and Measuring	• Use observation to look closely – observing change and patterns. • Observe changes over time.	Observing closely, using simply equipment, children can: • Observe the natural and humanly constructed world around them; • Observe changes over time; • Use simple measurements and equipment; • Make careful observations, sometimes using equipment to help them observe carefully.	Making systematic and careful observations and where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers, children can: • Make systematic and careful observations; • Observe changes over time; • Use a range of equipment, including thermometers and data loggers; • Ask their own questions about what they observe; • Where appropriate, take accurate measurements using standard units using a range of equipment.	Taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate, children can: • Choose the most appropriate equipment to make measurements and explain how to use it accurately; • Take measurements using a range of scientific equipment with increasing accuracy and precision; • Make careful and focused observations; • Know the importance of taking repeat readings and take repeat readings where appropriate.
Gathering and Recording	• Recording observations very simply.	Gathering and recording data to help in answering questions, children can: • Use simple features to compare objects, materials and living things; • Decide how to sort and classify objects into simple groups with some help;	Gathering, recording, classifying and presenting data in a variety of ways to help in answering questions. Recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts and tables, children can: • Talk about criteria for grouping,	Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs, children can: • Independently group, classify and describe living things and materials; • Use and develop keys and other information records to identify,

		• Record and communicate findings in a range of ways with support; • Sort, group, gather and record data in a variety of ways to help in answering questions such as in simple sorting diagrams, pictograms, tally charts, block diagrams and simple tables.	sorting and classifying; • Group and classify things; • Collect data from their own observations and measurements; • Present data in a variety of ways to help in answering questions; • Use, read and spell scientific vocabulary correctly and with confidence, using their growing word reading and spelling knowledge; • Record findings using scientific language, drawings, labelled diagrams, keys, bar charts and tables.	classify and describe living things and materials; • Decide how to record data from a choice of familiar approaches; • Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar graphs and line graphs.
Communicating Findings		Using their observations and ideas to suggest answers to questions, children can: • Notice links between cause and effect with support; • Begin to notice patterns and relationships with support; • Begin to draw simple conclusions; • Identify and discuss differences between their results; • Use simple and scientific language; • Read and spell scientific vocabulary at a level consistent with their increasing word reading and spelling knowledge at key stage 1;	Using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions. Reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions, children can: • Draw simple conclusions from their results; • Make predictions; • suggest improvements to investigations; • Raise further questions which could be investigated; • First talk about, and then go on to write about, what they have found out; • Report and present their results and conclusions to others in written	Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations, children can: • Notice patterns; • Draw conclusions based in their data and observations; • Use their scientific knowledge and understanding to explain their findings; • Read, spell and pronounce scientific vocabulary correctly; • Identify patterns that might be found in the natural environment; • Look for different causal relationships in their data; • Discuss the degree of trust they can have in a set of results;

		• Talk about their findings to a variety of audiences in a variety of ways.	and oral forms with increasing confidence.	• Independently report and present their conclusions to others in oral and written forms.
Using Scientific Evidence			Identifying differences, similarities or changes related to simple scientific ideas and processes. Using straightforward scientific evidence to answer questions or to support their findings, children can: • Make links between their own science results and other scientific evidence; • Use straightforward scientific evidence to answer questions or support their findings; • Identify similarities, differences, patterns and changes relating to simple scientific ideas and processes; • Recognise when and how secondary sources might help them to answer questions that cannot be answered through practical investigations.	Identifying scientific evidence that has been used to support or refute ideas or arguments, children can: • Use primary and secondary sources evidence to justify ideas; • Identify evidence that refutes or supports their ideas; • Recognise where secondary sources will be most useful to research ideas and begin to separate opinion from fact; • Use relevant scientific language and illustrations to discuss, communicate and justify their scientific ideas; • Talk about how scientific ideas have developed over time.