



Charlton Science Progression of Scientific Skills



EYFS	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6
- To explore the natural world around them, making observations, drawing pictures of animals and plants. - To know some similarities and differences between the natural world around them and contrasting environments, drawing on their experience and what has been read in class. - To understand some important processes and changes in the natural world around them, including the seasons and changing states of matter.	- To be able to record data - in a table, Venn diagram, chart. - To be able to observe closely, using simple equipment. - To be able to identify and classify. - To be able to ask simple questions and recognise that they can be answered in different ways. - To be able to perform simple tests. - To be able to record simple data in order to answer a question. - To be able to use parts of the plant to identify and classify it. - To be able to identify objects.	- To be able to use observations to suggest answers to questions; to be able to observe using simple equipment. - To be able to record data - flow diagram, table, tally chart, bar chart. - To be able to perform a simple test. - To be able to ask simple questions and recognise that they can be answered in different ways. - To be able to gather and record data to help answer a question. - To be able to perform a simple test. - To be able to recognise that questions can be answered in a range of ways. - To be able to use simple measurements to gather data.	- To be able to record using drawings; to be able to record data in a table; to be able to record findings in a bar chart. - To be able to report on findings from enquiries; to be able to provide an oral explanation of findings. - To be able to set up a comparative test. - To be able to set up a simple practical enquiry. - To be able to set up a simple fair-test. - To be able to identify changes related to scientific ideas. - To be able to use results to draw simple conclusions. - To be able to make systematic and careful observations and measurements. - To be able to make predictions for further values. - To be able to make systematic and careful observations. - To be able to use straightforward scientific evidence to answer questions or to support their findings. - To be able to measure using beakers and syringes. - To be able to present information in a branching key.	- To be able to record findings using labelled diagrams. - To be able to use written explanations to report on findings from an enquiry; to be able to report on findings from enquiries, including oral and written explanations. - To be able to identify the correct type of enquiry to answer a question. - To be able to set up a comparative test; to be able to set up simple fair tests. - To be able to set up a simple practical enquiry. - To be able to use results to make predictions. - To be able to gather, record, classify and present data in a variety of ways to help in answering questions. - To be able to use a scientific enquiry to answer a question. - To be able to make systematic and careful measurements with a data logger; to be able to use a thermometer to take accurate measurements. - To be able to identify differences, similarities or changes related to simple scientific ideas. - To be able to use straightforward scientific evidence to answer questions or to support their findings.	- To be able to present conclusions; to be able to report a presentation of an explanation; to be able to report and present findings from enquiries, including conclusions, causal relationships and explanations. - To be able to identify scientific evidence that has been used to support or refute ideas or arguments; to be able to use evidence to refute or support an idea. - To be able to record data within tables; to be able to record data using line graphs; to be able to communicate data using a scatter graph. - To be able to plan a scientific enquiry to answer a question. - To be able to explain the degree of trust in results. To be able to plan a fair-test; identifying the control variables. - To be able to use scientific diagrams and labels. To take accurate measurements using a data-logger; to be able to measure accurately using a thermometer; to be able to take repeated accurate measurements using a stopwatch. - To be able to use test results to make predictions to set up further comparative and fair tests. - To be able to evaluate an enquiry in terms of the amount of trust one can have in it.	- To be able to plan pattern-seeking enquiry; to be able to plan an enquiry that will answer a question. - To be able to report causal relationships; to be able to present findings from enquiries. - To be able to record results using a line graph; to be able to record data in a table. - To be able to measure with a data logger; to be able to take repeat measurements of data with precision using a data-logger. - To be able to explain the degree of trust can be had in results. - To be able to plan a fair-test by recognising the control variables; to be able to use predictions to set up fair tests. - To be able to identify scientific evidence that has been used to support or refute ideas or arguments. - To be able to recognise which secondary sources will be most useful to research ideas. - To be able to use test results to make predictions to set up further comparative tests. - To be able to make a key to classify plants.