Rucstall
PRIMARY SCHOOL

Disciplinary Knowledge in Science

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Measuring	Use simple equipment to measure closely	Use simple equipment like thermometers and rain gauges to observe changes closely over time	Make systematic and careful observations, and where appropriate, take accurate measurement using standard units of measure		Take measurements using a range of scientific equipment with increasing accuracy and precision - and taking repeated readings when needed Year 6 – use of averages	
Gathering and recording	Gather and record data as a class or in groups to help answer questions	Gather and record data to help to answer questions including using secondary sources of information using labelling and diagrams, graphs or tables	Gather record, classify and present data in a variety of ways to help in answering questions Use labelled diagrams, keys and child constructed bar charts and tables		Record data and results using more complex analysis with bar charts and some line or scatter graphs	Record data and results using more complex analysis such as scatter graphs and line graphs
Communicating Findings	Make a simple written explanation about what has been learnt from an investigation or what conclusion has been found out	Explain what has been done within an investigation and a simple report discussing what was learnt	Results put in a clear table with potentially a bar chart if applicable. Explanation of the results and conclusion.		Results put in a clear table with potentially a line or scatter graph if applicable. Explanation of the results and conclusion. Illustrations and diagrams drawn to demonstrate understanding.	

Classifying	Identify and classify simple groups	Identify, group and classify according to given criteria	Group information according to common factors Use of Venn and Carroll diagrams	Group and classify things and recognise patterns using appropriate ways of presenting. Children should select appropriate way to present	Use of classification keys
Concluding and questioning		Use his/her observation and ideas to suggest answers to questions noticing similarities and patterns	Use results to draw simple conclusions. Be able to make predictions for new variables. Suggest improvements if they were to conduct the investigation again Can explain what a fair test it	Evaluate when explaining findings from scientific enquiries. Talk about what happened in previous enquiries as a basis for predicting outcomes	