		Y1	Y2	Y3	Y4	Y5	Y6
Planning	Having their own ideas– thinking of ideas; finding ways to solve problems; finding new ways to do things Making predictions Planning making decisions about how to solve a problem and reach a goal	Ask simple questions when prompted Suggest ways of answering a question	Ask simple questions Recognise that questions can be answered in different ways	Ask relevant questions when prompted Set up simple and practical enquiries, comparative and fair tests Set up comparative tests	Ask relevant questions Plan different types of scientific enquiries to answer questions Set up simple and practical enquiries, comparative and fair tests	With prompting, plan different types of scientific enquiries to answer questions With prompting, recognise and control variables where necessary	Plan different types of scientific enquiries to answer questions Recognise and control variables where necessary
Conducting Experiments	Testing their ideas Children use everyday language as they explore to talk about size, weight, capacity. They explore characteristics of everyday objects and shapes Children safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.	Make relevant observations Conduct simple tests, with support	Observe closely, using simple equipment Perform simple tests	Make systematic observations, using simple equipment Use standard units when taking measurements	Make systematic and careful observations using a range of equipment, including thermometers and data loggers Take accurate measurements using standard units, where appropriate	Select, with prompting, and use appropriate equipment to take readings Take precise measurements using standard units	Take measurements using a range of scientific equipment Take measurements with increasing accuracy and precision Take repeat readings when appropriate
Recording Evidence	Developing ideas of grouping , sequencing, cause and effect Children represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories.	With prompting, suggest how findings could be recorded	Record and communicate their findings in a range of ways and begin to use simple scientific language	Record findings in various ways With prompting, suggest how findings may be tabulated With prompting, use various ways of recording, grouping and displaying evidence	Record findings using simple scientific language, drawings and labelled diagrams Record findings using keys, bar charts, and tables Gather, record, classify and present data in a variety of ways to help to answer questions	Take and process repeat readings	Record data and results of increasing complexity using scientific diagrams and labels Record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables and bar charts Record data and results of increasing complexity using line graphs
Reporting Findings	Making links and noticing patterns <u>Speaking:</u> Uses talk to organise, sequence and clarify thinking and ideas Gives meaning to marks they make as the draw, write and paint Children can make observations about plants and animals and explain why some things occur and talk about changes.	Recognise findings	Identify and classify	With prompting, suggest conclusions from enquiries Suggest how findings could be reported	Report on findings from enquiries, including oral and written explanations, of results and conclusions Report on findings from enquiries using displays or presentations	Record data and results Record data using labelled diagrams, keys, tables and charts Use line graphs to record data	Report and present findings from enquiries, including conclusions and causal relationships Report and presents findings from enquiries in oral and written forms such as displays and other presentation Report and present findings from enquiries, including explanations of, and degree of, trust in results
Conclusions and Predictions	Checking how well their activities are going Changing strategy as needed Reviewing how well the approach worked <u>Understanding:</u> Listens and responds to ideas expressed by others Children can discuss similarities and differences between living things, objects and materials.	Gather and record data Use observations to suggest answers to questions	Gather and record data to help answer questions Use their observations and ideas to suggest answers to questions	Suggest possible improvements or further questions to investigate	Identify differences, similarities or changes related to simple scientific ideas and processes Use straightforward scientific evidence to answer questions or to support their findings Use results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions	Report and present findings from enquiries, including conclusions and, with prompting, suggest causal relationships With support, present findings from enquiries orally and in writing Suggest further comparative or fair tests	Identify scientific evidence that has been used to support or refute ideas or arguments Use test results to make predictions to set up further comparative and fair tests