

Science	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Planning an enquiry								
		I suggest an idea to investigate with help. I suggest what might be the 'best' or 'worst'.	I suggest an idea to investigate and ask questions. I suggest what might happen with help.	I suggest an idea to investigate from observations. I suggest what might happen in my investigation.	I identify cause and effect in my investigations. I predict cause and effect (causal prediction).	I plan a fair test by selecting variables to change and measure. I predict a trend (relationship prediction).	I plan a fair test and ensure controlled variables are kept the same. I use K&U to explain my prediction (relationship).	I plan a reliable fair test (use of variable terminology). I reason K&U to make a hypothesis (relationship).
Designing tests								
		I follow short demo and spoken instructions (help). I am aware that factors change in an investigation. I use a range of everyday items to investigate. I work safely when given instructions (some supervision).	I follow short demo, spoken and picture instructions. I begin to identify variables in an investigation. I use a limited range of science equipment correctly (help). I notice risk (help) & can list some common dangers.	I follow short, spoken and written instructions in order. I identify variables in investigations (label & describe). I use a range of science equipment correctly. I notice risk in my investigations & know common dangers.	I follow written instructions and write a simple method. I suggest a suitable data range for a variable. I select suitable equipment for the task. I predict obvious risk & act on safety suggestions.	I design and write a simple ordered method (from plan). I suggest a data range & interval for a variable. I select and use suitable equipment for the task. I predict obvious risk & work safety (mostly).	I design and write an ordered method (controls variables). I suggest a data range, interval and sufficient readings. I select equipment with the correct scale for the task. I begin to plan to minimise risk & work safely (consistently).	I design and write an ordered reliable method (repeats). I plan to collect repeated readings (>3) & calculate mean. I select & use equipment with the correct scale for the task. I plan to minimise risk & describe safe use of equipment.

Gathering and recording data								
		I can position numbers on a number track to 20. I can use non-standard units to measure and compare. I use a simple table by recording in pictures & words. I use prepared pictograms to record my observations. I add to pictograms by counting up.	I can position numbers on a number track to 100. I can measure in non-standard units and compare e.g. heavier/lighter I can use a simple table by recording in words and numbers. I use a frame to add to pictograms and block charts. I add to block charts by counting up.	I measure labelled divisions on a number line (inc. in steps). I measure standard units (inc. length, mass, capacity). I use a simple table recording in words & numbers (inc. tally). I construct simple pictograms & block charts. I use the scale on a block chart to add the correct blocks.	I measure unlabelled divisions on a number line (+ive). I measure & compare values in standard units. I use a frame to construct a simple table of results. I use a frame to construct a bar chart (help). I draw bars on a bar chart (one axis co-ordinate).	I measure unmarked divisions on a number line (+ive values). I measure & convert values in standard units (inc. time). I construct a simple table to compare cause & effect. I construct bar charts correctly (inc. numerical axis). I plot co-ordinates on a graph in the first quadrant.	I measure divisions on a number line past zero (-ve values). I measure & convert values in standard units (inc. area). I use a frame to construct a complex table of results. I use a frame to construct a graph & can scale axes (help). I join plotted co-ordinates with straight lines.	I scale up/down a number line (axis) & decide on limits. I measure/ calculate with standard units (inc. Area & vol.). I construct a complex table to show repeated data. I construct graphs and can scale at least one axis independently. I plot mean values & draw a trend line for linear data.

Reporting findings and Evaluating		I recognise, create & describe simple patterns (e.g. size). I begin to use 'more' or 'less', etc. to compare observations. I talk about changes that I observe during activities.	I recognise, create & describe simple number patterns. I use 'more' or 'less' to compare numbers. I describe the changes that are happening.	I describe simple features & patterns in data & charts. I see obvious differences in sets of numbers. I describe the changes that have happened.	I describe simple patterns in data, charts and graphs. I see subtle differences in sets of numbers. I describe my results by linking cause and effect. Suggest improvements to my work	I describe simple patterns trends and relationships in data. I see differences (error) in repeated data. I describe trends and begin to use science to explain. Suggest sensible improvement to my method.	I describe patterns trends & relationships in data. I spot anomalous data that doesn't fit the pattern. I use data in my conclusions & use science to explain.	I describe changing patterns trends & relationships in data. I spot anomalous data & explain from the method. I use 1*/2* data & science ideas in my conclusions.
Topics e.g. forces, plants, evolution and inheritance								