Broadwood Primary School
Science – Progression Map

	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Planning an enquiry		Suggest an idea to investigate with help. Suggest what might be the 'best' or 'worst'.	Suggest an idea to investigate and ask questions. Suggest what might happen with help.	Suggest an idea to investigate from observations. Suggest what might happen in my investigation.	Identify cause and effect in my investigations. Predict cause and effect (causal prediction).	Plan a fair test by selecting variables to change and measure. Predict a trend (relationship prediction).	Plan a fair test and ensure controlled variables are kept the same. Use Knowledge and Understanding to explain my prediction (relationship).	Plan a reliable fair test (use of variable terminology). Reason Knowledge and Understanding to make a hypothesis (relationship).
Designing tests		Follow short demo and spoken instructions (help). Be aware that factors change in an investigation. Use a range of everyday items to investigate. Work safely when given instructions (some supervision).	Follow short demo, spoken and picture instructions. Begin to identify variables in an investigation. Use a limited range of science equipment correctly (help). Notice risk (help) &can list some common dangers.	Follow short, spoken and written instructions in order. Identify variables in investigations (label & describe). Use a range of science equipment correctly. Notice risk in my investigations & know common dangers.	Follow written instructions and write a simple method. Suggest a suitable data range for a variable. Select suitable equipment for the task. Predict obvious risk & act on safety suggestions.	Design and write a simple ordered method (from plan). Suggest a data range & interval for a variable. Select and use suitable equipment for the task. Predict obvious risk & work safety (mostly).	Design and write an ordered method (controls variables). Suggest a data range, interval and sufficient readings. Select equipment with the correct scale for the task. Begin to plan to minimise risk &work safely (consistently).	Design and write an ordered reliable method (repeats). Plan to collect repeated readings (>3) & calculate mean. Select & use equipment with the correct scale for the task. Plan to minimise risk & describe safe use of equipment.
Gathering and recording data		Position numbers on a number track to 20. Use non-standard units to measure and compare. Use a simple table by recording in pictures & words. Use prepared pictograms to record my observations.	Position numbers on a number track to 100. Measure in non-standard units and compare e.g. heavier/lighter. Use a simple table by recording in words and numbers. Use a frame to add to pictograms and block charts.	Measure labelled divisions on a number line (inc. in steps). Measure standard units (inc. length, mass, capacity). Use a simple table recording in words & numbers (inc. tally).	Measure unlabelled divisions on a number line (+ive). Measure & compare values in standard units. Use a frame to construct a simple table of results. Use a frame to construct a bar chart (help).	Measure unmarked divisions on a number line (+ive values). Measure & convert values in standard units (including time). Construct a simple table to compare cause & effect.	Measure divisions on a number line past zero (-ve values). Measure & convert values in standard units (including area). Use a frame to construct a complex table of results. Use a frame to construct a graph & can scale axes (help).	I scale up/down a number line (axis) & decide on limits. Measure/ calculate with standard units (including area & vol.). Construct a complex table to show repeated data.

Broadwood Primary School
Science – Progression Map

		Add to pictograms by counting up.	Add to block charts by counting up.	Construct simple pictograms & block charts. Use the scale on a block chart to add the correct blocks.	Draw bars on a bar chart (one axis co-ordinate).	Construct bar charts correctly (including numerical axis). Plot co-ordinates on a graph in the first quadrant.	Join plotted co-ordinates with straight lines.	Construct graphs and can scale at least one axis independently. Plot mean values & draw a trend line for linear data.
Reporting findings and Evaluating		Recognise, create & describe simple patterns (e.g. size). Begin to use 'more' or 'less', etc. to compare observations. Talk about changes that I observe during activities.	Recognise, create & describe simple number patterns. Use 'more' or 'less' to compare numbers. Describe the changes that are happening.	Describe simple features & patterns in data & charts. See obvious differences in sets of numbers. Describe the changes that have happened.	Describe simple patterns in data, charts and graphs. See subtle differences in sets of numbers. Describe my results by linking cause and effect. Suggest improvements to my method.	Describe simple patterns trends and relationships in data. See differences (error) in repeated data. Describe trends and begin to use science to explain. Suggest sensible improvement to my method.	Describe patterns trends & relationships in data. Spot anomalous data that doesn't fit the pattern. Use data in my conclusions & use science to explain. Identify strengths and weaknesses and improvements.	Describe changing patterns trends & relationships in data. Spot anomalous data & explain from the method. Use 1*/2* data & science ideas in my conclusions. Suggest limitations (data) & practical improvements.