

AOLE	Subject	Year	Assessment
Science and Technology	Science	7	Practical Assessment

Progression Table						
Progression Indicator	Knowledge/Skills	How will I demonstrate this				
Excelling	 Pupils link experimental findings and theoretical knowledge to draw valid conclusions. Pupils can critically evaluate the quality of data and justify improvements. Pupils can choose the most appropriate graph for the set of data and be able to justify their choice. Pupils draw a graph independently, having decided for themselves on an appropriate, and accurate scale. Pupils can draw conclusions from the graph without any guidance. 	 → I can suggest improvements to my inquiry. → I can identify measurement tools with the correct resolution to make fine measurements. → I can decide if I need to draw a bar chart or a line graph depending on the type of data I have collected. → I can draw my own graph, using my own scales. → I can suggest that as one variable increases what the other variable is doing. 				
Advancing	 Pupils can identify questions that can be investigated scientifically and suggest suitable methods of inquiry. Pupils can use their findings to draw valid conclusions. Pupils can ensure their data is reliable and as accurate as possible by creating a data table independently. Pupils can use their knowledge and understanding of the scientific topic to predict effects as part of their scientific exploration. They can start to use qualitative descriptions to do this. Pupils can choose the most appropriate graph to draw for the set of data out of 2 or 3 given options. 	 → I can consider what variables to change and measure to plan my inquiry. → I can write a conclusion and discuss if the results support my prediction. → I can carry out repeat readings and calculate a mean using a table I have created. → I can use my knowledge of the topic and the science I have learnt to predict what may happen. I can start to describe what I think may happen when I change my independent variable. 				

		→ I can start to select the most appropriate graph for the task with help then start to create this independently.
Securing	 Pupils can show curiosity and question how things work. Pupils can explore the environment, make observations and communicate their ideas. Pupils can evaluate the data that I want to collect. Pupils can ask questions and use their experience to suggest simple methods of inquiry. Pupils can start to create data tables independently given the independent and dependent variables. Pupils can recognise patterns from their observations and investigations and can communicate their findings. Pupils can draw a graph independently, having been given the type of graph to draw and guidance on the most appropriate scale. Pupils can label the axes and write an appropriate title for the graph. Pupils can independently check their graphs using SALUTE (Scale Axis, Line, Units, Title, Equipment). Pupils can interpret a given graph, or their own drawn graph. 	 → I can formulate a question about the scientific topic. → I can consider what variables should change. → I can select the correct measurement tool for my inquiry. → I can pose a question which will lead me to start an inquiry and write an aim. → I can start to take multiple measurements when one variable is changed. → I can start to plot the best type of graph to display my results. → Using a suggested scale I can draw the correct type of graph on my own and write on the scale correctly. → I can select the correct headings from my data table to put on the axis labels and use this to make a title. → I am able to check the correct boxes to check I have all the parts needed for a complete graph. → I can read a graph and identify simple questions such as: what drink has the most sugar given a bar chart of the sugar content of different drinks.
Beginning	 Pupils can use their knowledge and understanding to predict effects as part of their scientific exploration. Pupils can suggest simple conclusions as a result of carrying out their inquiries. Pupils record data in simple given tables with an independent variable and a dependent variable. Pupils can complete a partially drawn graph or draw a simple graph on a given set of axes for a simple set of data. Pupils can plot points or draw bars accurately and begin to understand the success criteria using SALUTE (Scale Axis, Line, Units, Title, Equipment). 	 → I can write a simple statement of what I think my inquiry's results will be. → I can write a conclusion, stating what I discovered. → I can record a measurement when one variable is changed. → I can complete a graph, accurately plotting the points or drawing the correct bars for data that has been given to me. → I can start to consider the parts I need to include in my graphs.

