Year 7 Ways of Doing-Science

Knowledgeable

Investigative

Analytical

Exceeding	 I can recall different theories with ease I can explain increasingly detailed scientific explanations using correct scientific theory and terminology I can compare and contrast different ideas with ease and occasionally include generalisations from my own reading 	 I can confidently follow more detailed methodologies and change them when needed I always assess my work for significant safety, ethical or environmental issues that are relevant to the methodology of the investigation My raw data is collected independently and in a correct manner 	 I can recognise more detailed patterns and trends and can make generalisations as to why they are occurring I am increasingly able to represent data with more detailed graphs/charts (including those on a computer) I can interpret graphs/charts, with some help, highlighting patterns and dealing with anomalies in the appropriate way
Expected	 I can remember simple theories with ease With support I can apply/analyse some scientific explanations using correct scientific theory and vocabulary I can explain basic scientific ideas using the correct theory with little or no support Sometimes I can identify links between different scientific ideas 	 I can follow experimental methodologies accurately adding suggested improvements if needed My work space is always free from unnecessary items 'a clean work space is a safe work space' My raw data is increasingly recorded independently and in an appropriate manner 	 I can recognise basic patterns and trends and apply my scientific knowledge as to why they might be happening I can draw accurate, yet basic, graphs/charts I can interpret simple graphs/charts highlighting anomalies in the appropriate way
Developing	 I can remember simple scientific theory with some help from the teacher I can describe more correct scientific theories I require only simple prompts to link different scientific ideas 	 I can follow simple experimental methods easily with few mistakes I can apply the lab safety rules so that I can maintain a safe working environment with little or no prompting from the teacher Data is regularly represented in a correct format, without support 	 I can assess the data I have collected and spot patterns and trends given some help I can display data in appropriate graphs/charts when given some help I can read simple graphs charts and understand anomalies and how to deal with them given some help
Supported	 I can remember simple scientific information when prompted by the teacher With support from the teacher, I can explain simple scientific ideas With scaffolded worksheets and prompts, I can link different scientific ideas together 	 I can follow a simple experimental method with support from the teacher With help from the teacher I can work in a clean and safe work space With help from the teacher and scaffolded help sheets, I can make a suitable results table 	 I am able to understand what the data I have collected is telling me when given help from the teacher I am able to display data in an appropriate graph/chart when given help from the teacher I can understand what a graph or chart is telling me when given help from the teacher