Year 8 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 • When prompted, I can link prior topics to current work	• I can independently design investigations. • I can identify risks when carrying out investigations and use relevant safety information to minimise risks • I can apply my existing practical skills to collect adequate data • I can independently identify the correct data to be collected, consider factors for reliability and reproducibility • I can clearly explain how evaluations and improvements link to the data and the method	• I can recognise more detailed patterns and trends and can make some 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 easily highlighting patterns and dealing with anomalies in the appropriate way
Expected	• I can remember simple theories with ease • With support, I can apply/analyse 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 design investigations when following a template • I am able to design a risk assessment given a template to allow for a safe working environment • I am able to identify more often how data should be collected and recorded in an appropriate manner • I am able to discuss some strengths and weaknesses of an investigation to provide realistic and relevant suggestions for its improvement	• I can recognise basic patterns and trends and apply my scientific knowledge as to why they might be happening • I can interpret simple graphs/charts and with support, I can read more detailed graphs/charts and spot anomalies. • I can identify anomalies and deal with them in the appropriate way
Developing	• I can remember simple scientific theory with some help from the teacher • I can describe more correct scientific theory • I require only simple prompts to link different scientific ideas	• I can follow simple methods easily with few mistakes • I am increasingly aware that my working environment should be safe for myself and other students around me • I can present my experimental data in the correct scientific way without support • I understand what an evaluation of my work means	• I am improving how I am able to analyse the data I collect and identify it for patterns and trends • I can display data in appropriate graphs/charts with the help of my teacher • With support I can independently read/interpret simple graphs, charts and understand what anomalies are
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 ideas together	• I can follow a simple method with the teachers help • With help and support, I can maintain a safe work space • I can present the data I have collected with the help of scaffolded worksheets	• With support from the teacher, I can understand what to do • With support from the teacher or a scaffolded work sheet, I can present my data in an appropriate graph/chart • With support, the student can read and understand the information on a graph or chart