

Key Performance Indicators	Year 8 Milestones - Working Scientifically
Scientific attitudes	I can be impartial and objective, when investigating, and be able to repeat and reproduce my results with accuracy.
	I can understand that scientific methods and theories develop as previous explanations are modified to take account of new evidence and ideas.
	I can understand the importance of publishing results and peer review.
	I can evaluate risks.
Experimental skills and investigations	I can identify one or more control variables from those provided, and decide when it is appropriate to carry out fair tests in investigations.
	I can ask questions on observations of the real world, alongside prior knowledge and experience.
	I can make predictions using scientific knowledge and understanding.
	I can select, plan and carry out the most appropriate types of scientific enquiries to test predictions, including identifying independent, dependent and control variables, where appropriate.
	I can use appropriate methods, equipment, and materials during fieldwork and laboratory work, paying attention to health and safety.
	I can make and record observations and measurements using a range of methods; and evaluate the reliability of methods and suggest possible improvements.
Analysis and evaluation	I can apply mathematical concepts and calculate results.
	I can present observations and data using appropriate methods, including tables and graphs.
	I can interpret observations and data, including identifying patterns and using observations, measurements and data to draw conclusions.
	I can present reasoned explanations, including explaining data in relation to predictions and hypotheses.
	I can evaluate data, showing awareness of potential sources of error.
	I can identify further questions arising from my results.