Forensics

Solving a murder mystery requires evidence and developing a timeline of events. You will conduct laboratory work to determine how meat cools and use mathematical modelling techniques to understand how time of death can be predicted. You will explore forensic techniques used to detect blood as well as investigate one factor that affects blood splatter. Other forensic tools such as fibre analysis, detecting gun powder residue and finger printing may be explored. This course is an introduction to using mathematics and science techniques, digital tools such as data loggers, graphing packages and spreadsheets.

Year 10 Elective

Engage *Skills*	Extend *Knowledge*	Enrich *Experiences*
• Collating evidence including data • Summarising and displaying numerical data • Researching key statistics for accurate reference information • Understanding mathematical models • Fitting mathematical models to data • Making predictions (e.g. for the time of death) • Laboratory work/scientific process • Presentation of evidence and arguments (e.g. to a "jury")	• Obtain an extended working knowledge of Excel for working with data and fitting models • Improve and practice laboratory skills • Reinforcement of scientific processes and approaches to science deconstruct and investigation assessment tasks for future SACE subjects • Improve understanding of how to identify, explain and discuss "assumptions" and "limitations" for future SACE Science and Mathematics investigation tasks	• Laboratory experiments • Scientific process for collecting evidence • Research of Law/Evidence facts • Presentation (group and/or individual)

Assessments/Outcomes	Pathways
Deconstruct and experimental reports	**Career Pathways:** Medical Sciences, Health Care, Scientist, Forensics, Data Analyst, Data Architect, Data Engineer, Risk Analyst

Walford