

Discovery Series

Complete Forensics C.I.C.

It's in our DNA



Background.

Complete Forensics is a community interest company providing forensic science consultancy services and education from Mossley, Greater Manchester.

Founded in 2013, over 14000 young people from many different backgrounds have had the opportunity to be inspired by the company since trading started in January 2014.

The company is the National Competition Organising Partner (COP) for the forensic science competition within the WorldSkills UK platform. Now into the third year of this annual contract the company has delivered heats in ten locations for over 90 competitors and taken two sets of finalists to the Skills Show at the NEC where 155000 visitors have attended. The third set of finalists are due to compete for the gold medal in November 2015. A video regarding this competition is available [here](#).

Complete Forensics was formed to demonstrate and apply scientific knowledge to the criminal justice system and to provide educational institutions industry specific content to enhance and inspire their delivery.

The company is continually in liaison with the Chartered Society of Forensic Sciences and the International Association of Identification (European Division) (IAI(EU)) and has delivered at a large number of conferences and educational establishments.



Complete Forensics is certified as an affiliate to the CPD Certification Service providing content to professionally enhance delegates with relevant and up to date content. This content is always focused on improving people, skills and the industry.

It should be noted that employment in Forensic Sciences are not as readily available as some might think. There is a serious lack of opportunities presently but the skills students can gain from forensic education can help in so many different roles it would be impossible to list them all. There are employment opportunities opening within the world of forensic science but with so many students applying for each one only the very best will get through to the interview stage. That is why Complete Forensics delivers content to enhance students, inspire students and to provide pathways students may not have thought about before.

During 2014 Complete Forensics C.I.C. teamed up with the Greater Manchester Learning Provider Network (GMLPN) to deliver "Miss Red" at the Manchester Communications Academy.

The event was designed to enable the students to act out all the parts, and they also provided the background activities such as photography, hair, make up etc. Complete Forensics was integral to the set up and delivery of this production.

A video is available [here](#) which highlights the event.



Discovery Series

Complete Forensics delivers educational support to colleges, schools and Universities. We currently have a number of different "Discovery" experiences which are all interactive (fully hands on), can take from 20 to 45 minutes, and are easy to set up, demonstrate and collapse.

These are as follows:

- Evidence Discovery - £150
- Blood Discovery - £480
- Light Discovery - £150
- Imaging Discovery - £220
- Fingerprint Discovery - £175
- Exhumation Discovery - £297
- Ballistics Discovery - £400
- Bodies and Bugs Discovery - £300
- The Water Death - £210
- Who Killed Henry Ward Discovery - £560

All equipment to deliver these discovery episodes is maintained by Complete Forensics and we normally deliver these for groups of up to 30 students. We do not presently charge VAT.



Brief overviews of the Discovery Activities:

Evidence Discovery – Delegates learn about the types of tamperproof packaging and some of the techniques we use to ensure the integrity of exhibits. Discussing how the packaging works and what scientific processes we can use to discover more about the evidence. Examples include packaged tools with apparent blood, fingerprints and knives. The delegates are challenged to gain entry to packaging without showing signs of tampering.

Blood Discovery – After protecting the floor and wall we dress the delegate in full scene examination clothing then discuss Using blood pattern analysis and distributions from weapons. We then use all the delegates to show how easily cross contamination occurs. This is a very popular module.

Light Discovery – Light is a very important investigative tool. Using our CrimeLites (from Forster & Freeman Ltd) we show how investigators can visualise evidence from many sources and discover what, where, when and how. Delegates are enabled to handle the light sources (supervised) and search their own belongings as well as some pre prepared evidence.

Imaging Discovery – Cameras have been used in crime investigation for many years. We explore the use of cameras and discover some of the techniques used in Crime Scene Photography to show the evidence using still and video cameras.

Fingerprint Discovery – Fingerprints have been used since the 1800's to record evidence of identification. Using techniques and tools in use today we show how fingerprints are recovered, how they are compared and even how they are formed. We encourage the delegates to recover their own fingerprints from different items and then using magnification and examination try to find their fingerprints on other items.

Exhumation Discovery – Discussing buried bones and evidence recovery from clandestine graves or even regular graves, this hands on activity will see the delegates actually digging in our table top grave for evidence. Using techniques and skills used in forensic science, forensic anthropology and archaeology.

Ballistics Discovery – In this discovery, delegates will learn background information on different types of firearms, and how a ballistics expert might use that knowledge to assist in crime scene investigations. Delegates will then use a Vernier calliper, trajectory rods and ballistic blocks to assess the bullets that are provided in this kit. Students will obtain metric data, analyse bullet calibre, and use tools to analyse a "bullet hole". These exercises will help delegates learn how to analyse damage to a bullet and connect it to a specific calibre firearm.

Bodies and Bugs Discovery – Delegates will use forensics to learn about entomology. Delegates will first observe and record how various factors influence the development of an insect's life cycle using insects that are collected from a source of meat we provide. This information is then applied to a crime scene scenario in order to estimate the time of death, if the body was moved, possible suspect/victim interactions by identifying each species, and create a time line for the sequence of appearance of each species of insect found on the "body."

The Water Death – A city council leader is found face down in a swimming pool and your delegates are being asked to examine the forensic evidence to determine if the drowning was accidental or if there is foul play involved. They will check for protists in the water sample from his lungs and then compare that sample to samples from three other nearby bodies of water. During the exercise, delegates will develop skills in microscopy, protist identification, record keeping, and the use of a dichotomous key.

Who Killed Henry Ward Discovery – This discovery addresses several different approaches for conducting a crime scene investigation. This scenario-based activity allows students to become detectives and determine who killed Henry Ward in a hit-and-run car accident almost 100 years ago. Delegates will solve this crime by utilizing various cross-curricular techniques including blood typing, forensic anthropology, fingerprint analysis, impression analysis for tires and shoes, hair analysis, blood spatter, and DNA evidence.