

Applied Science | DNA Profiling: The Great Escape



THE UNIVERSITY of EDINBURGH
Easter Bush
Science Outreach Centre

A full day workshop supporting students to develop practical lab skills and knowledge through working in our laboratory.

During this workshop students will develop practical lab skills and knowledge through working in our laboratory. They will prepare the solutions and agarose gels that they will need to carry out to use DNA profiling to compare the DNA of five sheepy suspects. There is also opportunity to meet with scientists and technicians working on our campus.

Learning Level: National 5 lab skills, National Certificate: Applied Science (SCQF 5-6), SWAP

Availability: See website

Cost: £5 per student

Minimum attendance: 16

Maximum attendance: 24

Learning objectives

- To perform manual laboratory molecular techniques
- To prepare solutions for laboratory use
- To increase confidence in working in the lab
- To work safely and efficiently in a laboratory setting
- To interpret and discuss experimental results

Techniques used

- Micro-pipetting
- Chemical handling
- Preparation of solutions
- Preparation of agarose gels
- DNA gel electrophoresis



Workshop timeline

- Analysis of sheep fleece from the scene of the escape
- Introduction to micropipettes
- Preparation of solutions
- Preparation of agarose gels
- Introduction to DNA profiling and DNA fragment analysis
- DNA electrophoresis using agarose gels
- Analysis and interpretation of results

Get hands-on
with real-life
science