NEATH PORT TALBOT COLLEGE
COLEG CASTELL NEDD PORT TALBOT

School of Maths & Science
Science Practical

Observation and Inference

◆ Aim

At the end of this experiment you should be able to:

1. Draw inferences and information from examined items

2. Examine footprints found at a crime scene and compare them to different suspects.

♦ Introduction

An **observation** is the use of one or more of the senses to learn something about the surroundings, a person or an object.
An **inference** is an interpretation or guess based on an observation.

◆ Safety

No significant hazards

◆ Procedure

1. You are investigating a burglary that has occurred in the finance office of Neath Port Talbot College. The case detectives have already determined how much money was stolen. Among the evidence submitted to the laboratory are several pieces of broken glass and an ink stained shoeprint. You have been asked to analyse the shoe print and draw some conclusions.

Examine the shoeprint and record your observations and inferences in the table.

Data Table – Observations
1.
2.
3.
4.
5.
Data Table – Inferences (These must match the observations above)
1.
2.
3.
4.
5.

♦ Questions

1. What sense did you use to make your observations?

2. What tools did you use during your examination of the evidence?

3. Explain how the tools aided you?

4. How would you prove or disprove the inferences you have made?

Classification and Individualisation

Examine the inky footprint found at the crime scene and compare it to the photocopies of shoe marks made by two different suspects.

1. Draw a conclusion about which suspect is the most likely based on features of the footwear.

2. Comment on any wear features that may be found on the suspect shoe mark and compare these to any features identified on the crime scene ink print.

3. Draw a conclusion based on individual marks, on whether you think the suspect should be charged with this crime?