NEATH PORT TALBOT COLLEGE
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School of Maths & Science
Science Practical

Blood Pattern Analysis – Part 2

◆ Aim

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

1. Produce a number of different blood stain patterns
2. Examine and identify the stains to assess how they were produced.

♦ Introduction

Bloodstain patterns are also caused by a number of different actions and the analysis of the stains can aid in the reconstruction of the incident.
During this practical we will be producing and examining a range of bloodstains in order to be able to identify bloodstains commonly found at crime scenes.
There are three main sections.

- Projected bloodstains
- Impact bloodstains
- Contact bloodstains

You are required to cover all three sections during this practical session. At each station you will be required to produce the required pattern. Once the pattern has been produced, a drawing will be made of the bloodstain for later analysis. You may work in pairs to produce the patterns but the drawings are to be done individually for assessment.

◆ Safety

Control Measures

- The wearing of safety **glasses** and **a laboratory coat at** all **times** will be sufficient to take account of most hazards and significant risks
- All waste is to be placed in the labeled container immediately after use
- You are reminded of the need of good laboratory practice in order to maintain a safe working environment.

Hazards

No harmful substances

◆ Procedure

1. Working in Groups you will be required to produce and then sketch the patterns produced.
2. Projected blood stains are produced using the syringes provided at the angle suggested below.
3. Impact blood stains will be produced using a range of weapons.
4. Contact blood stains will be produced using different materials, pressed onto surfaces.

◆ Results

1) **Projected bloodstains(Arterial spurt):** Vertically from 50 cm

2) Vertically from 100 cm

3) Horizontally from 40 cm

4) Horizontally from 80 cm.

5) Oblique angle

6) **Impact bloodstains (weapons):** Weapon 1

7) Weapon 2

8) **Contact bloodstains:** Hand or glove

9) Cloth type 1

10) Cloth type 2

Measure the diameter of blood drops from different heights

Data Table 1				
Distance in cm	**1**	**2**	**3**	**Average**
25				
50				
75				
100				

Measure the blood drops dropping onto different surfaces from a height of 50 cm.

Data Table 2				
Surface	**1**	**2**	**3**	**Average**
Tile				
Carpet				
Paper				
Paper Towel				