

Equipment / Activity / Area being assessed	CSI Session – Hands on experiments station led by Dr Randle. Verbal and written instructions provided.		Risk Assessment ID	RA001 v5/8/25	
Location	Guiding & scouting venues / party venue / schools				
Who is exposed?	Uniformed organisations, School groups, general public, Dr Randle, supervising adults				
Date of assessment	5/8/25				
Assessor’s name	Dr Laura Randle				
Risk = Likelihood of injury x Severity of injury	R = L x S	Low risk = 0 – 6	Medium risk = 7 - 12	High risk = 13 - 25	

L = Likelihood	S = Severity of injury					
	No injury or illness (0)	Minor injury or illness (1)	First aid injury or illness (2)	"3 day" injury or illness (3)	Major injury or illness (4)	Fatality, disabling injury, etc (5)
Zero to very low (0)	0 = Low	0 = Low	0 = Low	0 = Low	0 = Low	0 = Low
Very unlikely (1)	0 = Low	1 = Low	2 = Low	3 = Low	4 = Low	5 = Low
Unlikely (2)	0 = Low	2 = Low	4 = Low	6 = Low	8 = Medium	10 = Medium
Likely (3)	0 = Low	3 = Low	6 = Low	9 = Medium	12 = Medium	15 = High
Very likely (4)	0 = Low	4 = Low	8 = Medium	12 = Medium	16 = High	20 = High
Almost certain (5)	0 = Low	5 = Low	10 = Medium	15 = High	20 = High	25 = High

RISK ASSESSMENT					
	Activity	Hazards Identified	Risk rating (High, Medium, Low)	Control Measures in place to control the risk	Risk rating (High, Medium, Low)
1	General room set up	<ul style="list-style-type: none"> <li>Trailing cables from computer and props on tables could present trip hazard.</li> <li>Activity tables set up without chairs.</li> </ul>	L =1 S =1 R = 1 Low risk	<ul style="list-style-type: none"> <li>Any scenery, props and resources to be set up to minimise hazards</li> <li>Fire exits to be kept clear at all times.</li> <li>First aider on site at all times.</li> <li>Participants are consulted about any possible allergies, gloves are supplied if necessary</li> </ul>	L =1 S =1 R = 1 Low risk

				<ul style="list-style-type: none"><li>Parents/guardians/teachers to remain in close supervision of the children in their care at all times.</li></ul>	
2	<b>Excited participants</b>	<ul style="list-style-type: none"><li>Children may not listen</li><li>Children may run around 'Lab'.</li></ul>	L =4 S=2 R = 6 Low risk	<ul style="list-style-type: none"><li>Instructions provided for each experiment.</li><li>Risk assessment provided</li><li>Reinforce potions lab rules – no running, no eating or drinking potions, tie hair back, no clothes dangling.</li><li>Appropriate supervision</li></ul>	L =3 S=1 R = 3 Low risk
3	<b>Lifting Fingerprint</b> <ul style="list-style-type: none"><li>Dusting picture frame for fingerprints with silver fingerprint powder</li></ul>	<ul style="list-style-type: none"><li>Possible irritation to eyes.</li><li>Possible irritation to skin.</li><li>Possible inhalation</li><li>May cut hand on glass if broken</li><li>Possible latex allergy</li></ul>	L =3 S=2 R = 6 Low risk	<ul style="list-style-type: none"><li>Contain spills with damp, inert absorbent material.</li><li>Remove glass with sharp edges and advise participants to take care</li><li>PPE – avoid latex gloves</li><li>Appropriate instructions and supervision.</li></ul>	L =2 S=1 R = 2 Low risk
4	<b>Taking Exemplar Fingerprint</b> <ul style="list-style-type: none"><li>Rolled ink Method using reeves fingerprint paste / pre inked strips.</li></ul>	<ul style="list-style-type: none"><li>Possible irritation to skin.</li><li>Possible irritation to eyes.</li></ul>	L =2 S =2 R = 4 Low risk	<ul style="list-style-type: none"><li>Clean hands as soon as possible</li><li>Advise those with sensitive skin to avoid use</li><li>Use cleansing wipes for sensitive skin</li><li>Appropriate instructions and supervision.</li></ul>	L = 2 S = 1 R = 2 Low risk
5	<b>Hair and Fibre Analysis</b> <ul style="list-style-type: none"><li>Collect fibres/ hairs and observe under the microscope</li></ul>	<ul style="list-style-type: none"><li>May cut hand on broken microscope slide.</li><li>Trailing cables from microscope.</li><li>Electric shock from equipment</li></ul>	L =3 S = 3 R = 9 Medium risk	<ul style="list-style-type: none"><li>Remove broken glass with sharp edges &amp; advise participants to take care.</li><li>Electrical equipment is PAT tested.</li><li>Damaged equipment reported and taken out-of-use. On discovering a problem immediately place a do not use sign on the equipment and unplug the unit so that no other user will attempt to use the equipment.</li><li>Appropriate instructions and supervision.</li><li>Dust pans and brushes are provided to safely clean any broken slides.</li><li>Management of trailing leads and cables.</li></ul>	L = 1 S = 2 R = 2 Low risk


6	<b>Presumptive blood test</b>  Confirming the presence of blood in a dried red stain using Kastle–Meyer test  Non-hazardous samples: <ul style="list-style-type: none"> <li>• Simulated blood</li> <li>• Red poster paint</li> <li>• Red Food Colouring</li> <li>• Ketchup</li> </ul>	<ul style="list-style-type: none"> <li>• Possible Irritant to eyes and skin</li> <li>• May be harmful if swallowed</li> </ul>	L = 3 S = 3 R = 9 Medium risk	<ul style="list-style-type: none"> <li>• PPE – gloves, goggles</li> <li>• Contain spills with inert absorbent material</li> <li>• Limit exposure</li> <li>• Work on a tray</li> <li>• Appropriate instructions and supervision.</li> </ul>	L = 2 S = 2 R = 4 Low risk
7	<b>Blood Splatter Analysis</b>  Calculating speed and direction of non hazardous simulated blood splatter.	<ul style="list-style-type: none"> <li>• Possible slip hazard</li> <li>• May cut hand on glass dropper bottle if broken</li> <li>•</li> </ul>	L = 3 S = 1 R = 3 Low risk	<ul style="list-style-type: none"> <li>• Appropriate instructions and supervision.</li> <li>• Contain spills with inert absorbent material</li> <li>• Use plastic dropper bottles</li> </ul>	L = 1 S = 1 R = 1 Low risk
8	<b>Facial reconstruction</b>  Sculpt the victims face using plasticine and a model skull	<ul style="list-style-type: none"> <li>• Possible injury from broken clay sculpting tools</li> <li>• Possible ingestion, inhalation of plasticine</li> </ul>	L = 1 S = 1 R = 1 Low risk	<ul style="list-style-type: none"> <li>• Appropriate instructions and supervision.</li> <li>• Plasticine considered non toxic</li> <li>• Remove broken tools</li> </ul>	L = 0 S = 0 R = 0 Low risk
9	<b>DNA electrophoresis</b>	<ul style="list-style-type: none"> <li>• Possible irritation to eyes.</li> <li>• Possible irritation to skin.</li> <li>• Possible inhalation</li> <li>• Possible slip Hazard due to spillages</li> <li>• Electric shock from equipment</li> <li>•</li> </ul>	L = 3 S = 2 R = 6 Low risk	<ul style="list-style-type: none"> <li>• PPE – gloves, goggles</li> <li>• Wash hands after use</li> <li>• Contain spills with inert absorbent material</li> <li>• Appropriate instructions and supervision.</li> </ul>	L = 1 S = 2 R = 2 Low risk
10	<b>Facial reconstruction</b>  Using efit software on computer	<ul style="list-style-type: none"> <li>• Electric shock from equipment</li> </ul>	L = 2 S = 2 R = 4 Low risk	<ul style="list-style-type: none"> <li>• Appropriate instructions and supervision.</li> <li>• PAT tested equipment.</li> </ul>	L = 1 S = 2 R = 2 Low risk

Hazardous Substance	Hazard Type	State S/L/G	Quantity used	Exposure	Controls and Precautions	Disposal route, Spillage procedure Emergency procedures
Fingerprint Ink	Considered non-hazardous  May stain skin	Liquid	<1mL	<i>Frequency:</i> 1-5 times / day <i>Duration:</i> 6-10 min		<ul style="list-style-type: none"> <li>● Disposal – Solid in household waste. Liquid rinse down foul water drain.</li> <li>● Spillage: absorb spill, scrub with detergent, ventilate area and eliminate ignition sources.</li> <li>● Storage - Tightly closed container</li> <li>● Eye: through rinse 15-20 min</li> <li>● Inhalation: in cases of respiratory irritation – remove to fresh air</li> <li>● Ingestion: dilute with milk / water, do not induce vomiting. If symptoms persist consult medical advice.</li> </ul>
Fingerprint powder (Silver)  (Aluminium powder)	Danger  CLEAPPS 1A	Solid	<1g	<i>Frequency:</i> 1-5 times / day <i>Duration:</i> 6-10 min  10 mg m <sup>3</sup> (LTEL), 30 mg m <sup>3</sup> (STEL)  as inhalable dust	<ul style="list-style-type: none"> <li>● Wear Eye protection</li> <li>● Gloves</li> <li>● Avoid naked flames</li> <li>● Avoid raising dust.</li> <li>● Dust mask in confined or poorly ventilates spaces.</li> </ul>	<ul style="list-style-type: none"> <li>● Storage - Tightly closed container. Do not store with acids , alkalis or oxidizing agents.</li> <li>● Disposal: &lt;10g/L 2M HCl – ensure reaction remains acidic, upon completion can be poured down a foul water drain. &gt; 10g requires disposal via thermite registered waste carrier.</li> <li>● In case of fire use sand/ rockwool. DO NOT use water / foam. Water can liberate hydrogen.</li> <li>● Inhalation: Fresh air</li> <li>● Eye contact: Rinse opened eye for several minutes with running water.</li> <li>● Skin contact: Wash immediately with plenty of soap and water.</li> <li>● IF SWALLOWED: rinse mouth, seek medical advice</li> <li>● Spillage: sweep up and put in a dry receptacle.</li> </ul>
Hand sanitizer gel	Flammable Irritant	Liquid	<5mL	<i>Frequency:</i> 1-5 times / day <i>Duration:</i> 1-5min	<ul style="list-style-type: none"> <li>● Keep away from heat.</li> </ul>	<ul style="list-style-type: none"> <li>● Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing</li> </ul>

						<ul style="list-style-type: none"> <li>● Skin contact: Wash immediately with plenty of soap and water.</li> <li>● Ingestion: rinse mouth. Do NOT induce vomiting. Immediately seek medical advice</li> <li>● Inhalation: Remove person to fresh air and keep comfortable for breathing</li> <li>● Storage - Tightly closed container</li> </ul>
Theatrical blood	Considered non - hazardous	Liquid	<20mL	<i>Frequency:</i> 1-5 times / day <i>Duration:</i> 10-30min	N/A	<ul style="list-style-type: none"> <li>● All spillages mopped up immediately with inert absorbent material. Rinse with water.</li> <li>● Disposal – dilute and pour down foul-water drain</li> <li>● Storage - Tightly closed container</li> </ul>
Plasticine	Considered non-hazardous	Solid	~500g	<i>Frequency:</i> 1-5 times / day <i>Duration:</i> 10-30min	N/A	<ul style="list-style-type: none"> <li>● Eye contact: Rinse with water for several minutes.</li> <li>● Skin contact: Wash immediately with plenty of soap and water.</li> <li>● Ingestion: Immediately seek medical advice</li> <li>● Inhalation: Remove person to fresh air and keep comfortable for breathing</li> <li>● Spillage: Absorb into dry earth or sand</li> <li>● Store in cool, well-ventilated area. Keep container tightly closed.</li> <li>●</li> </ul>
Phenolphthalein (0.5% in ethanol)  Presumptive blood test	Flammable Irritant Health Hazard	Liquid	<1mL	<i>Frequency:</i> 1-5 times / day <i>Duration:</i> 1-5min	<ul style="list-style-type: none"> <li>● Wear Eye protection</li> <li>● Gloves</li> </ul>	<ul style="list-style-type: none"> <li>● Eye contact: Rinse with water for several minutes.</li> <li>● Skin contact: Wash immediately with plenty of soap and water.</li> <li>● Ingestion: rinse mouth. Do NOT induce vomiting. Immediately seek medical advice</li> <li>● Inhalation: Remove person to fresh air and keep comfortable for breathing</li> <li>● Spillage: Absorb into dry earth or sand</li> <li>● Store in cool, well-ventilated area. Keep container tightly closed.</li> <li>● W7 - Small amounts dilute &lt;0.1% for disposal into foul water.</li> </ul>
Hydrogen Peroxide (Food	Irritant (eyes)	Liquid	~30mL	<i>Frequency:</i> 1-5 times / day	<ul style="list-style-type: none"> <li>● Wear Eye protection</li> <li>● Gloves</li> </ul>	<ul style="list-style-type: none"> <li>● Skin contact: Wash immediately with plenty of soap and water.</li> </ul>

Grade): 8% w/v (28vol = 2.3M)  Presumptive blood test				<i>Duration: 1-5min</i>		<ul style="list-style-type: none"> <li>● Eye contact: Bathe the eye with running water for 15 minutes.</li> <li>● Ingestion: Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water to drink immediately. Transfer to hospital as soon as possible.</li> <li>● Inhalation: Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.</li> <li>● Spillage: Absorb into dry earth or sand</li> <li>● W7 Disposal – small quantities via drainage system. Dilute to 30 vol or lower</li> <li>● Storage - Tightly closed container, cool</li> </ul>
50x Electrophoresis buffer (TAE)  <a href="https://www.edvotek.com/site/pdf/114_SDS.pdf">https://www.edvotek.com/site/pdf/114_SDS.pdf</a>	Warning Irritant	liquid	500mL	<i>Frequency: 1-5 times / day Duration: 30-60min</i>	<ul style="list-style-type: none"> <li>● Wear Eye protection</li> <li>● Gloves</li> </ul>	<ul style="list-style-type: none"> <li>● Inhalation: Fresh air</li> <li>● Eye contact: Rinse opened eye for several minutes with running water.</li> <li>● Skin contact: Wash immediately with plenty of soap and water.</li> <li>● Ingestion: rinse mouth, seek medical advice if symptoms develop.</li> <li>● All spillages mopped up immediately with inert absorbent material</li> <li>● Disposal: chemical / biowaste</li> </ul>
FlashBlue™ DNA Stain.  <a href="https://www.edvotek.com/site/pdf/114_SDS.pdf">https://www.edvotek.com/site/pdf/114_SDS.pdf</a>	Warning Irritant	liquid	500mL	<i>Frequency: 1-5 times / day Duration: 10-30min</i>	<ul style="list-style-type: none"> <li>● Wear Eye protection</li> <li>● Gloves</li> </ul>	<ul style="list-style-type: none"> <li>● Inhalation: Fresh air</li> <li>● Eye contact: Rinse opened eye for several minutes with running water.</li> <li>● Skin contact: Wash immediately with plenty of soap and water.</li> <li>● Ingestion: rinse mouth, seek medical advice if symptoms develop.</li> <li>● All spillages mopped up immediately with inert absorbent material</li> <li>● Disposal: chemical / biowaste</li> </ul>

<b>Waste Disposal procedures</b>	<ul style="list-style-type: none"> <li>● Non hazardous liquids can be rinsed down foul water drain.</li> <li>● Non hazardous waste can be disposed of in household waste.</li> <li>● Consult CLEAPSS hazcards / W Hazcard summary</li> </ul>
----------------------------------	--

Emergency Procedures:	<p>Following CLEAPSS General Incident strategy: Assess &gt; Respond &gt; Manage</p> <p><b>Fire</b></p> <ul style="list-style-type: none"> <li>• <i>Safe to deal with:</i> Cut off ignition / fuel source and extinguish flames</li> <li>• <i>NOT safe to deal with:</i> Evacuate building by nearest fire exit and call 999</li> </ul> <p><b>Spillages/ leaks</b></p> <ul style="list-style-type: none"> <li>• <i>Safe to deal with:</i> Wear correct PPE, maintain safety. Contain &gt; collect &gt; treat spill. Clean spill area. Dispose of treated spill. Ensure all contaminated equipment is cleaned, check clothes / skin. Wash thoroughly.</li> <li>• <i>NOT safe to deal with:</i> Isolate and secure spill area. Call CLEAPSS helpline 01895 251 496f or advice or 999.</li> </ul> <p><b>First aid</b></p> <ul style="list-style-type: none"> <li>• <i>Non chemical emergencies:</i> clothing / hair on fire &gt; Stop, drop &amp; roll, Burns &gt; Cools and seek medical advice, cuts &gt; control bleeding, raise wound, if severe seek medical advice. Asthma attack / anaphylactic shock &gt; Support &amp; protect. Fainting / epileptic fit &gt; lower casualty to floor if losing consciousness, make area safe, if unconscious place in recovery position. Seek medical advice if required. Contact supervising adult / parent. Electric shock &gt; isolate from supply, call 999.</li> <li>• <i>Chemical emergencies:</i> <b>Eye</b> &gt; irrigate 10min, if severe call 999, otherwise call 111 for advice. <b>Mouth</b>&gt; Rinse and spit, if symptoms severe call 999, otherwise call 111 for advice. DO not induce vomiting. Do not swallow liquid. <b>Inhaled</b> &gt; Move to fresh air, if symptoms severe call 999, otherwise call 111 for advice. Ventilate / evacuate aera as necessary. <b>Skin</b> &gt; irrigate 10min, if severe call 999, otherwise call 111 for advice. Remove any contaminated / restricting clothing or jewellery while irrigating.</li> </ul>		
Reviewed by:		Date:	5/8/25
Next Review date:	Next time activity happens again		