

## SMG Risk Assessment Form

Nature / type of task being assessed and location/s		Greatest Hits show - offsite			
Date of Assessment	02/03/20	Date by when assessment must be reviewed	02/03/21	Assessment Completed by / Department	Anais Radiere – Outreach & Resources
How many people could be at risk?	30+	What category of person may be at risk (e.g. employee, contractor, public, young, old, special needs?)	Employee Contractor/Volunteers Public Young Old Special needs		

Hazard (What is the hazard, who might it harm and how?)	Current controls (what is already in place to reduce the likelihood of harm or make any harm less serious)	L	S	LxS	Risk Acceptable (Y/N)	Further actions required (what else is required to reduce risks to as low as is reasonably practicable)	Residual risk	Action by	Time scale	Complete
<b>Water Rocket:</b> Water from rocket may cause slip hazard and injuries due to slips and falls.	Tissue to be placed under water rocket to absorb excess water. Area cleaned of any excess water before continuing.	2	1	2	Y		Tolerable	All staff	Ongoing	
<b>Water Rocket:</b> Rocket may fire into audience causing minor injury due to impact	Make sure floor is flat and level. Ensure area above rocket is free of obstructions. Ensure the audience is seated at a safe distance. Ensure rocket is only filled up to marked level. Tape Phil the Frog to rocket to ensure soft impact.	2	1	2	Y		Tolerable	All staff	Ongoing	
<b>Tablecloth Trick:</b> Lacerations to staff or public caused by handling small pieces of broken crockery	Make sure audience are seated at a safe distance. Presenter must have practised this demo until competent, and will use the correct equipment to dispose of any broken props	1	2	2	Y		Tolerable	All staff	Ongoing	
<b>Tablecloth Trick:</b> Injuries due to any flying crockery	Make sure audience are seated at a safe distance. Presenter must have practised this demo until competent.	2	1	2	Y		Tolerable	All staff	Ongoing	
<b>Liquid nitrogen:</b> Contact with nitrogen could cause frost burns	Proper storage and handling equipment to be used at all times. All staff trained on proper usage. Follow transportation guidelines as listed on COSHH form. When moving a dewar, choose route to minimise manual handling risk. Do not allow untrained persons access unless supervised. Audience must be seated a minimum of 3 m away from where the nitrogen will be used. Protective screen must be placed around area where nitrogen is used. Gloves and goggles to	1	2	2	Y		Tolerable	All staff	Ongoing	

	be worn at all times. Nitrogen may be delivered by courier to the venue in advance of the show. If this is the case, the client should direct the courier to put the dewar in a secure, well-ventilated area, out of reach of children.									
<b>Liquid Nitrogen Flowers:</b> Frozen flowers buds could bounce off the surface and fall on the audience or into their clothes	Make sure audience are seated at a safe distance. Presenter should pick a volunteer who would be able to follow instructions and use safety screen should they feel it necessary.	1	2	2	Y		Tolerable	All staff	Ongoing	
Liquid nitrogen could spill while being transported from van to stage area and cause frost burns	Dewar will be firmly strapped to a wheeled trolley and escorted by at least two members of staff. Staff will move slowly and pay close attention to movement of the dewar. Any public approaching the dewar will be politely asked to stand back.	1	2	2	Y		Tolerable	All staff	Ongoing	
<b>Bottle trick:</b> Overfilling of bottle may lead to jet of liquid nitrogen being produced, possibly causing frost burns	Do not overfill plastic bottle – maximum level is one-third full. Wear protective equipment (goggles, ear protectors) and keep children well away.	1	2	2	Y		Tolerable	All staff	Ongoing	
<b>Cloud in a bucket:</b> Audience could come in contact with nitrogen, resulting in frost burns	Presenter will take extra care when moving around holding the bucket. Clear safety warning will be given, instructing audience not to trip presenter and to keep hands away from the bucket. Staff will ensure that children under 7 are closely supervised by an adult if taking part.	1	2	2	Y		Tolerable	All staff	Ongoing	
<b>Banana hammer:</b> Banana could shatter and cause an eye laceration. Volunteer could get frost burns from touching banana/liquid nitrogen.	Volunteer is to wear eye goggles and cryogenic gloves during experiment. Volunteer will be given clear instruction by presenter.	1	2	2	Y		Tolerable	All staff	Ongoing	
<b>Hydrogen balloon:</b> Hydrogen may ignite unexpectedly. Explosion may ignite surroundings. Explosion may damage hearing.	All presenters will be trained in using hydrogen. Correct equipment will be used (flame-retardant string and latex balloon) and venue checked for suitability – high ceilings and enough space for flame. Presenter will wear ear defenders and ignite from a distance. Audience will be instructed to put fingers in their ears. Hydrogen cylinder may be delivered to the	1	3	3	Y		Moderate	All staff	Ongoing	

	venue by courier in advance of the show. If so, it will be delivered in a portable gas cage, which the client should lock up in a secure, well-ventilated area (preferably outside), away from oxidant gases, other oxidants, any sources of ignition or children. Method statement document and MSDS are available on request.								
<b>Screaming jelly baby:</b> Blowtorch may leak and ignite. Presenter may be burnt by blowtorch, or by exothermic reaction. Potassium chlorate may explode if misused. Matter may be ejected from the test tube during the reaction.	Blowtorch must be stored and used correctly. Presenters will be trained in using the blowtorch, and wear heatproof gloves and full face shield. Test tube will be behind safety screen, pointed at the safety screen, and the area checked for people or flammable objects. All materials will be checked for contaminants. Method statement document and safety instruction sheet are available on request.	1	2	2	Y		Tolerable	All staff	Ongoing
<b>Cornflour shower:</b> Experiment could cause burns to presenter or audience	To be performed well away from public and any hanging fabrics (e.g. stage curtains). Performer holds ignited blowtorch well away from face. Kept out of reach of children at all times. Presenter must wear safety goggles. 2 metre clearance is necessary between apparatus and ceiling of the room. Fire sensors that respond to heat but be turned off.	1	2	2	Y		Tolerable	All staff	Ongoing
<b>Pringles rocket:</b> Pringles rocket may ignite other sources of hydrogen on stage	Hydrogen bladders should be stored well under benches and other balloons stored as far away from the stage right bench as possible.	1	3	3	Y		Moderate	All staff	Ongoing
<b>Pringles rocket:</b> Hydrogen may dissipate from Pringles rocket causing it to explode prematurely when lit	Presenter must be correctly trained in the use of the rocket and must leave the minimum of time between filling and igniting the rocket. Presenter should ensure that they are not leaning over the rocket when lighting it.	1	2	2	Y		Tolerable	All staff	Ongoing
<b>Mentos cannon:</b> Coke may spill onto floor and may cause slips or falls.	Experiment will be contained in clear box. Any spillage will be cleared up by tech assistant immediately during show. Audience will be warned if it is necessary for them to walk through the area afterwards.	2	1	2	Y		Tolerable	All staff	Ongoing


**You must ensure all actions are prioritised according to the level of risk. The higher the level of risk the higher priority the action/s should be given. Prioritisation should be reflected in the assigned time scale for completion. The table below provides further guidance.**

Manager's Name:.....Beth Linfield.....

Date:.....02/03/2020.....

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assessment values		classification of risk rating (LxS = score)		action from risk rating	
likelihood (L)	Severity (S)	score	risk rating	action	Example time scales
unlikely - 1	Marginal - 1 (slight injury, minor first aid)	1	Trivial	No further action required	-
likely - 2 (to occur at some time)	Dangerous - 2 (serious injury or damage)	2	Tolerable	Keep control measures under review	within 3 months
		3-4	Moderate	Where possible fine tune control measures	within 1 month
very likely - 3	Very dangerous - 3 (could cause death or widespread injuries)	6	Substantial	Urgent control measures needed	within 7 days
		9	Intolerable	Stop activity until risk reduced	immediately

- NOTE:** Where the activity or task is a one off event – the ‘time scales for action’ may need to be amended to ensure that safety controls are implemented before the activity takes place.

- Your assessment will need to consider who may be affected by the hazard/s – i.e. children or the elderly may be most at risk.
- Please remember you are not expected to risk assess activities that are outside of your knowledge, expertise or experience.
- Further information and assistance can be obtained from the SMG Health & Safety Advisor.

**Remember**

**Hazard** means anything that can cause harm.

**Risk** is the chance, high or low that somebody will be harmed by the hazard

**Five Steps to Risk Assessment**

- 1) Look for the hazards:
- 2) Decide who might be harmed
- 3) Evaluate the risks and decide whether the existing precautions are adequate or whether more should be done
- 4) Record your findings.
- 5) - 5 -Review your assessment and revise it if necessary