

RISK ASSESSMENT – HAVE WE GOT SCIENCE FOR YOU

Activity	Hazard	Persons in Danger	Severity x Likelihood = Risk Level			Control Measures	Safety Advice to be Given to Visitors.
Rolling a loo roll along the table	None identified	N/a	1	1	1		
Balloons on a length of copper tube	Dropping tube on foot	Presenter	1	1	1	Take care when handling tube, if it becomes too heavy at any point rest it on table.	
Sliding pole along your hands	None identified	N/a	1	1	1		
Dropping 5p piece down a tube	None identified	N/a	1	1	1		
Dropping a magnet down a tube	None identified	N/a	1	1	1		
Isaac Newton bag 1. Prism 2. Executive toy (Newton's cradle) 3. Apple	None identified	N/a	1	1	1		
Charles Darwin bag 1. monkey toy 2. Galapagos map 3. £10 note	None identified	N/a	1	1	1		

Gregor Mendel bag 1. Crucifix 2. Peas 3. jeans	None identified	N/a	1	1	1		
Edward Jenner bag 1. cow 2. syringe 3. Jenner statue	None identified	N/a	1	1	1		
Setting light to a brazil nut atop a banana and eating it	Burns, choking, nut allergies	presenter	2	2	4	Trick can be dropped from show if presenter feels uncomfortable eating nuts. Or in the case of nut allergies	
Disappearing water trick using water storage granules	This demo uses a cup of water which could spill and create a slip hazard. Water storage granules are potentially very hazardous if ingested	presenter	2	1	2	Be careful with water, and have tissues or towel close by. Ensure no water storage gel is accidentally ingested; seek medical help if this is the case.	
Fire Piston	Fuel smouldering after demo is finished, potentially setting alight to other items on the table, such as paper	Presenter	1	1	1	Only use cotton wool as the fuel source, as this flashes quickly, then doesn't smoulder. After the demo, double-check the equipment to ensure it isn't smouldering	
Adding	Water spills	Presenter	2	1	2	Be careful with water and have tissues or	

chocolate chips to fizzy water						towels close by.	
Dropping keys on a piece of string so that they wrap around a pole	Hitting self in face/dropping keys on foot	presenter	2	1	2	Hold face and feet back from pole when dropping keys	
Pouring glycerol, oil, water and surgical spirit into a container, sealing and then shaking	Spills, chemical ingestion, eye or skin irritation	Presenter	2	2	4	Very small quantities are used of each liquid and tissues are close by so any spills can be mopped up quickly. Try not to ingest or get any of the chemicals in contact with the eyes. Wash hands afterwards if needs be.	
Dropping a cup of water containing a ping pong ball onto a tray on the table	Spills	Presenter	2	1	2	Small quantity of water used and sufficient tissues in the kit to mop up any spills.	
Bottle and screw	This demo uses a cup of water which could spill and create a slip hazard. It also uses a screw, which could cut a finger	Presenter(slip and screw	2	1	2	Be careful with water, and have tissues or towel close by. Warn audience member of any water on the ground	
A flame is held under a balloon full of water, all of which is held over a volunteer's head	Slip	Presenter & volunteer	2	1	2	Enough tissue is part of the kit to clean up any spills if the demonstration doesn't work and the balloon pops	If it does pop, to be careful walking back to their seat
Filling a dolls head with	Skin allergy/irritation	volunteer	2	2	4	Check for allergies before performing trick, if skin irritation occurs drop trick	

shaving foam, placing in a vacuum container, and pumping the air out	to shaving foam					from show	
A teabag is set alight	Burns	Presenter	1	1	1	Ensure that the teabag is lit while on a heat-proof mat.	A teabag is set alight
Dropping a polystyrene figure into a tray containing acetone.	Acetone is highly flammable and can cause skin irritation	Presenter	2	2	4	Keep acetone well away from any flames that may have been used in show, avoid skin contact with acetone.	
<p>Odd one out reactions</p> <ol style="list-style-type: none"> Adding a vitamin C tablet into a film canister containing water and letting a pressurised reaction propel the film canister upwards Adding bicarbonate of soda to vinegar 	<p>Film canister hitting someone, ricocheting off a wall causing structural damage to a building.</p> <p>Vinegar bicarbonate of soda reaction causes evolution of carbon dioxide, which if produced in a sealed container can cause build up of pressure. Excessive exposure to carbon dioxide</p>	All	2	3	6	<p>Film canister is placed back from audience and somewhere with a high ceiling; presenter must also stand well back from reaction.</p> <p>Vinegar and bicarbonate of soda reaction is done with sufficiently low quantities of reactant that low concentrations and quantities of carbon dioxide are produced.</p>	Warn audience what will happen first.

	can lead to faintness						
Holding up pictures/structures of: 1. Graphite 2. Diamond 3. Soot (collect on tile) 4. Iron fillings	None identified	N/a	1	1	1		
Guessing Astronomical distances- volunteers up at the front walking around	trips	Volunteer/presenter	2	2	4	Ensure there is sufficient space before inviting volunteers up, push back tables if needed and remove any trip hazards or props that may be lying around	