

Risk Assessment for School Science Activities

Name and nature of activity	Using a laser	
Location and date of activity		
Name of teacher/technician	Science ASSIST example risk assessment	
Activity type	<input type="checkbox"/> Technician procedure <input checked="" type="checkbox"/> Teacher demonstration <input type="checkbox"/> Student activity – Student year group	
Physics and general equipment	Type of hazard	Controls and other measures
Lasers	<input checked="" type="checkbox"/> Radiation ionising laser <input type="checkbox"/> Electrical <input type="checkbox"/> Thermal <input type="checkbox"/> Projectiles <input type="checkbox"/> Sharps <input type="checkbox"/> Other –	<input checked="" type="checkbox"/> Relevant signage <input type="checkbox"/> Perspex safety shield <input type="checkbox"/> Sharps container <input type="checkbox"/> Glassware free from cracks or chips <input type="checkbox"/> Safety glasses <input type="checkbox"/> Thermally insulated gloves <input type="checkbox"/> Other – See comments below
Chemicals used and produced	Type of hazard	Controls and other measures
NA	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <input type="checkbox"/> Explosive <input type="checkbox"/> Flammable <input type="checkbox"/> Oxidising <input type="checkbox"/> Gases under pressure <input type="checkbox"/> Corrosive </div> <div style="width: 45%;"> <input type="checkbox"/> Acute toxicity <input type="checkbox"/> Health hazards <input type="checkbox"/> Chronic health hazards <input type="checkbox"/> Environmental <input type="checkbox"/> Other – </div> </div>	<input type="checkbox"/> Limit quantity/concentration <input type="checkbox"/> Perspex safety shield <input type="checkbox"/> Ventilation: natural/exhaust <input type="checkbox"/> Fume cupboard <input type="checkbox"/> Safety glasses <input type="checkbox"/> Laboratory coat/apron <input type="checkbox"/> Gloves: latex/nitrile/neoprene/PVC <input type="checkbox"/> Safety shower <input type="checkbox"/> Other –
Biological/geological materials used	Type of hazard	Controls and other measures
NA	<input type="checkbox"/> Biohazard <input type="checkbox"/> Dust/aerosols <input type="checkbox"/> Sharps <input type="checkbox"/> Manual handling <input type="checkbox"/> Other –	<input type="checkbox"/> Steriliser <input type="checkbox"/> Disinfectant <input type="checkbox"/> Sharps container <input type="checkbox"/> Dust mask <input type="checkbox"/> Safety glasses <input type="checkbox"/> Gloves <input type="checkbox"/> Other –
Waste produced	Waste disposal procedure	
NA	<input type="checkbox"/> Pre-treatment of waste – <input type="checkbox"/> Sink with water – <input type="checkbox"/> Regular waste – <input type="checkbox"/> Licenced hazardous waste company – <input type="checkbox"/> Other –	
Standard Operating Procedures		
<input checked="" type="checkbox"/> I have read the relevant Standard Operating Procedure. <input checked="" type="checkbox"/> I am experienced/trained in using all the equipment listed. <input type="checkbox"/> All chemicals used and produced are approved for use. <input type="checkbox"/> I have read the current SDSs for all hazardous chemicals used and produced. <input checked="" type="checkbox"/> I am aware of safety guidelines for using all chemicals, materials and equipment. <input type="checkbox"/> I will follow local guidelines for waste disposal (water authority, local council, EPA). <input checked="" type="checkbox"/> I am aware of first aid procedures if required.		
Other comments: Controls: Limit to Class 2 Lasers; do not shine a laser at or near persons, do not dismantle lasers, do not use optical aids to view a laser beam. When not in use lasers should be stored in a locked cupboard. Lasers classified as Class 3R/ 3A, may only be used subject to gaining school permission and following good safety practices. If the class of any laser is not clearly identified then it should not be used.		
Conclusion:		
<input type="checkbox"/> Risks not significant now and not likely to increase. <input type="checkbox"/> Risks significant but effectively controlled at the moment. <input type="checkbox"/> Risks significant and not adequately controlled at the moment. <input type="checkbox"/> Uncertain about risks; more detailed assessment required.		
Assessment carried out by: Science ASSIST	Signature:	Date: May 2016
Assessment approved by:	Signature:	Date:
Next assessment due:		
This Risk Assessment assumes that the activity will be conducted in a science teaching area with the following facilities: electricity, running water, emergency shut-offs for electricity, gas if applicable, and water, regular testing and tagging of portable appliances; emergency contingencies such as evacuation/emergency plans, appropriate fire extinguishers, spill kits, hand washing facilities, eyewash/safety shower and first aid supplies. It is also assumed that all the necessary licencing requirements and approvals are obtained prior to the activity.		