

APPENDIX 1:**DESIGN & TECHNOLOGY RISK ASSESSMENT**

POTENTIAL HAZARD	EFFECT OF HAZARD	WHO IS AT RISK?	RISK RATING	CONTROL MEASURES	RESPONSIBILITIES
1.General – Provision/Supervision		Children Adults	Low	Class and group sizes appropriate to: Room size, class size, staff, pupil ratio, activity, pupil age, pupil ability Wear appropriate clothing Share and warn of the risks to adults and children regarding the activity Expectation and rules visible in the working environment.	Adults
2. General equipment		Children Adults	Low	All equipment maintained and monitored before and after each use All equipment recorded in quantity when handling and recording to storage. Ensure staff know how to use the equipment correctly and are aware of the risks Staff are trained on basic hygiene, health and safety awareness and know the location/ contact for school first aiders	Adults
3. General equipment – storage		Children Adults	Low	Equipment and substances stored appropriately so they do not present a hazard, trip, fall, slip hazard. Heavy equipment stored at appropriate level Flammable materials should be kept away at distance from heat	Adults

4. General substances and COSHH		Children Adults	Low	All highly flammable substances should be stored in labelled, lockable metal storage containers or cupboards Inventory of chemicals used within the subject that identifies the quantity stored, includes safety data sheets, identifies level of risk and if there is a requirement to undertake COSHH risk assessment Communicate known risks from chemicals to the relevant people who may be exposed to risk including teaching, cleaning staff and children Only low hazard paints and inks used where possible Foods should not be consumed or brought into work areas where chemicals are used	Adults
5.General – kitchen classroom		Children Adults	Low	Staff and children will be trained on how to be safe in the classroom Staff and children will be trained on food hygiene Staff supervision of pupils Staffing ratios appropriate to child and adult Spillages are mopped and cleaned up General surrounding and area kept clear of obstacles Electrical equipment monitored and maintained	Adults

				Equipment used to prevent cross-contamination	
6.Kitchen classroom – sharp implements		Children Adults	Medium	Staff must store sharp items in a locked cupboard Staff and children must remove sharp items safely with blade and handle clearly visible. Children must be taught the correct techniques for handling sharp items under supervision from staff. Avoid injury by choosing tools appropriate to task and appropriate to the age and experience of the user. Scissors to be used to cut paper and thin card. Children to be made aware that the blades are sharp and could cause a pinching cut. Left-handed scissors should be offered to left handed children. Children who are likely to cause injury to themselves or others are prohibited from using scissors. All activities using scissors to be supervised. Pupils to be taught how to carry scissors- blades closed and held in a	Adults

				gripped palm, never carried with blades pointing outwards. KS1 and KS2 children should have the close supervision of an adult when using the hacksaw. Only staff to replace worn blades by holding the hacksaw in a holding device whilst compressing the frame (replacement blades are replaced with the teeth pointing forwards.) Teeth point forwards on the blades for ease of cutting- the cut will be on the push, not the pull. Pupils who are likely to cause injury to themselves or others are prohibited from using hacksaws. Avoid injury by choosing tools appropriate to task and appropriate to the age and experience of the user. Fabric scissors to be used to thin fabric such as cotton and felt. Children to be made aware that the blades are sharp and could cause a pinching cut. Left-handed fabric scissors should be offered to left handed children. Children who are likely to cause injury to themselves or others are prohibited from using scissors. All activities using fabric scissors to be supervised.	
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				Pupils to be taught how to carry scissors- blades closed and held in a gripped palm, never carried with blades pointing outwards. Only a craft knife with one blade should be used in schools. There is an increased hazard regarding the craft knives with break off blades. These can be easily taken by students so should not be used in school. Where possible a craft knife with a retractable blade should be used. · There is a risk of injury if the craft knife is not used with a safety ruler. A safety ruler has a raised platform to protect fingers. A plastic or wooden ruler should not be used with a craft knife. · KS1 and LKS children should not use a craft knife. Only UKS2 children may use the craft knife and this should be with close supervision of an adult. · Craft knife blades should be retracted when not in use to avoid injury. · Used blades should only be disposed of in the sharp bin in the schools office- do not put used blades in the classroom bins. Avoid injury by choosing tools appropriate to task and appropriate to the age and experience of the user. · Children who are likely to cause injury to themselves or others	
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				are prohibited from a stitch unpicker. · All activities using stitch unpicker to be supervised. · Always keep the blade covered when you're not using it	
7.Kitchen classroom – electric blenders/liquidisers		Children Adults	Medium	Staff must assemble/disassemble electric blenders/liquidisers Staff must wash the blades from electric blenders/liquidisers Electric equipment to be maintained and monitored through PAT testing	Adults
8.Kitchen classroom – oven/cooker hobs		Children Adults	High	Staff and children to be clear about the safe and appropriate use of an oven/hob Staff to consider ability, height and age before allowing them to use oven/hob. Oven gloves to be used to place food in the over/grill when removing under supervision Oven doors must be kept closed unless food is being kept in or taken out	Adults
Burns		Children Adults	High	First aid box in kitchen, qualified First Aider on site. Fire blanket/CO2 extinguisher located in kitchen/nearby. COSHH risk assessment in place for cleaning products. Pupils instructed in how to use oven safely (if applicable) Ensure correct supervision from a teacher/member of staff.	Adults

				Check ovens and hobs are correctly turned off at the start and end of all sessions. Ensure sleeves are rolled up when using a hob. Use a flameless hob where possible. Ensure pupils know how to use heat sources correctly. Ensure pan handles are turned inwards away from pupils. Ensure correct cooking utensils are used e.g. non-heat conducting. Ensure oven gloves are used.	
9.Kitchen classroom – food storage		Children Adults	Low	Hot food to be stored quickly and stored in the fridge within 1-2 hours Children and parents will be told of the reheating methods and allergens when food is taken home Finished dishes must be stored appropriately until they are ready for children to consume or take home Completed dishes not taken home after 48 hours or 24 hours for rice dishes will be disposed of. Ingredients must be stored and labelled appropriately	Adults
10.Slips, trips and falls		Children Adults	Low	Staff supervision of pupils Staffing ratios appropriate to size and age of children Spillages are immediately mopped and cleaned up and area returned to a dry, safe condition	Adults

				Surrounding area kept clear of obstacles and in a tidy, organised state. Children's belongings kept away from working areas in the classroom	
11.Allergies to chemical materials and ingredients		Children Adults	Medium	Staff are aware of the school first aiders Staff watch for adverse and undiagnosed reactions Staff are aware of children with allergic reactions and plan accordingly	Adults
12.Use of glue adhesives and fixatives		Children Adults	Low	Staff supervision of pupils Pupils instructed and understand to use appropriate amounts of glue Water based non-toxic formulation only – no solvent based Approved products for children only No superglue or wallpaper past containing fungicides Spray adhesives used by staff only highly flammable and toxic Must be used in well-ventilated areas away from children Heavy vapour adhesives used by staff only Behaviour expectations expressed before activities	Adults
13. Burns due to glue guns and hot components		Adults and children	M	Glue guns are used and supervised by adults for older children. Behaviour expectations will be made explicit by the class teacher.	Adults

General hygiene – balloons		Children and adults	L	Not sharing mouthpieces. A hand pump is advisable Behaviour will be made explicit.	Adults
Cuts, punctures and pinches from cutting and shaping (e.g. scissors, pliers)		Children and adults	L	Staff supervision. Rounded-ended scissors for children Cutting equipment not left unattended Damaged or faulty equipment will be disposed immediately. Hole puncher used to make holes Pupils will be taught how to hold scissors by the blade if it needs to be carried from one place to another. Cutting boards and mats to be used. Left-handed equipment (e.g. green and yellow scissors) Behaviour expectations will be made explicit before the lesson.	
Sewing, needle work and fabric choices		Children and adults	L	Staff supervision Pupils will be directed in how to use the needle safely. Cotton and threads to be cut by scissors not by teeth. Material to be chosen carefully as a thicker material will require more force and may lead to injuries. Behaviour expectations will be made clear before lesson.	Adults

Use of tenon saws (with bench hooks) and/or coping saws (with vices) to cut wood.		Pupils and children	H	Strict staff supervision Pupils will be taught how to handle equipment safely. Set up with adequate space with left- and right-handed pupils taken into consideration. Dust particles may enter air so goggles must be worn to protect eyes. Pupils told not to blow dust particles. Make sure wood is secured on the bench before cutting. G clamps could be used for to secure bench hook to the desk. Saws must be accounted for before and after activity Behaviour expectations will be made clear.	Adults
Drills and drill bits and portable power tools		Pupils and children	H	Strict staff supervision. Staff must change drill bit and check it is secure Pupils will be taught how to use the drill in a correct and safe manner. Adequate space to use equipment and left and right-handed pupils will be taken into consideration. Dust particles may enter air so goggles must be worn to protect eyes. Pupils told not to blow dust particles. Lowest setting on drill to keep control of tool.	Adults

				Drills and bits accounted for before and after. Loose clothing and other items to be removed or made secure to avoid tangling. Long hair to be tied back. Behaviour expectations will be made clear before activity.	
Clay		Adults and children	L	Wash hands after using clay. Staff supervision Spillages to be cleaned up immediately. Surrounding must be clear and safe. Cutting and shaping tools should be appropriate for age group.	Adults
Paint		Adults and Children	L	Staff are aware of first aiders. Staff to watch for reactions. Staff are aware of allergies before activity. Pupils to thoroughly wash hands before and after handling paint. Spillages are immediately cleaned. General tidiness of the surrounding. Water-based paints recommended	Adults
Crocodile clip pinches		Adults and children	L	Staff supervision Instructions on how to use clips safely and appropriately.	Adults

Plugs and Sockets			H	Staff supervision of pupils Staff are aware of first aiders. Equipment should be PAT tested to ensure they are safe to use. If there are visible defects to equipment then they should not be used. Pupils made aware of not touching electrical items with anything wet. Ensure pupils know the dangers of electricity.	Adults
Batteries (cell, button, coin, etc.)			H	All staff and pupils must be taught the dangers of mis-using batteries. Understanding that empty and dead batteries can still cause risk. Assess batteries for leaks or deterioration and dispose immediately. Remove batteries from electrical circuits and systems after use. Store batteries in a locked place away from children. Account for batteries before and after activities. Keep unused batteries in original package. If batter has been swallowed, they must attend nearest Accident and Emergency immediately.	Adults