



Berkswich CE Design and Technology risk assessment

Assessment conducted by: Rachel Joint and Lezleigh Ennis	Job title: Deputy and teacher (both Co-subject leads)	Covered by this assessment: Teachers, teaching assistants/volunteers/ supervising adults and pupils.
Date of assessment: September 2021	Review interval: Annually (or if any circumstances alter)	Date of next review: June 2022

Related documents
Health and Safety Policy, Medical Needs Policy, Administering Medication Policy, Accident Reporting Procedures, Fire Safety Checklist, Fire Safety Policy, Fire Safety Risk Assessment, Outdoor Education and Off-site Education Policy

Risk rating		Likelihood of occurrence		
		Probable	Possible	Remote
Likely impact	Major Causes major physical injury, harm or ill-health.	High (H)	H	Medium (M)
	Severe Causes physical injury or illness requiring first aid.	H	M	Low (L)
	Minor Causes physical or emotional discomfort.	M	L	L

Areas of concern and who is at risk	Risk rating prior to action H/M/L	Recommended controls	In place? Yes/No	By whom?	Deadline	Risk rating following action H/M/L
Policies and procedures Pupils and staff	H	- The headteacher ensures all staff who will be supervising activities involving DT are familiar with the relevant policies and procedures including Health, Welbeing and Safety. - Staff are responsible for seeking clarification to ensure a full understanding of the relevant policies.	Y	Headteacher All staff	On-going	L
General Pupils and staff	M	- Class and group sizes should be appropriate to room size, class size, staff: pupil ratio, the nature of the activity, pupil age, pupil ability. - Health and safety rules and responsibilities should form part of a whole-school set of expectations and should be expressed before each activity that involves an element of risk. Staff and pupils are advised to wear aprons to protect clothing when necessary (e.g. when using a glue gun). - Staff and pupils are advised to wear goggles when carrying out activities that use loose particles or risk of materials becoming airborne, to protect their eyes. - Share and warn pupils and staff of the risks involved before and after the activity. Expectations are reinforced throughout each unit and the sessions by the teachers and teaching assistants in the classroom or working environment.	Y	All staff	On-going	M
General: equipment Pupils and staff	M	- All equipment must be maintained and monitored before and after each use for wear and damage. All equipment must be counted out and counted back in when handing out and returning to storage. - Ensure staff understand how to use the equipment in the correct and safe manner, and are aware of any risks. - Staff are trained on basic hygiene, health and safety awareness and know the location and/or - Teachers know the location of a first aider when DT lessons take place; DT lessons in the coppice area contact Mr Kelly as a first-aiders and lessons off-site require a first-aiders if risks are above L.	Y	Teachers/S H/KH RJ/LE All teachers	On-going	M

Areas of concern and who is at risk	Risk rating prior to action H/M/L	Recommended controls	In place? Yes/No	By whom?	Deadline	Risk rating following action H/M/L
General: equipment storage Pupils and staff	H	- Equipment and substances stored appropriately so they do not present a trip, slip or fall hazard. Heavy equipment stored at an appropriate level. - Children are never left unattended with equipment or allowed access to storage areas - Rags, cotton waste, polyurethane foam or similar materials should not be allowed to accumulate or be stored near naked flames, hot objects or immediately against electrical equipment.	Y	RJ, LE and all staff All staff	On-going	M
General: substances and COSHH (i.e. ink, glue, fixatives) Pupils and staff	H	- All highly flammable substances (i.e. fixatives) should be stored in suitably labelled, lockable metal storage containers or cupboards. - Refer to COSHH (Control of Substances Hazardous to Health) for further advice. - Communicate known risks from chemicals to the relevant people who may be exposed to any risk, including teaching, cleaning staff and pupils. - Only low hazard paints and inks used in school. - Food should not be consumed or brought into work areas where chemicals are used.	Y	RJ, LE All staff	On-going	M

Areas of concern and who is at risk	Risk rating prior to action H/M/L	Recommended controls	In place? Yes/No	By whom?	Deadline	Risk rating following action H/M/L
General: kitchen or classroom used as food preparation area. Pupils and staff	H	• Staff and pupils will be instructed and trained how to be safe in the kitchen classroom (i.e. no running, no walking around with sharp equipment). • Staff and pupils will be instructed and trained on good food hygiene in the kitchen classroom (i.e. washing hands thoroughly before and after each activity, cross-contamination). • Pupils bags and equipment kept away from working areas in the kitchen. Staff supervision of pupils. • Staffing ratios are appropriate to the size of class and age of pupils. • Spillages are immediately mopped/cleaned up and the area returned to a dry, safe condition. General surrounding and immediate area kept clear of obstacles and in a tidy organised state. Electrical equipment will be monitored and maintained regularly; PAT tested annually. • Equipment will be used correctly to prevent cross-contamination (i.e. coloured chopping boards for different foods such as raw meats). • Long-hair must be tied back and put into a bun if longer than shoulder-length. • Staff must store sharp implements in a locked cupboard or room. • Cutting or food preparation equipment is always appropriate to the task and ability and needs of the child. IEPs/HCP are used to inform decisions made by staff. • Staff must monitor the quantity of sharp implements handed out and returned before and after each activity. • Staff and pupils must be able to remove and replace sharp implements safely, with their blade and handle clearly visible, in and out of their container. • Pupils must be taught the correct techniques for using sharp implements under strict supervision by staff. • Pupils must be instructed not to leave sharp implements in the sink when washing up.	Y	All staff	On-going	M

Areas of concern and who is at risk	Risk rating prior to action H/M/L	Recommended controls	In place? Yes/No	By whom?	Deadline	Risk rating following action H/M/L
Kitchen classroom: Electric blenders and liquidisers, Oven and cooker hobs, food storage and advice. So Pupils and staff	H	• Staff must assemble or disassemble electric blenders and liquidisers. Staff must wash the blades from an electric blender and liquidiser. • Electrical equipment must be appropriately monitored and maintained regularly; PAT tested annually. • Staff and pupils to be clear about the safe and appropriate use of an oven and the hob, including the risks they present. • Staff to consider pupils' ability, height and age before allowing them to use an oven and/or the hob. Oven gloves must be used to place food in the oven/grill and when removing it, under strict staff supervision. • Oven doors must be kept closed unless food is being placed in or taken out. • Hot food should be cooled quickly and stored in the fridge within 1-2 hours. • Pupils and parents will be advised of the appropriate reheating methods and possible allergens if taking home. • Finished dishes must be stored appropriately until they are ready for the pupils to consume or take home. • Completed dishes not collected after 48 hours, or 24 hours for rice dishes, will be disposed of. • Ingredients must be stored and labelled appropriately.	Y	All staff KH (overseeing PAT testing)	On-going PAT testing September each year	M
Slips, trips, and falls Pupils and staff	M	• Staff supervision of pupils: staffing ratios are appropriate to the size of class and age of pupils. • Spillages are immediately mopped/cleaned up and the area returned to a dry, safe condition. General surrounding and immediate area kept clear of obstacles and in a tidy organised state. Pupils bags and equipment kept away from working areas in the classroom. • Cupboards containing cleaning materials are locked immediately after use and not left open and unattended at any time. • Bursar is informed of any potential slips and hazards which require attention.	Y	All staff KH	On-going	L

Areas of concern and who is at risk	Risk rating prior to action H/M/L	Recommended controls	In place? Yes/No	By whom?	Deadline	Risk rating following action H/M/L
Allergies to chemicals, materials, and ingredients Pupils and staff	H	- Staff are aware of the school first aiders. - Staff watch for adverse and undiagnosed reactions. - Staff are aware of any pupils or staff with diagnosed allergies and plan accordingly. - Staff are provided with details of all children's medical and allergy needs and these inform planning, preparation and execution of lessons.	Y	All staff OK	On-going	M
Use of glues and fixatives Pupils and staff	H	- 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 super-glue or wallpaper paste 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 are expressed before activities proceed. - HCP followed and inform planning.	Y	All staff OK/LA	On-going	L
Burns, due to glue guns and hot components Pupils and staff	H	- Low-melt glue guns are considered safer than their hot-melt alternatives. - If hot-melt glue guns are to be used, these should only be used by older children under close supervision. - Behaviour expectations expressed before activities proceed. - Stands are used to reduce the risk of drips on children's skin. These are clearly marked with warning signs. Children work with an adult or in paired supervision relating to their experience, ability, needs and age. - Goggles worn to avoid splashes.	Y	All staff	On-going	M
General hygiene – balloons Pupils and staff	H	- When using balloons, staff should ensure hygienic procedures are followed. Do not share mouthpieces. - A hand pump should be used for inflating balloons. - Behaviour expectations expressed before activities proceed.	Y	All staff	On-going	M

Areas of concern and who is at risk	Risk rating prior to action H/M/L	Recommended controls	In place? Yes/No	By whom?	Deadline	Risk rating following action H/M/L
Cuts, punctures, lacerations, and pinches from cutting and shaping implements (i.e. scissors, pliers) Pupils and staff	H	Staff supervision of pupils: • Round-ended school scissors only, staff-use only for fabric and point-ended scissors. • Cutting and shaping implements must not be left unattended, and should be counted in and out of storage. • Store cutting and shaping implements in a safe, secure place – the trolley, resource cupboard or area out of reach in the classroom. • Damaged or faulty cutting and shaping implements to be immediately discarded in a safe and sensible manner. • Resources regularly checked by leads. • When punching holes through materials, pupils should use a pointed pencil to press into a soft, pliable material such as soft tack or a large rubber. • Screwdrivers and/or bradawls are not recommended for punching holes in materials. Where possible, use a hole punch or hand paper drill for creating holes. • Where applicable, cutting boards or mats should be used. • Pupils to be taught how to carry scissor blades closed and held in a gripped palm, never carried with blades pointing outwards. • Left-handed tools should be offered to left-handed pupils; right-handed tools should be offered to right-handed pupils. • Behaviour expectations expressed before activities proceed.	Y	All staff RJ/LE	On-going	L
Sewing, needlework and fabric choices Pupils and staff	H	Staff supervision of pupils. • Pupils are taught how to use a needle and thread in the correct and safe manner. Cotton and other threads must be cut using scissors, never teeth and set by example by teachers. • Material choices must be considered carefully, thick and dense materials can lead to excessive pressure being applied to the needle and thread which can result in puncture injuries. • Choose single layer, looser materials such as felt, cotton and Aida cloths for guided cross-stitch. • If denser materials are to be used, thimbles/thimblettes can protect pupils' fingers from injury. • Behaviour expectations expressed before activities proceed.	Y	All staff	On-going	L

Areas of concern and who is at risk	Risk rating prior to action H/M/L	Recommended controls	In place? Yes/No	By whom?	Deadline	Risk rating following action H/M/L
Use of saws (with benchhooks or vices) to cut wood Pupils and staff	H	Staff strict supervision of pupils. • All pupils must be taught how to use the saws and holds in the correct and safe manner. • Pupils must be set up with adequate space between stations for sawing, right-handed pupils will need more space to the left and left-handed to the right. • Fine dust and wood particles may enter the air when sawing wood, if possible, provide pupils with goggles to protect their eyes. • The area must be well ventilated, and the pupils must understand not to blow loose particles after sawing. • Ensure that pupils are able to secure the wood properly on bench hooks before proceeding to cut. G-clamps to secure the bench hook to the desk or corner bench hooks, which prevent sideways movement, can help with this. • All saws must be accounted for when handed-out and returned, and stored in a safe, secure location away from children. Behaviour expectations expressed before activities proceed. These are kept behind a locked door.	Y	All staff	On-going	M

Areas of concern and who is at risk	Risk rating prior to action H/M/L	Recommended controls	In place? Yes/No	By whom?	Deadline	Risk rating following action H/M/L
Hand drills and drill bits; and other portable power tools Pupils and staff	H	Staff strict one-to-one supervision of pupils. • Staff must change the drill bit, ensuring that it is secure and square before proceeding. • All pupils must be taught how to use the hand drill in a correct and safe manner; without applying too much pressure to the drill, with the work-piece secured appropriately. • Pupils must be set up with adequate space between stations for drilling, right-handed pupils will need more space to the left and left-handed to the right. • Fine dust and wood particles may enter the air when drilling into wood, if possible, provide pupils with goggles to protect their eyes. • The area must be well ventilated, and the pupils must understand not to blow loose particles after sawing. • Hand drills must be set to the lowest speed to reduce vibration and prevent loss of control. • Hand drills must be monitored and well-maintained, they must be accounted for when handed-out or returned, and stored in a safe, secure location away from children. • Behaviour expectations expressed before activities proceed. • To prevent entanglement, over-garments must be removed and long sleeved shirts rolled up - aprons are preferable to protect clothing from swarf/dust, but to also hold back any loose elements on clothing. Long-hair must be tied back and put into a bun if longer than shoulder-length. • Ensure that pupils are able to secure the wood properly on bench hooks before proceeding to drill. G-clamps to secure the bench hook to the desk or corner bench hooks, which prevent sideways movement, can help with this.	Y	All staff	On-going	M
Crocodile clip pinches Pupils and staff	M	Staff supervision of pupils. • Instruction the pupils on appropriate and acceptable behaviour when working with crocodile clips All pupils must be taught how to use the crocodile clips in a correct and safe manner.	Y	All staff	On-going	L

Areas of concern and who is at risk	Risk rating prior to action H/M/L	Recommended controls	In place? Yes/No	By whom?	Deadline	Risk rating following action H/M/L
Plug sockets (mains electricity) Pupils and staff	H	Staff supervision of pupils. • Staff are aware of the school first aiders. • All electrical equipment should be PAT tested to ensure that they are safe to use. • If there are visible defects with the equipment, do not continue to use it, this includes the cables and plug socket as well as damage to the device itself. Report any damage or defects to KH immediately. • Pupils are made aware of the risks of putting objects and wet hands near/into electrical sockets • Ensure that pupils know the dangers of mains electricity	Y	All staff KH All staff KH	On-going	M
Batteries (cell, button, coin, etc.) Pupils and staff	H	• All staff and pupils must be taught the dangers of misusing batteries; including the knowledge that empty or 'dead' batteries still present the level of risk. • Assess batteries before use for any deterioration and leakages, if present dispose of immediately and appropriately • Remove batteries from any electrical circuits and systems after use Store all batteries in a locked and labelled safe location away from pupils Count all batteries out to the pupils and back in after use • Keep new, unused batteries in their original packaging • Coin or button batteries not used by children before Year Four and then only with strict adult direction. • If staff suspect that a pupil has swallowed a battery, the child must attend the nearest Accident and Emergency immediately.	Y	All staff	On-going	M