



Design and Technology risk assessment: mechanisms

Location of activity: classrooms

Risk assessment completed by: Megan Donnelly

All of the below items must be used at a separate workstation, only 1 pupil in each area with an adult.

Hazards	Potential injury	Control measures
Glue gun	Burns	<p>KS1 children are to not use the glue gun.</p> <p>Pupils are taught how to use the gun safely, KS2 pupils can use the gun if supervised 1:1.</p> <p>Staff to be aware what to do if a child accidentally burns themselves with the gun.</p> <p>We only use low-melt glue guns.</p> <p>Any electrical equipment should be regularly tested for electrical safety.</p> <p>When it is not in use, the glue gun must be unplugged and stored safely.</p>
Junior hacksaw	Cuts Asthma triggers (dust)	<p>All children should work 1:1 with an adult.</p> <p>Only staff to replace worn blades.</p> <p>Teeth should point forwards on the blades for ease of cutting- the cut will be on the push, not the pull.</p> <p>Pupils who are likely to cause injury to themselves or others are prohibited from using hacksaws.</p> <p>Prior to use, staff should check the security of the blade in the frame and the blade has no broken teeth.</p> <p>When not in use the saws must be kept in a secure location.</p> <p>Pupils to be taught to ensure they have sufficient personal space to use the saw.</p> <p>The sawing of a piece of wood to be modelled to pupils, always using a bench hook or G-cramp and not saw directly onto the table.</p>

		Pupils to be taught to draw the saw back a couple of times to make a starter notch before beginning sawing action.
Dust		<p>There is a risk of inhalation of dust. Dust must not be blown away as this increases the risk.</p> <p>Sawdust and waste materials must be cleaned up in a timely manner.</p> <p>Eye protection should be worn if there is a risk of debris being expelled towards the eye.</p> <p>Saws must not be used on expanded polystyrene.</p>
Hand operated drill	Cuts	<p>Always use a vice or bench hook and clamp to secure the material you will be drilling into.</p> <p>If the work is too large to fit into a suitable vice, hold it as securely as possible, perhaps with the aid of G clamps.</p> <p>Eye protection should be worn if there is a risk of debris being expelled towards the eye.</p> <p>Long hair and loose clothes should be tied back to reduce the risk of entanglement in the drill.</p>
Hammers	Cuts, bruising to hands.	<p>Clamps should be used to hold the items.</p> <p>1:1 supervision when using the hammers.</p> <p>Demonstration of how to use a hammer safely without causing injury.</p>
Pliers	Cuts	<p>Children to be made aware that the blades could cause a pinching cut.</p> <p>Eye protection should be worn if there is a risk of debris being expelled towards the eye.</p> <p>Cut at right angles. Never rock the cutting tool from side to side or bend wire back and forth against the cutting edges.</p> <p>Pull on the pliers: do not push away from you when applying pressure.</p>
Craft knife	Cuts	<p>Only craft knives with one retractable blade to be used.</p> <p>Safety rulers should be used as they have a raised platform to protect fingers.</p> <p>Only Year 5 and 6 pupils should use craft knives, with close supervision of an adult.</p> <p>Used blades should be disposed in staff bins and not classroom bins.</p>

		<p>Prior to use, staff will check the security of the blade in the holder.</p> <p>When not in use, all knives should be kept in a secure location.</p> <p>Year 5 and 6 only:</p> <p>Pupils to be taught how to hold the craft knife correctly</p> <p>Pupils to be taught how to use a safety ruler when scoring and cutting in a straight line</p> <p>Pupils to be made aware that the blade is sharp and can cause cuts</p> <p>Pupils who are likely to cause injury to themselves or others are prohibited from using craft knives.</p>
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