

## KS1-KS2: Health and Safety Guidance

### Personal protection:

- Safety glasses –wear safety glasses at all times to eliminate risk of eye injury - nails can rebound, materials can shatter. Having children learn about safety culture and looking after themselves is also important. Children are much more comfortable in safety glasses rather than chunky goggles. Other children and staff also to wear safety glasses if in close proximity.
- Glovers are NOT recommended – children need the maximum control of the tools.
- Dust masks to be worn by asthmatic children if sawing. All children to wear a dusk mask if cutting MDF or hardboard.

### Supervision

- Ensure all children are given instruction on the correct use of all tools. Take time to discuss together and draw attention to hazards. Children need to understand why H&S measures are put in place. Keep a checklist of who has had the introduction to the four main tools ( saw, hammer, screwdriver, hand drill)
- Initial maximum ratios for safely introducing tools - KS1 1:6 and KS2 1:8
- Children must be monitored at all times. Initially with close supervision. When children are confident using tools ratios can be increased. As children become more confident and competent they can work independently. A staff member should always remain within line of vision of the woodworking area.
- Be aware of children with significant additional needs – some children will need additional support perhaps having a 1:1 ratio at all times.

### Area

- Keep floor area clear – most accidents in design and technology are from trips and falls.
- Limit the number of children at workbench so they are not working in too close a proximity. Allow enough space so not to endanger others.
- Locate workbench in a protected space to minimise traffic and other distractions
- Position the vice/sawing area in a way that restricts access for children directly in front of the saw.

## Tools

- Only use pull saws. Pull saws (held with both hands) are much easier and safer for children. After use, immediately hand up the saw. Wood always to be clamped in a vice or similar device such as 2 C-clamps when being sawn. Ensure wood is clamped tight. I suggest 2 sizes of pull-saw.
- Hammering. Short stubby hammers are more controllable. When hammering into wood children will be using considerable force. After the gentle taps to get the nail standing up hold the wood away from the nail before hammering hard. Embed this practice right from day one.
- Use hand drills with enclosed cog mechanisms to limit possibility of fingers being pinched.
- When transporting tools hold by your side. Never run with tools.
- Caution when children are using vices, clamps and pliers that fingers to not get pinched. Ensure fingers kept away from clamping area. Close vices when not in use.
- Caution with Japanese nail puller. A useful tool but only use when closely supervised 1:1 to ensure children only use it as a lever and do not 'yank' upwards towards themselves.
- Inspect tools periodically to ensure tools are in good repair or replaced when worn. Such as removing a hammer with a loose head or a dull saw is more likely to cause harm than a sharp saw as children will need more effort.
- Keep tools tidy – return to original locations. ( I suggest using silhouettes – easy to see if any tool is missing) Tools must not be removed from the woodwork area.
- Avoid large tape retractable measures – they can recoil fast making the thin metal hazardous.
- Power drills should be avoided with younger children due to high speeds and high torque and children could potentially lose control. They can be used in Y5/Y6 with 1:1 supervision. A bench drill could also be used from Y5/Y6
- Coping saws can be used from year 4 (for shaping wood)
- Plains can be introduced from Y5/Y6

## Caution

- Remove or make safe protruding nails from work before children take work home.
- Don't blow sawdust – as highly likely to end up in eye.
- Area to be kept as dust free as possible. Sweep up sawdust as necessary. Asthmatic children to wear dust mask if high levels of dust.

**Wood**

- Avoid hardwoods. They are very difficult for children to work with and there is a possibility that nails could rebound.
- Caution with plywood. It is hard and difficult to hammer into so better for older children. Plywood also has the tendency to splinter badly due to the glued layers.
- Avoid wood treated with chemical preservatives.
- Caution with MDF and hardboard. Limit the amount of sawing of MDF and wear duct mask – as it produces excessive levels of irritating fine dust. It is also hard so best drilled before hammering/ screwing.
- Check wood for splinters. We need to limit exposure to splinters. Avoid very rough splintery wood. Rough wood can initially be sanded. Sand if the edge after sawing is rough. Caution: Splinters can be a source of blood poisoning. Have plenty of sandpaper available at all times – best glued to a board.
- Do not store scrap wood with any nails sticking out

**First-aid**

- Ensure first aid kit available and know location. Know who is first aid qualified.

**Risk assessment**

- A risk assessment should be in place for all staff to see. Staff need to know how to use the tools safely so may need CPD themselves.

**Additional Note on Safety Glasses:**

Safety glasses should be worn at all times – by children and practitioners. It is important we model good practice. With hammering, there is a very small risk a nail could rebound. This can happen particularly with hard woods or knots in soft wood. This risk of impact with the eye is eliminated by wearing glasses.

Opinion has been divided on safety glasses. In many countries they are not used with hand tools and advice from PPE (personal protection equipment) professionals is divided in the UK. I believe because of this small risk is unwise not to wear eye protection. Wearing safety glasses clearly eliminates the risk. It is also important pupils learn to take responsibility for their own bodies with appropriate safety protection.

Goggles are more problematic as children often find them uncomfortable and are distracted by wearing them. Their peripheral vision is also actually restricted.


**HSE Guidance:**

When working with tools, equipment and materials, in practical activities and in different environments, including those that are unfamiliar, children should be taught:

- about hazards, risks and risk control;
- to recognise hazards, assess consequent risk and take steps to control the risks to themselves and others;
- to use information to assess the immediate and cumulative risks;
- to manage their environment to ensure the health and safety of themselves and others;
- to explain the steps they take to control risks

# Woodwork CPD

## INTRODUCING WOODWORK IN PRIMARY EDUCATION



- Introduction to woodwork. Historical and current context. Equal opportunities.
- Theory: Associated learning and development. Links to curriculum
- Introduction to tools, wood, resources and workbenches
- How to set up a woodwork area and manage the provision
- Health and safety and risk assessment
- Whole school progression in woodwork
- Longer term and collaborative projects
- Top tips for successful provision
- Practicals: Teacher hands-on experiences

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