

DESIGN TECHNOLOGY KNOWLEDGE ORGANISER



Topic: Keeping your desk tidy





My Tool Box

Tenon Saw – Used to cut straight lines in wood.

Hand file - Used to smooth out different materials





Bench hook – Used to hold work in place when cutting



Pillar/Bench Drill -Used to drill holes into different materials.



Machine vice – Used to hold workpiece securely during drilling.



Wood Vice – Used to secure

material while working on it

(cutting, filing sanding etc.)

Used to sand/smooth down different materials

Focused Topics





A jig is a device used to hold a piece of material and guide tools. They are used to ensure the process can be repeated accurately and to a high quality.

Correct way of cutting timber



When cutting from a long length of wood we should always mark one first, cut to length on the waste side of the line allowing for the kerf of the saw. Then mark the second section and repeat the process.

spruce) **Manufactured Board** – timber sheets which are produced by gluing wood layers or fibers together (such as MDF, Plywood and Chipboard) **Drill jig -** a tool made to help place a material in the same place repeatedly when drilling. Template - a shaped piece of material used as a pattern to mark around **Kerf** - the width of material that is removed by a cutting process

Task 1: Cover the knowledge organiser then write down all the tools you have learnt. Check and red pen mistakes. **Task 2:** Do the same as task 1 for Key terms & definition. **Task 3:** For the PPE signage write down a reason why each one would be worn (what would they help protect you from?)

happening).

To go further:

Introduction to isometric crating:



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Key Terms

Softwood - the wood from a conifer (such as pine, fir, or

Tasks

Task 4: Draw two tools and write what they are for. **Task 5:** For the different machine tools list all the potential hazards (thigs that could go wrong) and the associated control measures (What you could do to stop it

Task 6: Create a mind map for the information you remember and red pen anything you've forgotten. Task 7: Teach it. Create a task that can be used to teach some of the information from here.



More information about natural and manufactured timbers:

