



DESIGN TECHNOLOGY KNOWLEDGE ORGANISER

Topic: Keeping your desk tidy

My Tool Box



Tenon Saw – Used to cut straight lines in wood.



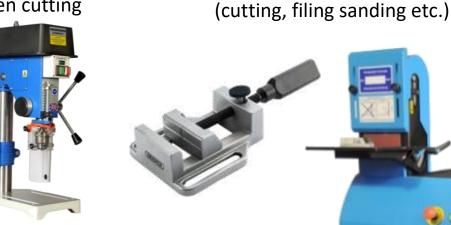
Hand file - Used to smooth out different materials



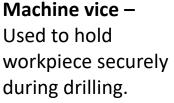
Try Square -Used to mark out right angles.

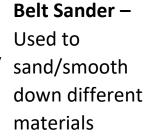


Bench hook – Used to hold work in place when cutting



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





Focused Topics

PPE equipment and signage



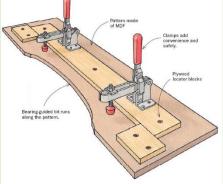


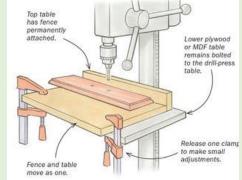






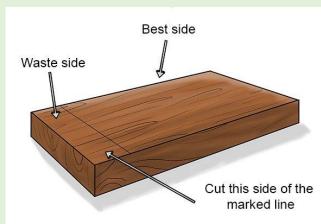
Drill jigs





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.

Key Terms

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

Tasks

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?)

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 happening).

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.

To go further:

Introduction to isometric crating:



More information about natural and manufactured timbers:





Wood Vice – Used to secure

material while working on it

