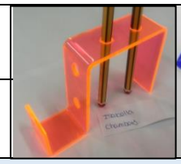
DESIGN TECHNOLOGY KNOWLEDGE ORGANISER

Topic: Keeping your desk tidy




YEAR 7 DT

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

Wood Vice – Used to secure material while working on it (cutting, filing sanding etc.)

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

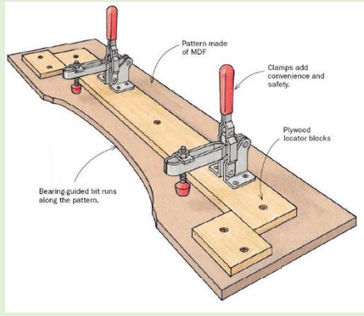
Machine vice – Used to hold workpiece securely during drilling.

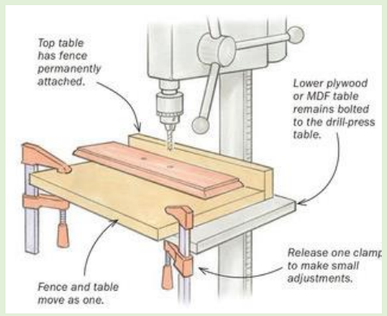
Belt Sander – Used to sand/smooth down different materials

Focused Topics

PPE equipment and signage

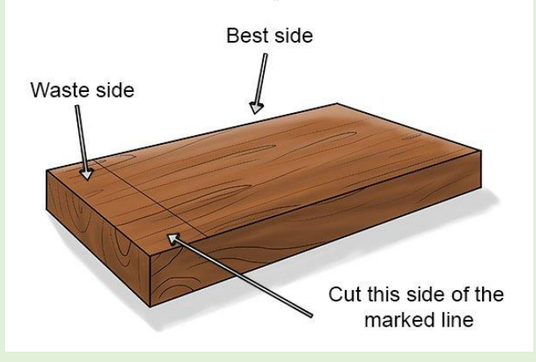
Drill jigs





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: Learn the tool names and their use.
Task 2: Learn the key words and the definition.
Task 3: Create 6 questions that can be answered from the information in the focused topic column.
Task 4: Draw two tools and write what they are for.
Task 5: Create a quiz based on task 1, 2 or 3. Get someone to test you.
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: