

Subject: Design & Technology Term: 5

Year group	What we are studying	Work to complete
Year 9	 Designing (freehand sketching) Timbers and manufactured boards Importance of (FSC) Orthographic Drawing (3rd Angle Protection) CNC routers Specialist tools and equipment Surface treatments and surfaces 	Task 1 You need to design a mobile phone holder for a client of your choice. This could be a family member or friend. The design page must include: Four or more design ideas sketched in 2D presentation. Apply colour to your designs Annotate your designs by describing good or bad features, cost, function, size or any importance features you can think of i.e. how it could be made. Challenge: Make a card model and test your phone on to understand scale and any possible design faults. Then evaluate how you can improve your design Keywords Client Material Function Durability Acrylic Plywood Task 2 Create a mind map describing natural timbers Your poster must include: Explain the Characteristics and properties of softwoods & hardwoods Explain the original source (Where natural timber comes from and how it is converted into a workable material) Draw products made from natural timber and annotate why it is a suitable material Challenge: Describe the FSC logo and why it is import to buy timber based products from a sustainable forest Task 3 Produce a table with the headings (Name of equipment, what it's used for, safety issues)
		 Detailed research of the item you will be describing by using the links attached Four or more items must be demonstrated Diagram of the hand tool or machinery
		Describe what it is used for



• What safety issues must be considered when operating the tool or machinery you are describing

Key words

Pillar Drill Cordless Drill Coping Saw Bench Vice Tenon Saw Bench Hook Glass Paper Hand Drill Screw Driver Mitre Saw

Challenge: You could look at CNC machines and explain why they are used to manufacture flat pack furniture.

Task 4

Surface treatments and finishes

Your work should include:

- Explanation of why natural timbers need to have a wood finish
- Describe the purpose of vanish, wood preservative, wax and oil.
- Choose one wood product in your home and identify what wood finish has been used and why.

Key words

Appearance Projection Tanalisation Paint Varnish Wax oil stain fungal

Challenge: Explain why tanalised timber is used for outdoor applications.

If you need help!

Website:

Technology Student website: https://www.technologystudent.com/joints/joindex.htm

https://www.technologystudent.com/prddes1/susenv1.html https://www.technologystudent.com/despro_flsh/finish3.html

Youtube:

https://www.youtube.com/watch?v=oFwWrAq47io https://www.youtube.com/watch?v=kCme9OmdkuE