

Homework

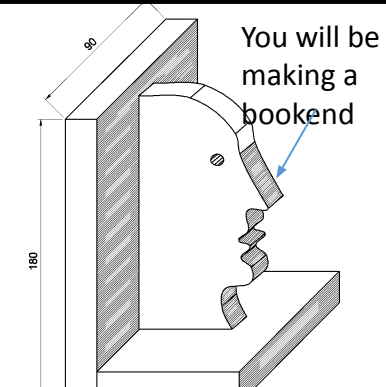
Week	Task
1	Where does wood come from?
2	What is the difference between a softwood and a hardwood?
3	Name three softwoods three hardwoods
4	What are the common wood faults?
5	What are manufactured boards?
6	Name some manufactured boards (minimum 3)
7	Make a poster about how to use the pillar drill safely.
8	Which wood joint are you using in the creation of bookend?
9	Name some wood working tools and their uses.
10	Can you use natural timber straight away after cutting from a tree?
11	How can Ikea make their furniture more sustainable?
12	Where does wood come from?

Big Ideas

Learning skills and uses of basic hand tools and working with wood. Learning how to use the pillar drill safely.

Key terms

Key term	Definition
Hardwood	They come from trees that lose their leaves in the winter- come from deciduous trees. Examples are, mahogany, ebony, teak, oak, ash.
Softwood	They come from coniferous trees (cone bearing trees) examples are, pine, birch, spruce, cedar.
Dowel joint	A dowel joint, or doweling, is a type of joint used to connect two pieces of wood by drilling dowel holes in each piece and using a wooden peg (the dowel) to attach them.
Rasp	A rasp is a hand tool. It is a coarse form of file used for coarsely shaping wood/
Sand paper	Woodworkers use sandpaper to smooth wooden surfaces, and sandpaper is also useful for removing loose paint, grit, or dirt when you're painting.
Wood vice	A woodwork vice is the name given to a heavy-duty wood clamping vice that is attached to a workbench.
FSC	The Forest Stewardship Council is an international organisation established in 1993 that promotes the responsible management of the world's forests.
Coping saw	A coping saw is used to cut fine, intricate cut-outs or shapes in carpentry or woodworking, ideal for delicate applications such as curves or patterns.
Tenon saw	A Tenon saw is used to cut straight lines. It has a brass back which dictates the depth you can cut into a material. It is sometimes used in conjunction with a bench hook.
Bench hook	A bench hook is a workbench appliance used in woodworking to hold a workpiece in place while crosscutting with a hand saw. A bench hook is a simple method used to improve accuracy and safety.
Tri- square	A try square or try-square is a woodworking tool used for marking and checking 90° angles on pieces of wood.
Pillar drill	A pillar drill is a machine that can be used on a wide range of materials where single hole drilling is required. The head is lowered vertically and plunges into the material by means of a hand lever and the table can be adjusted to suit varying sizes of material.



Nametag



Rings of Hardwood



Hardwood is
not
sustainable

The Forest Stewardship Council is an international organisation established in 1993 that promotes the responsible management of the world's forests.

What is the difference?



Hardwood

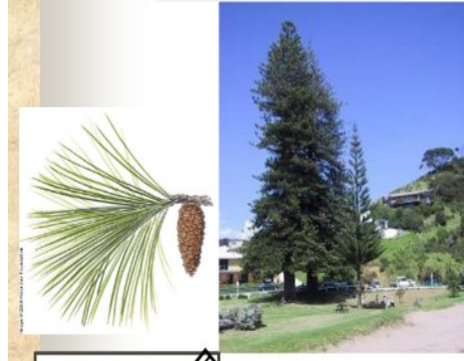
- Hardwood grows very slowly
- The grain is very close together
- One new ring is added a year



Rings of Softwood



Which is which?



Softwoods

- These come from trees with cones: coniferous trees
- They grow faster and have grain that is not so close together
- They are generally long and thin. Why is this useful?
- Great for floorboards and long planks



Wood and its properties

- Wood comes from two main classes:
- Hardwood which comes from a tree whose leaves fall off in the autumn
- Softwood whose leaves stay on all year round

Activate V
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Uses of Soft wood

- It can be grown in plantations
- Large companies like IKEA use a lot of it
- It can be replaced as it is used by replanting
- It is usually pale yellow in colour

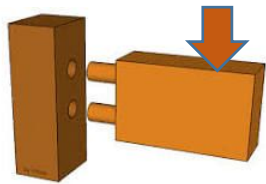
Uses of Hard wood

- Hardwood often makes more expensive furniture and products
- It is harder to work with but not necessarily *hard*
- Balsa wood is a hard wood!



Balsa wood is very light and feels soft!

Dowel joint



Bench hook



Tri-square



Manufactured boards

- Saw dust can be processed to make manufactured boards such as **MDF**
- Wood can be made into veneers and stuck together to make **plywood**
- They can be any thickness or size
- They are very consistent and come in large sheets
- Both these are **plywood**



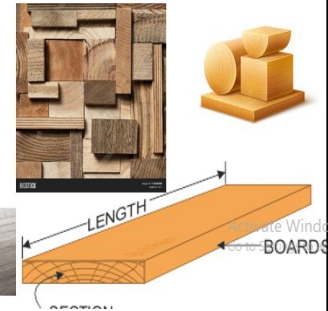
Which materials have you used in DT?



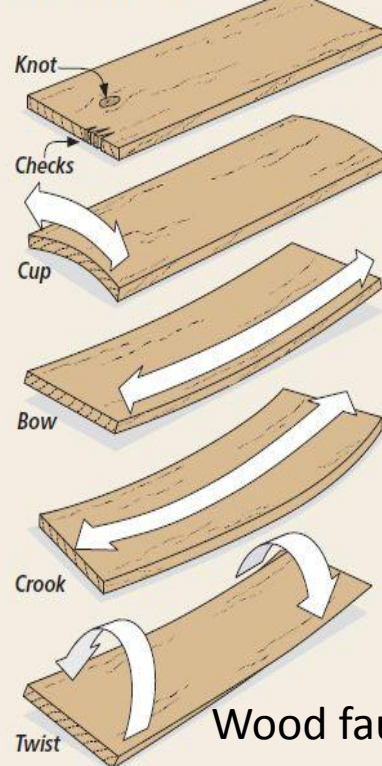
Activate Windows
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Stock forms

- Wood needs to be made into a convenient form to work with
- You can't start with a tree when you want to make a bookend in school!
- What do you think the stock forms of wood are?



Common Defects



Wood faults

Wood Wax

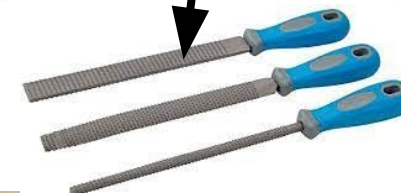


Sandpaper comes in different grits

Coping saw



Rasps



Tenon saw



Plywood

Wood vice

