

Materials



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Hardwoods



Hardwoods

Hardwoods come from deciduous or broad-leaved trees. They are generally slow growing which tends to make them harder but more expensive. Please note though that not all hardwoods are hard, Balsa which is very soft and is often used for model planes is in fact a balsa wood! Hardwoods are sold by the cubic metre then this is sawn to the size the customer requires. Some timber is machined into many sections called mouldings for example, dowel, beading, etc.



Beech tree



Oak Leaf

Hardwoods properties:

- Hardwoods are usually have broad leaves.
- Hardwoods come from deciduous or broad-leaved trees.
- Hardwoods are special as they are deciduous this means they loose their leaves.
- You can distinguish hardwoods by the structure of the wood grain.
- Hardwoods grow slower than softwoods so they are more expensive.
- Hardwoods include Ash, Beech, Oak, Balsa, Teak and Mahogany.

Useful web links



The wood picker site

Use the Wood Picker to identify between woods, enter your criteria to find the most suitable wood.

[View the wood picker page >>](#)

BBC Bitesize

Revise more about timbers at the BBC bitesize site.

[View the bitesize timbers page >>](#)

Relevant DT links

Need to learn more about joining woods? Then try this link below.

[Wood joints >>](#)

Hardwood types	Grain image	Harwood uses	Example product
Beech - A straight-grained hardwood with a fine texture. Light in colour. Very hard so is ideal to be used where it is being bashed around and used often. Beech is also very easy to work with.		Used for furniture, toys, tool handles. Can be steam bent.	
Oak - A very strong wood which is light in colour. Open grain. Hard to work with. When treated it looks very classy and elegant. A hardwood.		Used for high class furniture, boats, beams used in buildings, veneers.	
Mahogany - An easy to work wood which is reddish brown in colour. This wood is very expensive. A hardwood.		Used for expensive indoor furniture, shop fittings, bars, veneers.	
Teak - A very durable oily wood which is golden brown in colour. Highly resistant to moisture and outdoor weather. A hardwood.		Used for outdoor furniture, boat building, laboratory furniture and equipment.	

Balsa - is a pale white to gray. It has a distinct velvety feel. It has exceptional strength to weight properties. It is the lightest and softest wood on the market. A hardwood.



Used for light work such as model making and model airplane construction.



Memory tip: Remember BAD HOTEL!

B - Balsa
A - Ash
D - Deciduous

H - Hardwood
O - Oak
T - Teak
E - Expensive
L - Loses leaves



Quiz time!

Mr DT says 'Read the text above and then answer these questions below'. Write your answers on a sheet of paper, dont forget to write your name on the sheet!:-

- 1.) Note down the hardwood properties in your own words?
- 2.) What trees do hardwoods come from?
- 3.) What is special about deciduous trees?
- 4.) Why are hardwoods expensive?
- 5.) What is beech normally used for?
- 6.) What is oak normally used for?
- 7.) Why is teak good for outdoor furniture?
- 8.) Why is balsa wood normally used to make model planes?



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