The wood

Maple is an expensive wood and is very light in colour. It has a lovely light grain pattern. The wood is very hard and durable, making it good for flooring.

Uses

- Kitchen unit doors
- Maple flooring
- Furniture-making
- Veneers



IRISH SOFTWOOD TREES

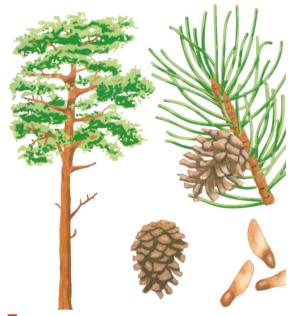
Scots pine

Scots pine is widespread throughout Europe. It is grown as forestry in many countries including Scotland. It is unlike most conifers in shape as it stands tall and has few branches, which are large. The needles of the tree grow in pairs and the bark of mature Scots pine is a reddish-brown colour

The wood

The wood of the Scots pine is a light brown-cream colour with a distinct grain. It is known as **red deal** and is a strong softwood. The wood is easy to work with and finishes well.

- Construction timber
- Pine furniture
- Doors
- School project work



Scots pine tree, needles and cones





Douglas fir tree, needles and cone

Uses

- Structural panels
- Gates and outdoor furniture
- Plywood manufacture
- Railway sleepers

Douglas fir

The Douglas fir is a native tree of North America; sometimes called the Oregon pine or Colombian pir grows quickly and is tall. It likes well-drained soils sheltered areas away from high winds. The needles gro around the twig, which has reddish-brown buds. The cones are oval in shape, which makes the tree easy to ide

The wood

The wood is a reddish-brown colour. The grain is decor and the annual rings are clearly visible. It is a tough du wood that will withstand heavy wear. Although the wo light, it is very strong. It is resistant to decay and acid at



Douglas fir gates

Norway spruce

A native of central Europe, this tree grows at high altitudes and in mountainous regions. A 4 per cent of Irish forestry is Norway (common) spruce. It has a shallow root system and is p to being blown down.



Norway spruce tree, needles and cone

The wood

Norway spruce wood is known as white deal and is softer red deal. It has a pale yellow-cream colour. The wood is 6 worked, but is less durable than red deal.

- Floorboards
- Internal woodwork
- Construction timber
- Fibreboard and chipboard
- Christmas trees

Sitka spruce

The Sitka spruce, sometimes called the silver spruce, is the tree that is most commonly planted as forestry in Ireland. It is ideal for Irish forestry as it thrives on wet soil. The needles are sharp and are blue-green in colour, which makes the tree easily recognisable.

The wood

The wood of the Sitka spruce is strong and straight-grained. It is a light yellow colour.

Uses

- Structural timber roofs and floors
- Paper-making
- **■** Floorboards
- Fibreboard and chipboard manufacture



Sitka spruce tree, needles and cones

Larch

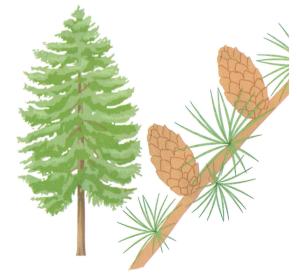
The larch tree is widely grown in Ireland. It is the only conifer grown here that loses its needles in the autumn. The needles are light green and are arranged in small tufts or groups on the

branch. The bark is thick and ribbed with thick scales. It is a fast-growing, attractive tree with a good root system. It requires good light and clean air.

The wood

Larch wood has a distinct red colour. The wood has elastic properties and is durable. Larch is resistant to water, but tends to warp.

- Boat building
- Light furniture
- Exterior joinery
- Fence posts



Larch tree, needles and cones





Lodgepole pine tree, needles and cone

Lodgepole pine

The lodgepole pine is widely planted in Irish forests. In native of western America. It was introduced here grows well on wet soils and in poor conditions. needles are grouped densely on the branches and are b in pairs.

The wood

The lodgepole pine's attractive wood is reddish-brov not properly cared for the tree develops many bran that give the wood a lot of knots, making it unsuitabluse.

Uses

- Internal woodwork
- Chipboard and fibreboard manufacture

Yew

The yew tree is an evergreen tree that grows well in Ireland. It can be found in many grave (it can grow for hundreds of years). It is not generally planted in the Irish countryside be it is poisonous to livestock if eaten. The yew is a slow-growing tree.



Yew tree, needles and seeds

The wood

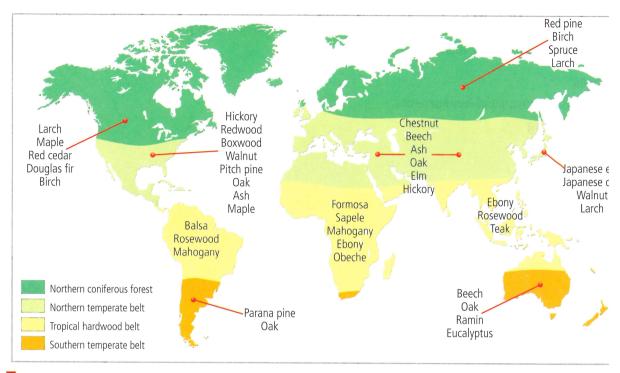
The yew's wood is unusual as the sapwood is a light creamy colour and the heartwood (of which there is a large portion) is a beautiful orange-brown colour. The wood is very hard and is sought after for furniture-making.

- Turning
- Carving



of yew

Timber regions of the world



The map shows the regions (belts) where timber grows in the world

OTHER TIMBERS

There are many other woods in use. Some come from tropical rainforests. These forests are being cut down for timber and cleared to make way for farming. We should use only timber from responsibly managed forests (FSC labelled). The map above shows the four different tree-growing regions of the world. It also shows where different species of tree are found.

Cedar

Cedar is a coniferous tree that is imported from Canada. It is a tall tree with a full crown. The wood is strongly scented and it is used to line drawers and blanket chests, as the scented oil in the wood repels insects. The wood is a rich red to brown colour. Although light, the wood is very durable and decay resistant. It is used outdoors and doesn't need to be painted. The wood splits easily. It reacts with ferrous metals causing staining.

- Cladding on buildings
- Outdoor furniture

Wood Materials Technology



Ebony

Ebony is a very dark wood, almost black in colour. It grows in the tropical areas of Africa south-east Asia. The wood is hard and dense which makes it heavy. It is very rare and expensits hardness makes it difficult to work.

Uses

- Making musical instruments
- Carving
- Inlaying

Mahogany

Mahogany is possibly the best-known tropical hardwood. It is widely used for furniture. The are a number of woods that are called mahogany, but the best mahogany comes from Cer America. It is known as Cuban or Honduras mahogany.

Mahogany varies from light red to a deep chestnut brown. The grain can be very attractive is a hardwood, but it is quite easy to work with. The wood is resistant to fungal and insect at and it is a stable wood (it does not warp easily).

Uses

- Furniture-making
- Veneering
- Woodturning
- Woodcarving

Iroko (teak substitute)

Iroko grows in tropical areas of Africa, India and Asia. The timber is a dark golden colour. an oily wood and it is very durable. It is resistant to fungal and insect attack. The wood is I and can be difficult to work. The dust from the cut timber is quite irritating and causes peto cough when working with it.

Uses

- Hardwood windows
- Hardwood doors
- Outdoor furniture
- Gates

Walnut

The walnut tree grows widely in North America, but it is a native of south-east Asia. It grow Ireland and Britain. The wood is imported from North America mostly.

Walnut is dark brown with a beautiful grain pattern. It is durable and finishes very well.

Uses

- High-quality furniture
- Hardwood flooring
- Marquetry and veneers
- Woodcarving
- Woodturning

Rosewood

Rosewood grows in tropical regions of South America and south-east Asia. The wood is a rich dark brown colour and it is very hard. This hardness makes it difficult to work.

Uses

- Instruments
- Veneers
- Tool handles (mortise gauges)



Exercises

- 1 Explain what is meant by the terms 'deciduous' and 'coniferous'.
- 2 From the list in the table opposite, say whether each tree is a broadleaf or a conifer.

Tree name	Broadleaf/conifer
Maple	
Scots pine	
Cedar	
Oak	

3 Give the names of two trees that are evergreen and two trees that lose their leaves in winter.

Evergreen	Lose leaves in winter
2	

- 4 Name a timber that is used for making plywood.
- 5 Give an example of a light-coloured hardwood.
- 6 Which woods might you choose if you were making the following items?
 - (a) Dining table
 - (b) Front door
 - (c) Table lamp
 - (d) Picnic table



Exam Questions

1 State from which trees in the list these seeds come from.

Birch

Pine

Oak

Holly

Sycamore

(JC, OL, 2007)



B



2 The diagrams show the leaves and fruit of three common Irish trees. Name the trees.









Web Links

www.treecouncil.ie/index.html

www.enfo.ie

www.rsatrees.org/plantatree/types.php

www.hainaultforest.co.uk/55treeidentification_index.htm

www.standardtrees.co.uk

www.the-tree.org.uk

www.rfs.org.uk

www.british-trees.com/